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PROJETO APOIO AOS DIÁLOGOS SETORIAIS UNIÃO EUROPEIA - BRASIL

**BENCHMARKING:  
ENTREPRENEURIAL  
CAPABILITY POLICY & SKILLS  
IN EUROPEAN UNION**

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## ABBREVIATIONS AND ACRONYMS

APL	Local Productive Arrangement
ASA	Administrative Simplification Agency (Belgium)
ASE	Agence de stimulation économique (Belgium)
BDS	Business Development Services
BNDES	Banco Nacional de Desenvolvimento Econômico e Social
BSO	Business Support Organizations
BSS	Business Support Services
BRICS	Brazil, Russia, India, China, South Africa
CORDIS	EU's Community Research and Development Information Service
COSME	EU's Programme for the Competitiveness of enterprises and SMEs
DG DEVCO	DG Development and Cooperation
DG ENTR	DG Enterprise and Industry
DG R&I	DG Research and Innovation
DG TRADE	DG Trade
EC	European Commission
ECP	Entrepreneur Capability Policy
EEN	Enterprise Europe Network
ECE	European Cluster Excellence
EMBRAPII	Empresa Brasileira de Pesquisa e Inovação Industrial
ESF	European Social Fund
EURYDICE	Network of education specialists in the EU
FDI	Foreign Direct Investment
FP7	7th Framework Programme for Research and Technological Development
GEM	Global Enterprise Monitor
HORIZON 2020	EU Research and Innovation Programme Proposal for 2014-2020
IADB	Inter American Development Bank
IEL	Instituto Euvaldo Lodi
IWT	Flanders institute for the promotion of innovation by science and technology
IMF	International Monetary Fund
ITS	Internationally Traded Services
LA	Latin America
LAC	Latin American Countries
MCITI	Ministry of Science, Technology and Innovation
MDIC	Ministério do Desenvolvimento, Indústria e Comércio Exterior
NIP	National Indicative Programme
NEP	National Entrepreneurship Policy
PSD	Private Sector Development
PPP	Purchasing Power Parity
SME	Small and Medium-sized Enterprises
SMI	Small and Medium-sized Industries
SEBRAE	Serviço Brasileiro de Apoio às Micro e Pequenas Empresas
UNCTAD	United Nations Conference on Trade and Development
VET	Vocational Educational and Training

## INTRODUCTION

The Brazilian government, specially the Ministry of Development, Industry and Foreign Trade (MDIC) is designing a **National Entrepreneurship and Business Policy (NEBP)**. The main aim of the NEBP is *consolidate an effective coordination and articulation of existing institutional framework, programs and actions that promote and support entrepreneurship, in order to address it at economic, social and innovative aspects of Brazil*. Most of the governance instruments already exist, nevertheless, it's deemed necessary the inception of new instruments to fill specific gaps.

In a complementary way, it was launched on 2008, the framework of EU-Brazil Sectoral Dialogues, which has the overall objective is to further and deepen the bilateral EU-Brazil relation through fostering sector dialogues on themes of mutual interest. The specific purpose is to facilitate and support the exchanges between relevant stakeholders involved in specific sector dialogues, especially in the areas of social development and cohesion, environment sustainability, regional development and territory integration, according to the agreements made and guidelines issued by the policy decision levels<sup>1</sup>.

Meanwhile the specific objectives of the Dialogue are: *Improved institutional, regulatory and industrial dialogues between both regions; Increased institutional capacity to assist the development of the NEBP, PNCA and similar initiatives; Deliverance of subsidies to policy development and government programs implementation in the vicinity of the scopes of NEBP and PNCA; and Linkage and harmonization of NEBP and PNCA with other Brazil-EU economic joint initiatives.*

In this context, the **EU-Brazil Sector Dialogues Support Facility** was created with a view to contributing to the advancement and enhancement of the strategic partnership and bilateral relations between Brazil and the EU, by fostering greater exchanges of technical know-how. The project is coordinated jointly by the Brazilian Ministry of Planning, Budget and Management – through the National Project Directorate – and the Delegation of the European Union to Brazil (DELBRA). Currently, there are 29 Dialogues identified between Brazil and the EU on a wide range of themes, based on the principles of reciprocity and complementarity, aiming to foster the exchange of know-how and experiences in areas of mutual interest.

The sectoral Dialogues Brazil-EU of Developing Entrepreneurial Capabilities and Skills for Small Business is one of them. The dialogue between Brazil and the European Union on the development of entrepreneurial skills and capabilities for small businesses is based on the exchange of information related to best practices in supporting policies that develop entrepreneurship and human resources. This should be achieved with a focus on enhancing mutual insights into policies,

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<sup>1</sup> Please, see the website: [www.dialogossetoriais.org/index.php/](http://www.dialogossetoriais.org/index.php/)

programmes and other governance tools to support small and medium-size businesses.

The Ministry of Development, Industry and Foreign Trade (MDIC), in partnership with the private sector and other stakeholders, is developing the National Policy on Entrepreneurship and Business (PNEN), which addresses entrepreneurship with a focus on economic, social and innovation aspects. The MDIC has created a working group to develop a national policy for the development of entrepreneurial and human resource skills, tentatively called the National Plan for Training and Improvement of Micro and Small Businesses and Entrepreneurship (PNCA in Portuguese). This plan should provide the basis to create a governance system over all volunteer executive stakeholders (federal, state, county and municipal agencies of the executive branches), non-governmental organisations of a semi-autonomous nature - Sebrae, Senac among others -- and other similar public and private institutions responsible for training programmes aimed at individual entrepreneurs, small and micro businesses.

The governance model should facilitate to reach the Multi-Year Plan targets concerning labor force training, which will be done through the coordinated implementation of public policies in this area. PNCA shall enable government to enlarge the funding of the education and training programs focused on entrepreneurs. At the same time, PNCA shall enable government to allocate better those relatively scarce resources, and facilitate the availability of subsidized credit, tax deductions incentives and similar monetary and fiscal instruments to stimulate the education and training of entrepreneurs leading. Finally, PNCA shall foster the networking of all relevant stakeholders using appropriate ICT resources.

In this way as an input to the development of this entrepreneurial training plan, the MDIC runs a specific short-term mission: **Developing entrepreneurship capabilities and skills for SME** to make a comparative analysis of best practices in the European Union about the entrepreneurial capabilities national plan<sup>1</sup>. The main product of this mission is the document that is now presented.

The overall objective of this Mission is *contribute to the achievement of the aims and objectives of the EU-Brazil sectoral dialogues through design and conduct a comprehensive comparative study of public policies for the promotion of skills and entrepreneurial skills for MSMEs in Brazil and in around five european countries.* This benchmarking of best practices in the area of national entrepreneurial capabilities plan in Europe, allow **valuable lessons learned applicable to the Brazilian economy and society, feeding the National Entrepreneur Policy.** To achieve the above result, it is necessary to know the Brazilian reality in the field of entrepreneurship, as well as perform a benchmarking of best practices in this area identified in the European Union.

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<sup>1</sup> The actual mission "Developing entrepreneurship capabilities and skills for SME - PMEE0006" is carried out by PhD Carlos Rivera, expert in SMEs Competitiveness Policy.

*As results of the study, it consolidates a comprehensive comparative Benchmarking about the National Entrepreneur capabilities & Skills Policy in the European countries (present paper). Comparative analysis which takes into account the five factors pointed out with the MDIC task-team: **model of governance at institutional level, financial mechanisms and resources, tax benefits for the entrepreneur, alignment with national sectoral priorities, and unique platform for information and services.** These factors are the benchmark criterion for the Benchmarking carried out. Also, the study has allowed a set of lessons learned to help the national policy entrepreneur in Brazil, and consolidate a policy recommendations for this country.*

*First, it presents the general context of policy entrepreneurs in the European Union, followed by a methodological approach to the study of Benchmarking, and setting general definitions to be used throughout the document.*

*Then, it offered an analysis of the policies of the European Union as a whole as well as that of each selected country. In each country, it will focus the main axes of each experience, context, main actors, components and outputs, sending to respective attachments the institutional contacts and more detailed references.*

*Finally, we present the lesson learned for Brazil and Conclusions and Recommendation for Policy in this country. An Annex part is start with the bibliography, the list of contacts and institutions in Entrepreneur Capability in each country selected, as well as the TOR of the Short Mission.*

# 1. METHODOLOGICAL APPROACH OF BENCHMARKING

The start point is there are key experiences at regional and national level in Europe, enabling to offer valuable lessons for the Brazilian case, showing mechanisms of overcoming structural constraints and alternative forms of development.

We have to remember, that Benchmarking means simply **learn from the best**, and includes a series of benchmarking techniques to extract lessons and alternative paths of development experience in study of this is complex and productive joints.

At this point, we start from a definition of benchmarking as *the continuous process and analytical approach to systematically measure the activities and processes -in this case the entrepreneur capabilities- field within the region, compared to other experiences identified, recognized as regional or leading worldwide developer of this subject.*

Benchmarking understood in this way, becomes a mechanism for **political and institutional learning**, defined as a comparative analysis of the behavior of a national experience, in relation to best practices at regional and international level and they are leaders in their field. This comparative analysis, alternative developments and identifies windows of opportunity, in support of an operational plan for improving the governance of the training entrepreneur plan in Brazil. Thus, **"the benchmarking becomes a continuous process of learning and continually adapt to the institutional level, designed to optimize the results, and that is to learn, adapt and implement methods and practices proven policies that have yielded similar experiences positive"**.

To carry out the benchmarking will undertake the following tasks:

- **Benchmark setting or selection criteria experiences.** These criteria are the parameters that guide the search for benchmarking, discriminating the universe of possible cases. These must be in line with the applicability for Brazil and Brazilian institutions, and there should be a national or regional level. This Benchmark criteria that have guided us in the selection of experiences to study in detail are:
  - the case should form a model of governance involving the main actors involved and to make it sustainable model of governance at institutional level;
  - must be aligned with any national or regional strategy development, and national sectoral priorities;
  - should consider financial mechanisms and resource contribution to the companies involved;
  - including tax benefits and incentives for entrepreneurs;
  - must include a Web Site platform and support, as well as other mechanisms (face to face assistance, guidelines, manuals, etc.).

- **Identification of best practices in entrepreneurial capabilities plans at European level.** Then, taking into account the selected criteria is addressed in detail existing experiences and reliable information which exists to support it. These experiences must be real and excellent performance levels (or at least on the average of the industry in question) and meet at a time, the other criteria set by parameters defined benchmarking.
- Based on research realized, **systematic searches** through internet, consultations and review of strategic documents, the best practices in Entrepreneur Capability and education plan are the cases of: **Norway, Finland, Denmark, Sweden and Flemish Region in Belgium.**

For the development of benchmarking, we have relied on the methodology of UNCTAD, OECD and EU, which have more in common than differences. With the advantage that several of the countries we have selected have served as reference parameter for establishing the methodology for defining and evaluating the phenomenon in question. This is the case of Denmark, which has been one of the reference cases from the beginning to define the methodology of UNCTAD, OECD and CEE<sup>1</sup>.

Also, we use the data from the Small Business Act (SBA) Fact Sheets, which are produced by DG ENTR as part of the SME Performance Review (SPR), which is its main vehicle providing an economic analysis of SME issues. They combine the latest available statistical and policy information for the 27 EU Member States and another 10 non-Member States which also contribute to the EU's Competitiveness and Innovation Framework Programme (CIP). The Fact Sheets — produced annually — help to organise the available information in order to facilitate SME policy assessments and monitor SBA implementation<sup>2</sup>..

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<sup>1</sup> Please take a look at the methodological appendices of each of these procedures, which are available at the website of each one of them. From UNCTAD: [www.unctad.org](http://www.unctad.org), OCDE [www.ocde.org](http://www.ocde.org), and UE, [http://europa.eu/index\\_es.htm](http://europa.eu/index_es.htm).

<sup>2</sup> [http://ec.europa.eu/enterprise/policies/sme/small-business-act/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm)

## 2. BACKGROUND: THE ENTREPRENEURSHIP EDUCATION POLICY IN EU

### 2.1. SECTOR CONTEXT: STRATEGIC IMPORTANCE OF ENTREPRENEURSHIP IN EU

Currently there is general agreement on the importance of developing entrepreneurship and entrepreneurial activity in the economy, which is supported by many studies of the World Bank, Global Forum, OECD, UNCTAD, UNIDO, IMF, ILO, IDB, European Union, among others. These in one way or another have been commissioned to reveal the positive relationship between entrepreneurship and entrepreneur's greater number of variables of job creation, economic growth and development of a country.

Furthermore, almost all countries have implemented programs and business development projects, especially small and medium enterprises SME's, in the field of OECD countries, and the Micro, Small and Medium Enterprises MSME's, in the context of developing countries. Which one indicates that there is a whole wealth of experience in this field, which has allowed basic infrastructure for business development in them and that makes it possible to pass to the next phase in the present, the development of entrepreneurial education action plan.

How is clear, in European context, the entrepreneur are highly consider. The European economy in general and SMEs in particular, depends on the entrepreneurs. Understood as an entrepreneur, **anyone individual who have the ideas and are willing to take the risks necessary to get a firm off the ground**<sup>1</sup>. In this context, the Entrepreneurship refers to an individual's ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs setting up social or commercial activities.

Entrepreneurship as a broad public policy area calls for the development of an integrated framework of government actions, in which the individuals, enterprises and environmental facets jointly play important roles. Entrepreneurship is a powerful driver of economic growth and job creation: it creates new companies and jobs, opens up new markets, and nurtures new skills and capabilities. In the field of industry for instance, it is therefore particularly important to fast development of the six emerging growth sectors identified in the Commission's Industrial Policy update: advanced manufacturing technologies and clean production, key enabling technologies, bio-based products, sustainable industrial and construction policy and raw materials, clean vehicles and smart grids.

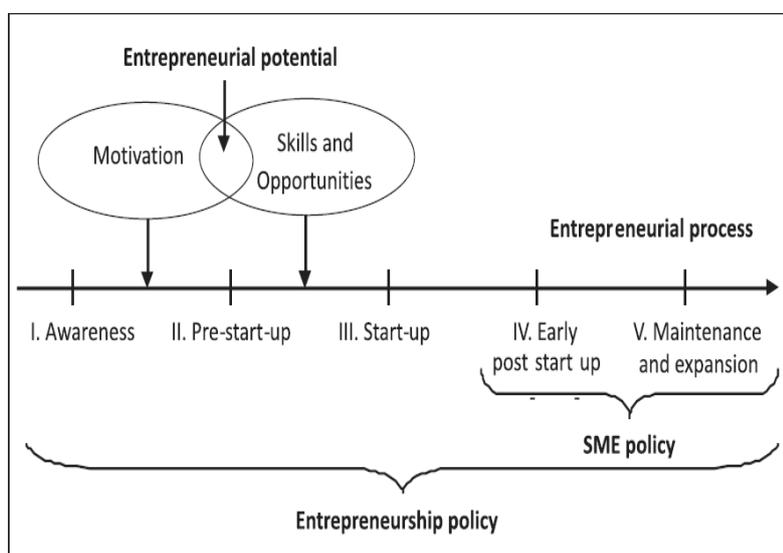
Entrepreneurship makes economies more competitive and innovative and is crucial in achieving the objectives of several European sectorial policies. Commercialising new ideas improves productivity and creates wealth. Without the jobs from new

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<sup>1</sup> [http://ec.europa.eu/cip/eip/promotion-entrepreneurship/index\\_en.htm](http://ec.europa.eu/cip/eip/promotion-entrepreneurship/index_en.htm)

firms, average net employment growth would be negative. New companies, especially SMEs, represent the most important source of new employment: they create more than 4 million new jobs every year in Europe.

However, entrepreneurship policy not always is directed towards the stimulation of all its elements as well as all phases of the entrepreneurial process. In a variety of recent strategic documents the entrepreneurship policy is equated with the small and medium enterprises (SME) policy. Therefore, there is a need to define both these policies and the relation between them.



It is recognized, that entrepreneurship policy is the base of SME policy. Without efforts to foster the development of positive attitudes, motivated individuals, start-ups, and young emerging firms, the foundation for an

efficient SME policy is limited. There are two main ways to distinguish entrepreneurship policy from SME policy<sup>1</sup>. The first is the breadth of policy orientation and instruments: While SME policies focus on firms (predominantly already existing SMEs), entrepreneurship policy focuses more on entrepreneurs who may be at different stages of the process of developing a new or early stage business. The second way is the fact that virtually every country has a ministry or governmental agency charged with promoting the viability of the SME sector. In contrast, no such agencies exist to promote entrepreneurship. In accordance to the distinctions mentioned above, Stevenson and Lundstrom defined entrepreneurship policy as: Policy measures taken to stimulate entrepreneurship, that are aimed at the pre-start, the start-up and post-start-up phases of the entrepreneurial process; designed and delivered to address the areas of motivation, opportunity and skills; and with the primary objective of encouraging more people to start their own businesses.

Furthermore, the roles of motivation (through awareness), skills (through knowledge, skills and abilities necessary for exploitation of opportunities) and opportunity (through the startup supports) are emphasized here as the key foundations of entrepreneurship policy.

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<sup>1</sup> Stevenson and Lundstrom: "Entrepreneurship Policy for the Future", 2001; On the Road to Entrepreneurship- Volume 1 of the Entrepreneurship Policy for the Future Series, 2002.

Thus, the entrepreneurship policy is more directed towards the entrepreneurial development of society as the whole for possible potential of entrepreneurship activity. It highlights the “soft” policy measures, including entrepreneurial education, consultations, improvement of skills and capacities, promotion of entrepreneurial culture and the like, as a vital force in order to enhance the willingness and opportunities of people to start their own business. At the same time, entrepreneurship policy also refers to the improvement of general business environment in which all kinds of business activities can flourish. In the meanwhile, the SME policy often focuses on already existing enterprises in a limited size scale and refers more to “hard” policy measures such as finance, infrastructure and equipment.

In relation to this strategic importance, the European Commission is working with Member States, in particular by facilitating the sharing of experiences and fostering entrepreneurial attitudes. In addition, campaigns such as the European SME Week, and others, have been launched to promote the image of entrepreneurship. Entrepreneurship is the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation.

The Entrepreneurship and Innovation Programme (EIP), is the largest component of the European Union’s Competitiveness and Innovation Framework Programme for the period 2007-2013. It directly and indirectly supports entrepreneurial activity and innovation among businesses across Europe, promotes better access to finance for SMEs through venture-capital investment and loan-guarantee instruments, and supports policy-making that encourages entrepreneurship and innovation<sup>1</sup>.

Also, the new Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) will run from 2014 to 2020, has the Objectives of: facilitating access to finance for Small and Medium-sized Enterprises (SMEs); creating an environment favourable to business creation and growth; encouraging an entrepreneurial culture in Europe; increasing the sustainable competitiveness of EU companies and helping small businesses operate outside their home countries and improving their access to markets. COSME has a planned budget of € 2.5 bi (current prices)<sup>2</sup>.

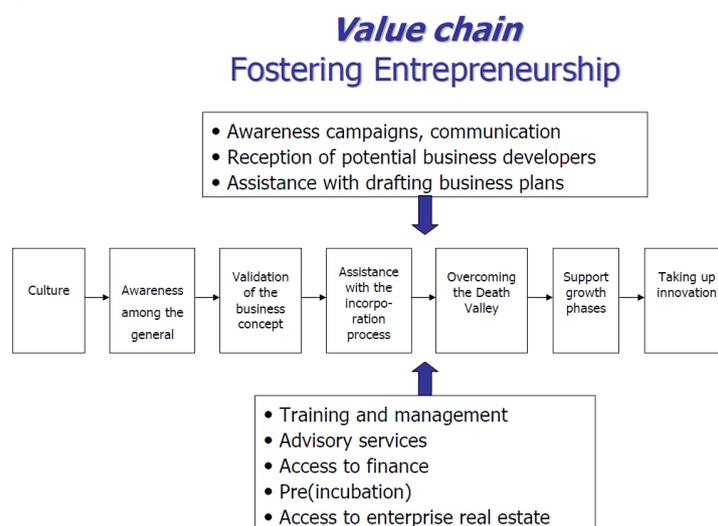
The expected results of COSME are: Easier access to finance for entrepreneurs and small businesses; More prominent role for self-employment and business development as important sources of growth and job creation; in individual EU countries: a more competitive industry, more entrepreneurs and higher employment rates.

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<sup>1</sup> <http://ec.europa.eu/cip/eip/>.

<sup>2</sup> [http://ec.europa.eu/cip/cosme/index\\_en.htm](http://ec.europa.eu/cip/cosme/index_en.htm).

Through its various programs, projects and activities, the European Commission has established a value chain of entrepreneurship in the EU, which is presented in the following diagram. In this value chain, as is easily appreciable education and training plays a key role.



## 2.2 ENTREPRENEURSHIP EDUCATION POLICY IN EU

The promotion of entrepreneurship in education and training is an area that has been given broad priority in the EU. The European Commission has defined entrepreneurship as one of eight **key competences in education and training**. The Council of the European Union has recently determined four strategic goals for collaboration in education and training, one of which is to promote creativity, innovation and entrepreneurship at all educational levels. Emphasis is here placed on creativity and innovation being prerequisites for wealth creation and for Europe being internationally competitive. Collaboration between different educational levels and working and business life is meant to help promote innovation and entrepreneurship in all forms of education.

Due to the emphasis in the Lisbon process on economic growth, entrepreneurship and innovation have been given increased attention within the education systems. The EU member states have committed themselves to increasing their efforts for informal learning, to developing flexible study courses that promote mobility and to encouraging collaboration between universities and working life on innovation and the transfer of knowledge.

Entrepreneurship refers to an individual's ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs setting up social or commercial activities.

Entrepreneurship education and training are among the key drivers in the process of building a stronger culture of entrepreneurship and entrepreneurial mindsets. With the help of entrepreneurship education, schools and other educational institutions could increase the awareness of entrepreneurship as a career choice, promote young people's entrepreneurial spirit, and support the development of their entrepreneurial skills<sup>1</sup>.

Entrepreneurship education is a life-long learning process and entrepreneurial mindset can be applied also in other context for enhanced creativity and innovation. The question is which policies and strategies the Nordic countries should promote in order to develop entrepreneurship education in the Nordic region.

An entrepreneurial culture is best realized in cooperation with the operational environment according to the set strategy and objectives. In general, Nordic countries have the strategies for entrepreneurship education in place, but the countries are in different stages of implementing the strategies. The report aims at presenting the current status of the implementation as well as bringing up a range of good projects and practices.

But, the crisis affects yet the engine for this recovery has been stuttering: since 2004, the share of people preferring self-employment to being an employee has dropped in 23 out of the 27 EU Member States. While three years ago for 45% of Europeans self-employment was their first choice, now this percentage is down to 37%.<sup>7</sup> By contrast in the USA and China this proportion is much higher: 51% and 56% respectively. Moreover, when new enterprises are founded, they grow more slowly in the EU than in the USA or emerging countries, and fewer of them join the ranks of the world's largest firms.

In 2001 the European Commission set up an expert group for training and education in entrepreneurship. The group had members from 16 countries. One of the group's tasks was to arrive at a common definition of entrepreneurship in training and education. In November 2002 the group submitted its report with the definition that the strategic plan and work on entrepreneurship in education is based on:

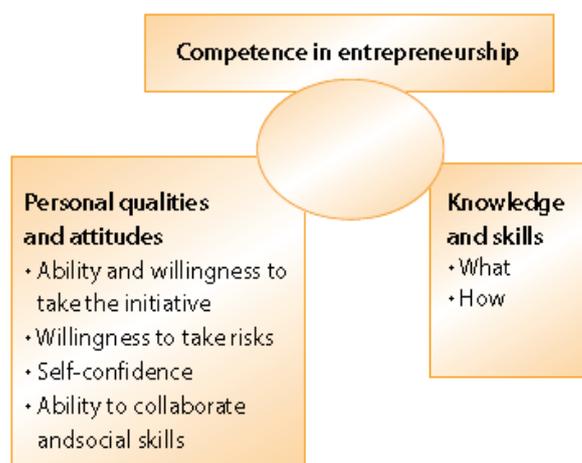
*“Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities, whether in a social, cultural or economic context.”*

This definition indicates the objective of entrepreneurship in education. Entrepreneurship in education includes development both of personal qualities and attitudes and of formal knowledge and skills:

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<sup>1</sup> [http://ec.europa.eu/education/more-information/education-and-training-in-the-member-states\\_en.htm](http://ec.europa.eu/education/more-information/education-and-training-in-the-member-states_en.htm).

- Personal qualities and attitudes that increase the probability of a person seeing opportunities and doing something about them. Work on entrepreneurship in education must primarily place emphasis on development of personal qualities and attitudes. In that way a basis is laid for later utilization of knowledge and skills in active productive work;
- Knowledge and skills concerning what must be done to establish a new enterprise, and concerning how to be successful in developing an idea into a practical, goal-oriented enterprise.



The focus on entrepreneurship in education shall also encourage more people to attempt to become entrepreneurs.

Policy conclusions and recommendations from the "Best Procedure" project concluded in november 2002 have focussed on a number of issues to be considered as crucial for making progress on entrepreneurship education in Europe. Some of the identified key areas are used in this Section as a basis for monitoring recent developments at national level, highlighting necessary steps to be taken, outlining future perspectives. They are the following:<sup>1</sup>

- The national curriculum
- Starting from primary education
- International networks, and programmes based on "learning by doing"
- Training for teachers
- Creating a global framework
- Translating policy commitment into concrete measures
- Collection of quantitative data

During recent years there has been increased national and international emphasis on the interaction that takes place between higher education, research and innovation, the so-called Knowledge Triangle. In a number of Communications, the European Commission stresses that the Knowledge Triangle is considered essential if the objectives of the Lisbon Strategy are to be achieved, and the Knowledge Triangle has been given an increasingly central position in the EU's

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<sup>1</sup> Expert Group Report of November 2002:

[http://europa.eu.int/comm/enterprise/entrepreneurship/support\\_measures/training\\_education/index.htm](http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/training_education/index.htm)

policy design. It is an objective that cooperation between the stakeholders is to be promoted on all levels, regionally, nationally and within the EU.

In the autumn of 2006 the Norwegian authorities in collaboration with the European Commission organised the conference Entrepreneurship Education in Europe – Fostering Entrepreneurial Mindsets through Education and Learning. As a result of this conference came The Oslo Agenda for Entrepreneurship Education in Europe. This document contains a number of proposed measures adapted to different types of stakeholders, where responsible actors can pick out measures at the relevant level and adapt them to local conditions. The EU has launched 2009 as the European Year for Creativity and Innovation, with the motto “Think. Create. Innovate.” The objective is to raise awareness of the importance of creativity for the innovation ability. In April 2009 the Nordic Council of Ministers entered into an agreement on strengthening collaboration in educational matters in order to promote a culture for entrepreneurship in the Nordic countries.

A major initiative to this end was the establishment of the European Institute for Innovation and Technology (EIT) in 2008. The EIT is to promote and integrate higher education, research and innovation in major areas of society.

In 2008 an expert group appointed by the European Commission presented its report Entrepreneurship in Higher Education, especially within Non-business Studies. This states that the education system has an important role to play in the promotion of entrepreneurial attitudes and behaviour. The expert group also believes that the benefits of education and training in entrepreneurship are not limited to the establishment of enterprises, innovative projects and new jobs. Entrepreneurship is concerned with the individual’s ability to transfer ideas to action. As a qualification it is therefore suitable for everyone, and can also help young people become more creative and give them greater selfconfidence.

In 2009, the European Commission carried out a pilot action that brought together senior officials from the ministries of education and enterprise of EU Member States and EEA countries, along with representatives from stakeholder groups such as business organizations and teachers’ trade unions. There were total of four High Level Reflection Panels (HLRP) of which Iceland participated in the 1st HLRP (16-17 March 2009 in London) and Denmark, Finland, Norway and Sweden in the 2nd Panel (23-24 April 2009 in Stockholm). After the panel meetings, a report ‘Towards Greater Cooperation and Coherence in Entrepreneurship Education’ was published<sup>1</sup>.

The report stated that an ideal national Entrepreneurship Education strategy needs to contain the following five dimensions:

- Developing the national strategy framework
- Support to educational institutions

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<sup>1</sup> DG Enterprise (2010), Towards Greater Cooperation and Coherence in Entrepreneurship Education: Report and Evaluation of the Pilot Action High Level Reflection Panels on Entrepreneurship Education initiated by DG Enterprise and Industry and DG Education and Culture, [http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training-entrepreneurship/reflection-panels/files/entr\\_education\\_panel\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training-entrepreneurship/reflection-panels/files/entr_education_panel_en.pdf)

- Teacher education and training
- Developing an active role for local and regional authorities
- Engaging with businesses and private associations and organizations

Also, the European Commission has recently published a report on the impact of entrepreneurship programmes at university<sup>1</sup>. The study shows clearly that entrepreneurship education makes a difference. Students who completed entrepreneurial programmes and activities displayed more entrepreneurial attitudes and intentions, got a job earlier after finishing their studies, could innovate more even as employees in a firm, and start up more companies.

Finally, In **The Europe 2020 Strategy**, the UE proposes three areas for immediate intervention:<sup>2</sup>

- Entrepreneurial education and training to support growth and business creation;
  - **New foundations:** increasing the prevalence and quality of entrepreneurial learning. Education should be brought to life through practical experiential learning models and experience of real-world entrepreneurs. Defined entrepreneurial learning outcomes for all educators are needed, to introduce effective entrepreneurial learning methodologies into the classroom. Practical entrepreneurial experiences can also be gained outside education. Young people should be encouraged to develop entrepreneurial skills through informal and non-formal education like volunteering. Such experiences should also be validated and recognized, in accordance with the proposed Commission recommendation in this area. Partnerships with businesses can ensure that education and training curricula are relevant to the real world. Initiatives such as the VET21-Business forum and Sector Skills Alliances provide routes to involve business. Education institutions should be encouraged to become more entrepreneurial in their wider approach, to ensure that they develop and live a culture of entrepreneurship and innovation through their missions, leadership, stakeholder engagement, curricula and learning outcome.
  - **Higher education for entrepreneurship.** The role of higher education in entrepreneurship goes far beyond the delivery of knowledge to participating in ecosystems, partnerships and industrial alliances. With high-tech and highgrowth enterprises increasingly becoming a focus of entrepreneurship-related public policies, higher education institutions are an active component of the innovation policies of Member States and EU. The European Institute of Technology (EIT) has pioneered the role of entrepreneurship as a key enabler of innovation on EU level and is

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<sup>1</sup> European Commission (2012), Effects and impact of entrepreneurship programmes in higher education <http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/education/>

<sup>2</sup> Entrepreneurship 2020 action plan, reigniting the entrepreneurial spirit in europe. Communication from the Commission to the European Parliament, the council, the european economic and social committee and the committee of the regions. Brussels, january 2013.

helping to bridge the gap between education and innovation for industry. A number of start-ups have already been created out of the EIT's Knowledge and Innovation Communities (KICs).

- **Strengthening framework conditions for entrepreneurs** by removing existing structural barriers and supporting them in crucial phases of the business lifecycle. There are six key areas where action is needed to remove existing obstacles impeding their creation and growth:
  - Access to finance;
  - Support for entrepreneurs in the crucial phases of the business lifecycle and their growth;
  - Unleashing new business opportunities in the digital age;
  - Transfers of businesses;
  - Bankruptcy procedures and second chance for honest entrepreneurs;
  - Regulatory burden reduction.
- **Dynamising the culture of entrepreneurship in Europe:** nurturing the new generation of entrepreneurs. With New horizons initiatives: reaching out to women, seniors, migrants, and the unemployed and young people.

The Commission will:

- Develop a pan-European entrepreneurial learning initiative bringing together existing European and national expertise for impact analysis, knowledge sharing, development of methodologies and peer mentoring between practitioners from Member States.
- Reinforce co-operation with the Member States to assess the introduction of entrepreneurship education in each country based on real experience and to support public administrations wishing to learn from successful peers.
- Establish, jointly with the OECD, a guidance framework to encourage the development of entrepreneurial schools and VET institutions.
- Promote the recognition and validation of entrepreneurial learning in an informal or non-formal learning environment.
- Disseminate the entrepreneurial university guidance framework in early 2013; facilitate exchange between universities interested in applying the framework; gradually promote it to the EU Higher Education Institutions;
- Endorse successful mechanisms of university-driven business creation (spin-offs etc.) and emerging university-business ecosystems around key societal challenges.

The Member States are invited to:

- Ensure that the key competence "entrepreneurship" is embedded into curricula across primary, secondary, vocational, higher and adult education before the end of 2015.
- Offer the opportunity to young people to have at least one practical entrepreneurial experience before leaving compulsory education, such as running a mini-company, being responsible for an entrepreneurial project for a company or a social project;
- Boost entrepreneurial training for young people and adults in education by means of Structural Funds resources in line with national job plan, notably the European Social Fund (ESF) in line with National Job Plans, particularly as a tool for second chance education for those not engaged in education, employment or training. Take full advantage of the training possibilities available under the rural development fund - European Agricultural Fund for Rural Development (EAFRD).
- Promote entrepreneurial learning modules for young people participating in national Youth Guarantee schemes.

### 3. EUROPEAN BENCHMARKING: ENTREPRENEUR CAPABILITY & SKYLLS POLICY

#### 3.1 THE EC&SP IN NORWAY

Our first case study, it's Norway. Is the country more representative of what has been called the “Nordic model of development”, with only an estimated population of 4.9 million, reached the 485.8 billion dollars in 2011 (GDP, current U.S. \$), and the second highest GDP per capita in the EU (GDP PPP in \$ 55.300 for 2012)<sup>1</sup>.



Norway is one of the first countries in Europe that launched a specific strategy to encourage entrepreneurship in education at nationwide. Which one makes this Nordic country a representative case study and an obligatory reference.

#### SME'S OVERVIEW

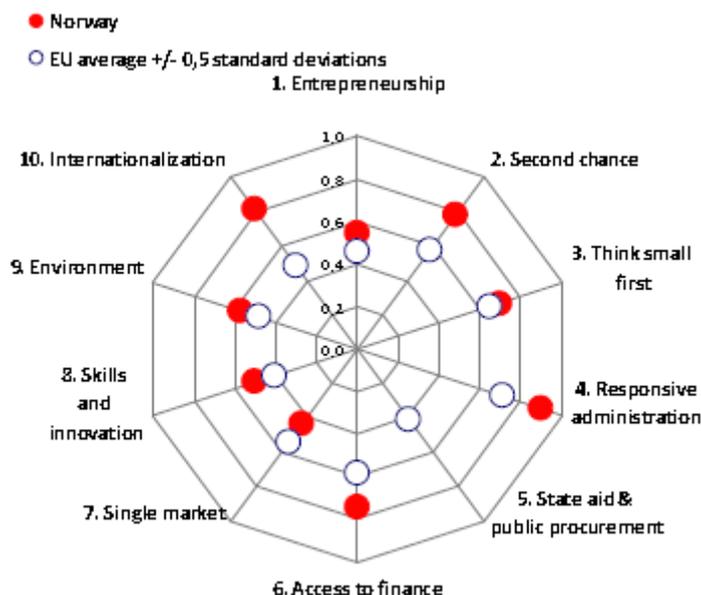
Norway has a business ground dominated by SMEs. For 2010, the SME's were 265.131, accounting for 99.8% of all enterprises, which they offered 974.965 jobs. The largest numbers of SMEs are to be found in the wholesale and retail trade, construction and real estate. In terms of employment, the top three sectors are wholesale & retail, construction and manufacturing. Mining and quarrying is by far the most important sector for SMEs in terms of value added. This shows the reliance of Norway's economy on the extraction of hydrocarbons. In 2010, the average number of employees per SME in Norway is 3.68, which is below the EU average (4.22)<sup>2</sup>.

The Small Business Act SBA for Norway's (see spider chart), shows results that are above the EU average in almost all areas, except single market.

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<sup>1</sup> The gdp in Brazil not reach the 11 thousand dollars per capita for the same period. World Bank Country Database.

<sup>2</sup> See SBA Fact Sheet Norway 2012, DG Enterprise and Industry, European Commission, 2013.



The rate of opportunity entrepreneurship (those for whom running their own business was their first career choice) is 3% above the EU average. Norway outperforms the EU average in most of the remaining indicators in this dimension. The costs of closing down a business in Norway are extremely low compared to the EU average.

In think small first, Norway beats the EU average by a wide margin for the two indicators that measure Communication and simplification of rules and regimes' and the 'Burden of government regulations'. It is quite remarkable that the start-up time for a new business in Norway is half the EU average. Starting a business in Norway is also much cheaper. The same applies to the number of tax payments – only four compared to EU average of 15 – and the time needed to comply with these requirements (87 as compared to 206 hours). Norway is also a role model in that it offers all basic public services online, compared to the average of 89 % for the EU. SMEs have access to a wider range of e-procurement services (92 % versus 73 %), and are paid much more quickly than their EU counterparts (14 days compared to 25 days)<sup>1</sup>.

On the policy front, the Norwegian Government has publicly supported the introduction of the European Commission's proposals on public procurement. One of the new provisions enables contracts over half a million euro to be divided into smaller parts ("lots"), so that SMEs can participate more easily and gain access to public procurement.

In Internationalization, Norway's strong performance in this area serves as a role model for the EU countries. All indicators describing the trading performance of Norwegian SMEs point in a positive direction. The remaining indicators describing the administrative resources required for trading from and to Norway for SMEs are also very strong. However, some patterns are emerging: although the costs of exporting and importing appear to be slightly lower than the EU average, it takes considerably longer to engage in trading (in both cases, SMEs have to take into account an extra four days compared to the EU average). In addition, the indicators tracking the administrative burden by simply counting the number of documents required to export and import also put Norway way ahead of the EU average.

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<sup>1</sup> Nordic entrepreneurship Monitor, 2010. NORDEN Nordic Council of Ministers, 2011.

## NATIONAL EDUCATION STRATEGY

Entrepreneurship has received increased political attention. A number of initiatives have been introduced since the first Government entrepreneurship strategy in 2004. So far, most policy instruments in this area have focused on removing barriers to entrepreneurship and nurturing an entrepreneurial culture. Merging narrow, sector specific instruments into broader, sector neutral instruments has been a deliberate strategy of Government over the recent 5-10 years. Hence, measures such as the R&D tax deduction scheme and programmes for user driven innovation are among the most powerful tools for growth entrepreneurship and for innovation policy in general. In the recent years an increasing share of funding and instruments have been focusing on green innovations and green technologies. In 2012, the Government announced the establishment of six new funds for increasing seed capital supply to startup companies with growth potential. The total capital is supposed to reach 3 billion NOK (410 million EUR), with a 50/50 share between public and private sources<sup>1</sup>.

In response to the financial crisis, startup grants to companies with growth potential were substantially increased, but have now been considerably reduced, following a general phasing out of the measures. In its budget proposal for 2013 the Government introduced increase in funding for startup grants, with a special emphasis on companies at an early stage (less than 3 years old). The expansion concerns grants on the national level, thus avoiding the risk of mismatch with funding and entrepreneurship in regionally oriented grants.

Reducing administrative burdens has a high priority in Norway. One of the concrete actions is that audit requirement for companies with annual revenues of less than 5 million NOK (700 000 EUR) was abolished in 2012. This change is expected to reduce the administrative burdens for up to 140 000 companies. The capital threshold for starting a limited company has also been reduced from 100 000 to 30 000 NOK (4 000 EUR).

In addition, the so-called "Altinn" electronic portal will be strengthened and further developed in order to allow easier and more effective reporting procedures for companies<sup>2</sup>. The 2013 budget proposal includes an increase of 100 million NOK to further development of the Altinn portal. A new "Invest in Norway" office will be established, following an initiative launched by the Government in 2012. Innovation Norway has started to develop a dedicated "High-Growth Programme", where selected companies will receive special support and guidance through different phases of their business cycle.

Nevertheless, Norway was one of the first European countries to develop a national strategy plan for entrepreneurship in the school system.

In the field of entrepreneurship education and skill, Norway implemented three national initiatives:

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<sup>1</sup> <http://www.regjeringen.no/en.html?id=4>.

<sup>2</sup> <https://www.altinn.no/en/>.

- **“Strategic plan for entrepreneurship in education and training: See the opportunities and make them work, 2004-2008”.** This Plan was carried out for three ministries: The Ministry of Trade and Industry, the Ministry of Education and Research, and the Ministry of Local Government and Regional Development. The purpose of the strategy is to profile entrepreneurship as an educational objective and training strategy. With the government vision of Entrepreneurship in the education system shall renew education in this and create quality and multiplicity in order to foster creativity and innovation in Norway. A strategy for entrepreneurship in education and training is a strategy to strengthen the individual’s ability to see and exploit opportunities in an economic, social and cultural context.

*“We wish to motivate and inspire educational institutions, municipalities and county municipalities to plan and firmly establish training in entrepreneurship in collaboration with trade and industry and other relevant stakeholders in the local environment. A deliberate, goal-oriented focus on entrepreneurship will contribute to development of an innovative culture in all parts of the country. This is a culture that will promote entrepreneurship, thereby promoting innovation and rethinking, as well as the ability to take the initiative and calculated risks. The educational system has a role to play in stimulating attitudes and behaviour that promote the capacity for collaboration, creativity and innovation in children and young people. This must take place through long-term work with satisfactory progression”<sup>1</sup>.*

The target group for the strategy is primarily those who are responsible for education at all levels of the educational system. Various stakeholders who support entrepreneurship in their sectors, in this strategy will find a comprehensive plan and overview of the work.

The responsibility for coordination lies with the Directorate for Education and Training and the Ministry of Education and Research who justify their implementation on: *“Encouraging entrepreneurship is essential to the development of trade and industry throughout Norway. Newly established enterprises can contribute to strengthening the local labour market and the local business sector inasmuch as such new enterprises will often emerge where their Founders live. New workplaces will give young people greater freedom of choice regarding choice of domicile”.*

The plan was developed through the joint efforts of the teams of the three Ministries directly involved and an expert body the Directorate for Education and Training.

The plan comprises the entire educational career from primary school to college and university, including teacher training. With the following specific goals by educational level:

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<sup>1</sup> See the opportunities and make them work, 2004-2008. Strategic Plan for Entrepreneurship in Education and Training. 2004.

- **Primary goal:** The education system shall contribute to productive work and innovation by encouraging acquisition of knowledge and skills, enjoyment and mastery of work, independence and community feeling in pupils, students and teachers at all levels, and development of a culture propagating entrepreneurship.
- **Goals at all levels of education and training:**
  - A comprehensive and well-founded focus on entrepreneurship that includes public and private sector parties;
  - Increased collaboration between educational institutions;
  - and business and community life;
  - Entrepreneurship focus in regional development policy;
  - Increased contact with education systems in other countries, increased contact with international networks and greater opportunities for pupils and students to gain international experience, a training that provides variation and challenges in various learning arenas.
- **Goals of primary, lower and upper secondary education and training:**
  - School-owners who pave the way for entrepreneurship in training;
  - Pupils with social and professional subject curricula skills and attitudes that promote creativity and innovation;
  - Increased competence in teachers in schools concerning providing entrepreneurship training;
  - Schools that develop and utilize varied work forms and new methods;
  - More pupil and youth enterprises at lower secondary level and in upper secondary education and training, and more pupils taking part in this;
  - Increased use of partnership agreements and similar collaboration with local businesses.
- **Goals of higher education:**
  - Increased extent and breadth of entrepreneurship provision for students;
  - More student enterprises and more students participating in these;
  - An increased degree of collaboration between universities/colleges and the business sector;

- Doctoral scholars in the fields of entrepreneurship and innovation;
  - Training in entrepreneurship provided in more programmes of study;
  - An increased range of entrepreneurship courses for teachers.
- **Goals of teacher training**
    - Increased competence in entrepreneurship in providers of teacher training
    - Reinforcement of work on entrepreneurship in the general teacher training programme
    - Increased collaboration between teacher training and local business life
    - More teachers and school managers who take courses in entrepreneurship.

This plan ends in 2008, and is currently being evaluated. It is not known if there will be a follow-up to this plan.

With the contribution of this Plan, Norway beats the EU average by a large margin in terms of both the share of enterprises providing training and the share of employee taking part in education and training. The rate of Enterprises providing training to their employees for 2005 was 86% for Norway, (EU average 58%). Also, the employees's participation rate in education and training was 19% for 2010 (EU average of 11%)<sup>1</sup>. In 2008, 21 of the state university colleges and universities reported that they offered programmes of study in entrepreneurship, varying from individual courses to complete master's degree programmes. Among these there are courses and degree programmes for teachers, economists, technologists and the tourism trade as well as cross-disciplinary courses<sup>2</sup>.

- **Action Plan Entrepreneurship in Education and Training, from compulsory school to higher education in 2009- 2014.** This Plan was launched in September 2009. The implementation of this plan comes from the results of the previous plan assessment conducted in 2008. The results of the evaluation indicated among other things a marked increase in the number of pupils and students that have taken part in different types of entrepreneurship training, especially in primary and secondary education. The evaluation concluded that it is necessary to expand efforts in a number of areas so as to promote entrepreneurship in teaching and learning on all levels.

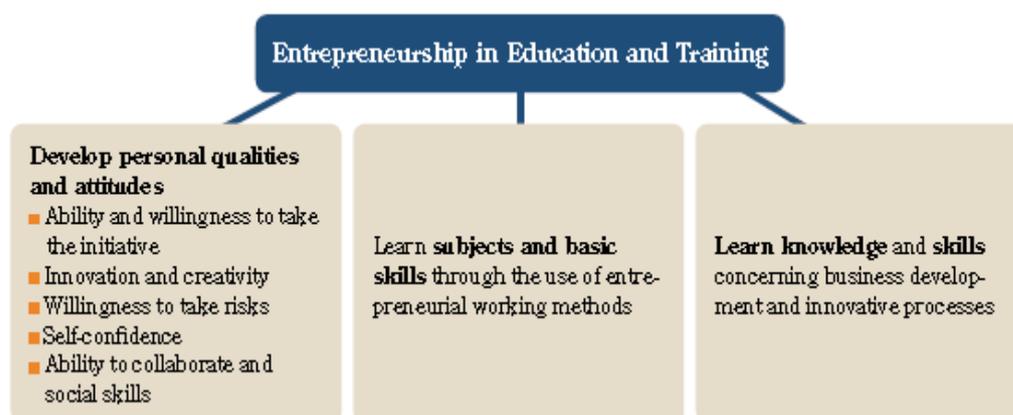
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<sup>1</sup> The SBA Fact-Sheet Norway, 2012

<sup>2</sup> Ibid, pag.3.

Consequently, the objective of this second Plan is to strengthen the quality of and the scope of entrepreneurship education and training at all levels and areas of the education system. Internationally Norway shall be a leading force when it comes to entrepreneurship in education and training. *“Entrepreneurship competence is relevant for all areas of working and business life, in both new and established activities and enterprises. Voluntary organisations/associations, foreign aid and development work and the cultural sector are also important areas of society where entrepreneurship and innovational processes are relevant”<sup>1</sup>.*

Entrepreneurship in education and training may be both theoretically and practically oriented. Training in entrepreneurship can be organised as a separate subject or be integrated as a way of working in other subjects. Entrepreneurship can be a tool and a working method to stimulate learning in different subjects and in basic skills. Entrepreneurship in education and training may also further develop personal characteristics and attitudes. The training may focus on imparting knowledge on how to start one’s own business and about innovative and ground-breaking processes in existing enterprises (see figure above).



The main target groups for this Action Plan are leaders and owners of educational institutions, teaching staff, as well as pupils and students. Entrepreneurship in education and training must comply with the overarching fundamental principle in Norwegian educational policy: that it must be given broad priority and made available for everyone, adapted to the individual’s abilities and needs. How the training in entrepreneurship actually takes place, is organised by the individual educational institution. However, this work requires collaboration and efforts from a number of parties, including:

- **Private actors:** business and industry, and commercial and industrial organisations
- **Organisations:** pupil and student organisations, the social partners, Junior Achievement-Young Enterprise Norway

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<sup>1</sup> Entrepreneurship in Education and Training, from compulsory school to higher education in 2009- 2014.

(JA-YE Norway), STARTNorway and the Norwegian Association of Local and Regional Authorities (KS)

- **Public actors:** Innovation Norway, the Research Council of Norway, SIVA, municipalities, county authorities and other regional development actors, the Directorate of Education and Training, the Ministry of Education and Research, the Ministry of Trade and Industry and the Ministry of Local Government and Regional Development.

Thanks to the results of previous and current plan, the entrepreneurship education is explicitly recognized at all school levels as cross-curricular objective and as part of other subjects. It is integrated in the National Curriculum for knowledge Promotion in Primary and Secondary Education and Training. It is embedded in the themes and aims of the Core Curriculum, in the clauses of the Quality Framework and in the competence aims of the various subject curricula:

- In ISCED 2, entrepreneurship education is part of the compulsory subject 'Social studies' and of many new optional subjects to be introduced.
- In ISCED 3, it is part of the compulsory subject 'Social studies' and it is taught as a separate optional subject 'Entrepreneurship and business development'.
- The Ministry announces to the Parliament the inclusion of entrepreneurship as a subject in the development of new offers for optional subjects from the school year 2012/13. The proposed changes to the national curriculum were approved by the Parliament (Storting) on 9 January 2012<sup>1</sup>.

Also, in recent years a number of universities and university colleges have established separate units for entrepreneurship, creativity and innovation, such as the Centre for Entrepreneurship at the University of Oslo, the University of Stavanger, the University of Agder and the Norwegian University of Science and Technology (NTNU). Bergen University College has established a Centre of Innovation in collaboration with the Norwegian School of Economics and Business Administration and the University of Bergen. As a follow-up to this, some institutions have established different variants of pre-incubators or incubators. The University of Stavanger, for example, has established a student incubator, Oslo University College has a pre-incubator and NTNU has an innovation centre. Doctoral degrees have been awarded in the field of entrepreneurship and professorships have been established at the University of Oslo, NTNU, the University of Agder and Bodø University College, among others<sup>2</sup>. To attain the main objective of the Plan, the Action Plan here proposes measures that aim to

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<sup>1</sup> <http://sok.udir.no/Sider/results.aspx?k=entrepren%c3%b8rskap> (only NO).

<sup>2</sup> See their respective websites.

strengthen efforts concerning entrepreneurship in education and training, as well as a tracking system.

- **Global Entrepreneurship Training Programme (GET)**<sup>1</sup>. From 2010, a new programme “Global Entrepreneurship Training” is aimed at entrepreneurs – and executives of Norwegian start-up companies – with international growth potential who want to develop their skills to succeed globally. The Global Entrepreneurship Training (GET) aims to plant hope, motivation, and confidence in the minds of the people to bring about a positive change built on honesty and integrity in them, in their work, and in their local communities. A tangible output GET intends to produce via the program is to enable participants to 1) identify either a local need or an advantage 2) to create ethical ventures/ideas to satisfy those needs or 3) to utilize the advantage to generate revenue. Big picture- by producing ventures, jobs openings, and innovative ideas, GET anticipates poverty reduction and economic stabilization. The core of the programme is a five-day executive course at Babson College in Boston followed by field work of one week or longer, at any Innovation Norway incubator office in the Americas. Babson College is the number one USA teaching institution on the subject of entrepreneurship. The following industries are in particular encouraged to apply: ICT, medical technology, oil & gas, and clean technology.

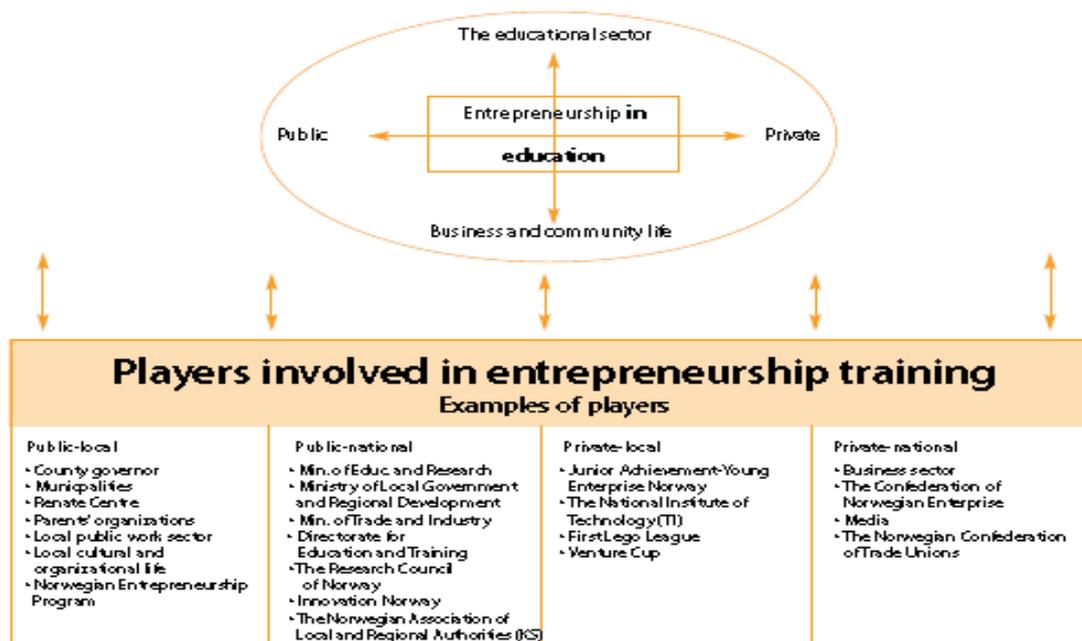
## KEY INSTITUTIONS

There are three ministries that are actively involved in Entrepreneurship policy; The Ministry of Trade and Industry, the Ministry of Education and Research, and the Ministry of Local Government and Regional Development. There are also three state owned organizations that are the main organizations for entrepreneurship at a national level; The Industrial Development Corporation (SIVA), Innovation Norway and the Norwegian Research Council.

Entrepreneurship policy in Norway is primarily the responsibility of the Ministry of Trade and Industry, and the Ministry also coordinates the Government’s innovation policy. The Ministry of Local Government and Regional Development has a major role in promoting entrepreneurship with a regional perspective. When it comes to the framework conditions, the Ministry of Finance, the Ministry of Labor and the Ministry of Education and Research are also important players. On the operational level, most funding and instruments are concentrated around three agencies; 1) Innovation Norway, which is responsible for loans, grants and advice for business and regional development, 2) The Research Council of Norway, which is responsible for most R&D related instruments and 3) SIVA, the Industrial development Cooperation, which aims at strong regional and industrial clusters through infrastructure, investment and knowledge networks and instruments (see the next chart).

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<sup>1</sup> <http://www.entrepreneurship.org/en>.



These national actors are also some of the most important actors for Entrepreneurship policy at the regional level. The most important motivator for entrepreneurship is Junior Achievement – Young Enterprise Norway, which teaches business skills to students of all ages. JA-YE Norway receives funding from the Ministry of Trade and Industry, and The Ministry of Government and Regional Development. The Norwegian government aims to be a driving force and partner in the work with entrepreneurship in education.

### 3.2 THE EC&SP IN FINLAND

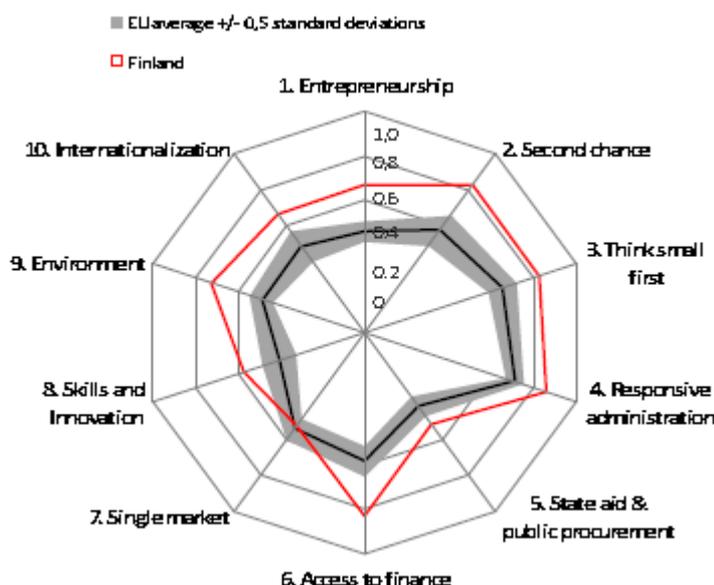
Finland is our second case of this Benchmarking and also it's a Nordic country. It has an estimated population of 5.3 million and GDP of 263 billion of dollar by 2011.



#### SME'S OVERVIEW

Finland has 212,508 SME by 2011, contributing at 61.7% of total employment (869, 776 jobs) and 57% of total value added (49 billions) for this year<sup>1</sup>.

The specific difference with respect to the European average SME's is made up of Finnish company's hi-tech manufacturing and knowledge-intensive services. As is the case elsewhere in the EU, the majority, i.e. two-thirds, of SMEs are rather low-tech and not knowledge intensive. Still, Finland boasts a considerably stronger base of high- and mid- to high-tech SMEs (e.g. computer, electronics and optical products as well as electrical equipment, pharmaceuticals and chemical products) than most of its EU partners. The 3513 Finnish SMEs in these sectors represent



16% of all SMEs (EU: 12%), they employ slightly more than 52000 people (28% of all manufacturing jobs, EU: 21 %) and create more than a third of the total value-added in manufacturing (34%, vs. 30 %). The same holds true for the 41.888 knowledge-intensive services in Finland.

Finland's SBA profile could serve as a benchmark for all other EU Member States. In nine out of ten SBA areas, Finland outperforms the rest of the EU, and in most cases by a wide margin. 'Single market' is the only area which is in line with the EU

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<sup>1</sup> SBA Fact-Sheet Finland 2012, EC, 2013.

average. Given Finland's high level of achievement, it is natural that in most of the SBA areas it is consolidating its excellent position rather than further improving it. Exceptions are Responsive administration, Skills and innovation and Internationalisation. In these areas, Finland not only has a high or above-EU average performance level but is also on course for further considerable improvements (as the consolidated compound growth rates for these indicators show for the period 2007-2012).

Finland has implemented quite a few SBA measures to promote small business. The most important of these has focused on securing small business access to finance and reforming competition in public procurement, as well as facilitating electronic transactions.

Finland remains the EU leader in Entrepreneurship with the highest overall score of all EU-27 countries. There is little substantial change in most of the individual indicators as compared to last year; Finland continues to come first in the EU on three of eight indicators (entrepreneurship rate, the status of entrepreneurs in society and media attention for entrepreneurs). Finland has the largest percentage of adults who think that successful entrepreneurs enjoy a high status (almost 87% in Finland versus 71% for the EU as a whole). Finland also has the highest score on two other fronts: media attention for entrepreneurship and the proportion of adults who feel that school education helps to instil an entrepreneurial mindset (55%; EU: 49%). Against this backdrop, it is hardly surprising that 45% of Finns (as opposed to 28% of EU citizens overall) think it would be feasible for them to start their own business.

As second chance measures, in Finland, closing down a business takes much less time (less than one year as opposed to almost two years) and costs much less (4 % of the debtor's estate versus almost 11 %) than in the EU as a whole. This creates a much more favourable environment for a business restart than in most other EU countries.

The scores for the Responsive administration indicators show that Finland has the most SME-friendly environment in the EU. This ranking is based on above-average performances for nine out of ten indicators. On all counts (costs and time needed to start a business, transfer, number of tax payments, etc.), Finland scores much better than the EU average. The cost of enforcing contracts remains a particular strong point. This is about a third cheaper in Finland than in the EU as a whole (13% compared to almost 21%). The only area where Finland is not ahead of its EU peers is the start-up time (14 days) where Finland's performance is in line with the EU average. Policy wise, the bureaucracy for small firms in the food industry has been reduced since September 2011. A firm starting a new business needs to announce this at least four weeks beforehand, but no advance approval is needed. Furthermore, an inverse value-added tax in the construction sector has been introduced. According to the new law the buyer (instead of seller) is obliged to pay the VAT. The reform is aimed at reducing the 'grey economy'<sup>1</sup>.

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<sup>1</sup> SBA Fact-Sheet Finland 2012.

Finland is also the EU's top performer in access to finance for SMEs. While SMEs in many other EU countries struggle to obtain finance, especially in the form of bank loans, Finland's SMEs appear to be largely unaffected by such problems. In terms of access to credit, Finland continues to score well on all indicators except for the relative difference in interest rate levels between loans above EUR1 million and loans below that threshold. Finland performs best on the willingness of banks to provide loans: only 1% of SMEs (last year 0 %) reported deterioration in banks' attitudes in this regard, the best score of all EU Member States. Finland has also made inroads as regards the cost of credit for small firms (SME-sized credits)<sup>1</sup>.

The mark-up last year for smaller loans was higher in Finland than in the EU as a whole (30% compared to 24 %); this year, the mark-up fell to

19%, which is practically on par with the EU average. Payment delays remained relatively short — only 23 days compared to the EU average of 53 days — and so did payment losses — only 1.9 % of total turnover (EU: 2.9%). Both factors had a positive effect on the cash-flow situation of SMEs. Access to venture capital is also above average, while the indicators describing the basic regulatory characteristics of the financial market, such as the legal rights of creditors and depth of credit information, show a more mixed and rather average picture overall.

In February 2011, the Finnish government and the Export Credit Agency decided to award EUR 700 million in investment loans for 2011. The financial problems of SMEs in particular are larger than before the economic recession, so this type of financing is needed as a complement to the financial markets. New conditions for financing firms due to economic recession were introduced in February 2011. On 3 February 2011, the public-owned credit agency (Finnvera) extended the maximum loan time from six to ten years, improving the financing prospects for SMEs in particular. On 21 December 2011, the government agreed to extend Finnvera's counter-cyclical financing by one year (to the end of 2012) on account of the weakening economic climate in 2012.

Finland's strong performance in the SBA area Skills and innovation last year was confirmed again this year with little change on most indicators. Finland scores 'above average', and on the same level as Germany, Denmark, the United Kingdom and Belgium. As was the case last year, Finland performs well in terms of the innovation capability of SMEs. Four out of the five innovation indicators show 'above average' scores: SMEs introducing product or process innovations, Sales of new-to-market and new-to-firm innovations, innovative SMEs collaborating with others and SMEs innovating in-house. These results confirm the findings of the Entrepreneurship section above as regards the relatively high proportion of hi-tech SMEs, particularly in manufacturing. Only when it comes to introducing marketing and organisational innovations do Finnish SMEs lag behind their EU counterparts by some margin. Also, Finland scores well above the average on the indicators for skills development and training: 77 % of SMEs in Finland engage in training, as compared to only 58 % in the EU as a whole. Also, many more employees of micro

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<sup>1</sup> [https://www.stat.fi/meta/svt/index\\_en.html](https://www.stat.fi/meta/svt/index_en.html).

firms participate in education and training in Finland than in the EU on average (26% compared to about 11%).

Policy wise, in the beginning of 2011, the R&D tax premium was increased from 8 to 10%. This reform applies to all firms but is especially important for small R&D-intensive firms. In 2010, the government introduced simplified e-invoicing. The Patent Law Reform in 2010 led to a reduction in the fees for new patents. Patent fees only apply after five years. A similar reduction in fees was brought in under the trademark law reform. The first three years are free of fees.

Finally, in internationalisation indicator the best scores are for the costs associated with exporting to and importing from countries outside the EU. Export costs, for instance, are less than 52 % of the EU average (\$ 540 compared to \$1 032). In the case of imports, the difference is more than 43% (\$620 compared to \$ 1 101). In addition, Finnish SMEs take less time (three days less than the EU average) to import and export their products. This consistently positive picture is rounded off by the smaller number of documents that are required for trading (both exporting and importing).

## NATIONAL STRATEGY

Entrepreneurship education has been a part of Finnish national basic education curricula since 1994. However, nationally and internationally a measurement system concerning teachers' actions in entrepreneurship education was missing and therefore a national project was launched in 2008. MTEE project, co-funded by European Social Fund, was targeting at this challenge by creating an assessment tool for teachers of basic and secondary education.

Two ministries and sixteen external organizations directly are involved in formulating strategy. Steering group for entrepreneurship education was first set up in 2002 and the third time since then.

Entrepreneurship is emphasized in the latest 5-year development Plan **for Education and Research** (Ministry of Education and Culture, 2011-2016, following the one for 2007-2012). The goal for the Government is *to make Finland the most competent country in the world by 2020*. The aim is that Finland will be placed among the OECD top countries in major comparisons of young people's and adults' learning outcomes, in the number of school dropouts and in the relative number of higher education graduates among young and older adults. Measures will be taken to reduce inheritance of education and to minimise gender differences in learning outcomes, participation in education and in the completion of studies. The specific objective of this Plan is promotion of entrepreneurship at all levels and improving the co-operation between education and work life<sup>1</sup>.

A primary aim for the Government is to enhance the **competitiveness of Finnish knowledge and competence**. As the working-age population keeps decreasing

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<sup>1</sup> Education and Research 2011-2016. A development plan. Reports of the Ministry of Education and Culture, Finland 2012

and the young age groups getting smaller, the challenge is to ensure a high level of competence and sufficient workforce by fields and regions.

Measures will be taken to update the content of education and training and to enhance the quality, efficiency and impact of the operations of educational institutions. The decreasing age groups make it possible to cut the provision of education in a controlled way. Research standards will be raised and measures will be taken to secure research prerequisites.

Education policy is built on the **lifelong learning principle**. Learning skills start developing early in pre-primary and basic education, and input into these will prevent exclusion at a later stage. In a constantly changing society, favourable development of learning skills is of primary importance. Lifelong learning policy entails that transitions from one level to another and from education to the labour market are as flexible as possible. Learning does not end with a degree or qualification gained in youth but continues throughout adult life. In all education and training, attention will be paid to the recognition of prior learning so that knowledge and skills gained earlier within and outside the education system can be counted towards a qualification as fully as possible. An adult education and training system comprising all the levels of education creates a basis for responding to the competence requirements in working life and for offering high-quality services for self-improvement, for instance, in liberal adult education.

In this national programme, Finland commits itself to raising young people's level of education and reducing the proportion of early school-leavers. In the strategy, Finland sets a concrete aim to raise the share of 30-to-34-year olds who have higher education diplomas to at least 42 per cent. According to the policy line recorded in the Government Programme, by 2020 over 90 per cent of the 20-to-24-year-olds will have a post-compulsory qualification.

Level of education among the population will be raised, especially in the next fields:

- Action programme for equal opportunity in education;
- Equal access to education enhanced by municipal reform;
- Availability of competent workforce;
- Education supply targeted in response to labour market needs;
- Lifelong learning and guidance counselling;
- Immigrants' participation in education and training;
- Stronger links between education and working life;
- Active citizenship;
- National languages strategy and enlarged language reserve;
- Information and communications technologies in education;
- Student welfare services to be improved;
- Better access to basic education in the arts.

As is easily noticeable, actions to develop each of the indicators in these fields. Now, it detail that we care more for the purposes of this study.

- **Availability of competent workforce.** For some time now, Finland has based its competitiveness on high-standard knowledge and skills – on higher education and on strong professional competence –, on the

innovativeness thus engendered and on rapid utilisation of innovations in production. The problem with the availability of workforce may evolve into a bottleneck in the competence-driven competition strategy. A worst-case scenario would be that businesses encountering difficulties with access to workforce increasingly outsource also their planning and design abroad.

Access to competent workforce can be improved and the unfavourable development of the care ratio can be compensated through measures improving the efficiency of the education system and the targeting of the education and training supply. In terms of education policy, this means:

- Shortening the overall time spent in education and training and the average age at the time of qualification by means of shortening the time spent at each level of education, expediting transition phases, reducing unnecessary doubling in education and enhancing the recognition of prior learning;
- Improving the completion rate in education, and;
- Improving the matching of education supply and labour demand.

The main measures to be implemented to achieve these objectives are:

- With a view to lengthening work careers, the aim is that the median age of new polytechnic graduates will fall to 24.1 and the median age of Master's graduates to 26.3;
  - The aim is that 95 per cent of school-leavers continue directly in qualifying upper secondary education and training and that all young people continue in post-compulsory studies. The admissions at the upper secondary level will be reviewed to this effect;
  - The admissions to higher education will be reformed to promote more rapid transition to further education. The aim for 2016 is that 50 per cent of matriculated students continue their education the same year. The main education track for matriculated students is higher education;
  - The aim is to raise the completion rate in the upper secondary school to 90 per cent, in initial vocational education and training to 78 per cent, and in higher education to 75 per cent.
- **Education supply targeted in response to labour market needs.** At the present, the education supply in some fields exceeds and in others fails to meet labour market needs in Finland. Inadequate matching of education and the labour market demand has an effect on not only the functioning of the labour market, but also the way young people find their place in working life and how long they study. The targeting of education supply is backed up by a wide range of foresights conducted by the Government Institute for Economic Research and the National Board of Education, among others.

In the present decade, the targeting of the education supply will probably gain even more importance because the rate of exit from the labour force

will clearly exceed the rate of entry. In some fields at least, the oversupply will probably turn into a labour shortage. The challenge will be to promote a balanced development of employment in industrial production and welfare services, among others.

- **Lifelong learning and guidance counselling.** Lifelong learning means learning throughout the lifespan and in all walks of life. For the principle of lifelong learning to be realised, it is vital that knowledge and competencies are made visible and knowledge and skills are valued to the full wherever, whenever and however they have been acquired. When done correctly, the identification and recognition of prior learning will make for a well-working education and qualification system and improve the motivation and progress of the individual in education and in working life.
  - Educational legislation, guidance counselling and financing will be used to promote the identification and recognition of prior non-formal learning in all education. Measures will be taken to promote competence-based definition of degrees and qualifications.
  - Criteria will be defined for guidance counselling in basic education, in general upper secondary education and in vocational education and training for adoption in the autumn term of 2014. In vocational education and training, the criteria will be adopted in connection with the implementation of the quality strategy.
  - Electronic information, guidance and counselling services will be developed as part of the learner's web services included in the SAD e-programme (Programme expediting electronic transactions and democracy).
  - The higher education institutions will raise the standard of instruction and guidance and improve the graduation rates at all degree levels.
  - The initial education of guidance counsellors will be developed in response to the growing demands of the profession. Similarly, measures will be taken to improve opportunities for persons working within guidance in different administrative sectors and in working life to participate in further and continuing professional education.
  - Measures will be taken to develop the implementation of the one-stop principle in all guidance services with a view to making full use of the competence and expertise of different administrative sectors.
  - The centres for economic development, transport and the environment will be given a stronger role in the development of regional guidance cooperation.
- **Immigrants' participation in education and training.** Fewer young immigrants go on to study in the upper secondary school than the mainstream population and therefore they are also underrepresented in higher education. One crucial factor is their language proficiency, which

they often feel to be deficient. The provision of additional voluntary basic education has not given sufficient support to them in language development. The aim is that immigrants and people with immigrant backgrounds participate in education in the same ratio as the mainstream population.

- With a view to improving immigrants' capacity to study in the upper secondary school, provisions concerning preparatory education for immigrants will be included in legislation. The duration of the education is one year. The implementation of the reform will be start at the beginning of 2014.
  - The level of language instruction given in immigrants' integration education will be improved and enlarged to provide real capabilities for immigrants to participate in education preparing for vocational education and training and for polytechnic education. Special attention will be paid to young immigrants who come to Finland close to the end of compulsory schooling age or after it. The planning and implementation of the integration education will take the immigrant's whole family into account. The status of the Swedish language will be guaranteed in integration education. Education preparing immigrants for vocational education and training will stress the language proficiency required for participation. Preparatory education will also be targeted to young immigrants.
  - Obstacles to immigrants' higher education will be removed through the development of guidance counselling, student selection and other support action. The higher education institutions will carry on the development of language instruction, practical training and other support geared to international students. The higher education institutions will offer curricular study modules, associated language instruction and other continuing education for self-motivated studies and for commissioned labour market training.
  - Institutes of liberal adult education will develop and step up immigrants' language instruction. Measures will be taken to develop and increase integration education provided by adult education centres and folk high schools and education provided by adult upper secondary schools, adult lines in upper secondary schools and study centres;
  - One focus in the development of guidance counsellors' education will be the special issues relating to young immigrants.
- **Stronger links between education and working life.** During the last few years of basic education, pupil's ave work familiarisation periods in support of their education and career choices. On the whole, the placements at the workplace are one to two weeks. However, cooperation between basic

education providers and employers has been minimal. Only 20 per cent of comprehensive schools and even fewer upper secondary schools (4%) cooperate with business and industry. The cooperation is often sporadic and not adequately linked to studies and learning. This means that pupils' and students' opportunities to familiarise themselves with working life vary according to the activity of the school. Cooperation with employers and working life is an essential part of vocational education and training. Education providers cooperate actively with the world of work in the development and provision of education. On-the-job learning is a compulsory part of all vocational qualifications. All students in initial vocational education and training obtain basic information about working life and entrepreneurship. On-the-job instructors have an important role in work-based learning, but there is no systematic training provision for them. The operative concepts in efforts to enhance the impact, quality and matching of adult vocational education and training are 'work-centred', 'demand-driven' and 'responsive'. Development services for employers are an essential part of it. In addition to the development of the education system and a rise in completion rates, it is necessary to increase flexibility in education and training in order to accommodate different learners and different learning styles. This entails more opportunities for work-based learning and closer cooperation with third-sector operators who recognise that their work environments are learning environments contributing to curricular aims.

In higher education institutions, work placement is included in degree requirements and students often write theses that serve working life needs. At present, the university administrative bodies have a wider representation of external stakeholders than before. Contacts with working life must be further intensified to keep the education content up-to-date and to give students a clearer picture of possible work careers and better employment prospects:

- Measures will be taken at all levels to increase education on the rights and duties of the citizen, the employee and the entrepreneur.
- The revised core curricula for basic education and upper secondary school education will determine nationally uniform aims for working life skills which can be applied according to local circumstances. During the upcoming ESF period, models will be prepared for school – work cooperation suitable for use in upper secondary schools.
- The qualification requirements in vocational education and training will be revised to enhance knowledge about the rules obtaining in working life and about societal influence. Improved contacts with working life will be taken into account in the funding reform.
- Measures will be taken to ensure sufficient training of on-the-job instructors and access to this training. Possibilities to create a permanent funding model for the training will be explored.

Alternative ways to arrange on-the-job instructors' training will be developed. The content of the training will be developed nationally to serve extensively work-based learning and on-the-job practice at different educational levels, the evaluation of vocational competence and the knowledge needs of each on-the-job instructor.

- Measures will be taken to reinforce the strategic significance of the development services provided for employers in continuing vocational education and training and demand driven approaches in the implementation of continuing vocational education and training. Cooperation based on partnerships between education providers, businesses and public organisations will be developed and strengthened. Work-based development services supporting innovation will be diversified. Measures will be taken to raise awareness about development and service cooperation with the world of work and to enhance its quality and matching.
  - Schools will provide more opportunities for labour market organisations and operators to present working life, their operations and the branches of industry and occupations they represent.
  - The contacts of higher education institutions with the world of work will be improved through the development of funding criteria and models.
- **Information and communications.** Technologies in education Information and communications technology (ICT) are an essential part of education, working life and the operation of the whole society. The use of ICT makes for more flexible and personalised learning and renews instruction. Care will be taken in both initial and continuing teacher education to make sure that teachers are able to use ICT in education. The purpose of the Act on public information management (634/2011), which came into force at the beginning of 2011, is to step up public governance and improve public services and their accessibility. The Act focuses on enhancing the compatibility of the information systems in the public administration, that is, in state and local government.
    - Measures will be taken to improve the use of ICT in education and to develop teachers' and students' ICT skills.
    - Measures will be taken to develop information management and information architectures in the educational administration in support of the harmonisation of the information systems. Care will be taken to ensure the commensurability of the concepts used and to formulate and maintain definitions and descriptions of the information systems to be developed.

## EDUCATION SYSTEM

Entrepreneurship education is explicitly recognized and integrated as compulsory crosscurricular theme named 'Participatory citizenship and entrepreneurship' in ISCED 1-2 and 'Active citizenship and entrepreneurship' in ISCED 3. Due to full school autonomy, implementation modalities vary. Normally integrating it in general subjects such as social studies, schools can also organize special entrepreneurship courses.

In ISCED 1-2, the learning objectives for the cross-curricular theme of active/participatory citizenship and entrepreneurship include: to act with a sense of enterprise and initiative; to act innovatively and perseveringly in achieving a goal; to assess one's own actions and their impact, and to get to know working life and entrepreneurial activity. In ISCED 3, students will adopt pro-activeness and enterprise as their own operating methods and be familiar with the different forms and opportunities of entrepreneurship.

Implementation guidelines for ISCED 3 specify the main focus to be on practical exercises, creation of personal experiences of participation. The study environment may be developed in cooperation with different organisations and enterprises.

Guidelines for entrepreneurship education, 2009, has been published by the Ministry of Education and Culture in cooperation with other ministries and stakeholders, including objectives for 2015 e.g. stronger focus on entrepreneurship in all levels of education, better collaboration between key players in the development of teaching methods to support entrepreneurship<sup>1</sup>.

The most ambitious and innovative of the recent policy measures is the establishment of the Vigo Accelerator program by MEE in 2009. The current nine Vigos are private companies run by experienced entrepreneurs. They provide contacts, expertise, and funding (some one-third of which comes from public sources) for high-quality and internationally-focused growth companies. The aim of the program is to ripen promising companies for international venture funding. In the first two years of operation, the Vigo portfolio companies raised some 70 million euros in funding. MEE estimates that by the end of 2015 portfolio companies should have attracted some 200 million euros of private funding<sup>2</sup>.

Some exciting changes have taken place in the Finnish university system. New University Inventions Act was enacted in January 2007. It gave universities the rights to inventions conceived within its domain. While it weakened the position of the inventors, it also gave the universities new incentives for pursuing their "third mission" in the form of nurturing startups commercializing intellectual property at their disposal. Furthermore, since 1st of January 2010, Finnish universities have been either independent corporations under public law or foundations under private law, which has given them both more scope and better incentives for promoting

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<sup>1</sup> [http://www.okm.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm07.pdf\\_1924203533.pdf](http://www.okm.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm07.pdf_1924203533.pdf) (only FI).

<sup>2</sup> Please see the web of Ministry of Education: <http://www.okm.fi/OPM/Koulutus/koulutuspolitiikka/index.html?lang=en>.

entrepreneurship and startups. In particular, recently formed Aalto University (a merger of three old universities) has taken these matters at heart. It has more than a dozen interesting initiatives primary under two main umbrellas – Aalto Entrepreneurship Society (AES, students' grassroots activity) and Aalto Center for Entrepreneurship (ACE). AES has become a highly visible cheerleader for the cause.

ACE offers innovation, commercialization, and startup services primarily for Aalto University researchers, students, and other stakeholders. Besides offering services that are similar to tech transfer offices in many American universities, ACE is able to independently provide a few rounds of funding for promising startups.

The Government budget proposal for 2013 includes two tax incentives aimed at growthseeking companies. Provided that the remaining legislative issues are resolved, both of them should be introduced at the beginning of 2013. The Tax Incentive for Private Investors targets business angels investing equity in SMEs. The incentive provides a possibility to postpone paying capital gains taxes as long as those gains are re-invested in qualifying companies. Since this primarily leads to tax deferral, the incentive is not expected to have fiscal consequences in the long run. The R&D Tax Credit for SMEs is likely to be a deduction from corporate income taxes tied to the wage costs of R&D personnel in Finland. This incentive is estimated to have a fiscal cost of up 200 million euros in the first year of operation. Presumably the R&D tax incentive supplements rather than replaces the current R&D subsidies.

Two further new policy instruments are currently under consideration. The first concerns asymmetric returns in venture capital funds. The idea is that a public investor could cap its required rate of return to some pre-defined level (e.g., 8%), the excess of which would be distributed among the private investors in the fund. The second is an IPR Box, which would provide a lower corporate tax rate on revenues coming from intellectual property rights (IPRs).

## **KEY STAKEHOLDERS**

Growth entrepreneurship enjoys a high political status in Finland. All Finnish governments in the 2000s (and even before) have had growth entrepreneurship among their half a dozen or so key policy items. Furthermore, after the merger of the Ministry of Labour and the Ministry of Trade and Industry into one organization, the Ministry of Employment and the Economy (MEE) has coordinated and conducted most relevant policy aspects in the domain of growth entrepreneurship since 1st of January 2008.

In the last few years the overall emphasis of enterprise policy in Finland has shifted from incumbents to startups. The government and its agencies have assumed active roles in promoting risky new businesses and their global expansion. In the coming years, taxation is about to become a more actively employed tool of enterprise policy.

Arguably the most important change in entrepreneurship policy has gone almost unnoticed, even in Finland. Tekes, the Finnish Funding Agency for Technology and Innovation, largely executes innovation policy. Annually Tekes supports innovative Effort a with some 600 million euros. With a major overhaul of its strategy a few years back, Tekes shifted its emphasis towards new ventures. As a part of this process, it now has a keen interest in radical/disruptive and non-technical innovation as well as internationalization. One manifestation of the new strategy is a program for Young Innovative Companies, which offers a million euros per qualifying enterprise to support preliminary phases of international growth.

Tekes and five other relevant public bodies participate in a recently introduced Growth Track service, which aims to provide a one-stop-shop for companies seeking quick growth and internationalization. Each company entering the service is assigned a civil servant probing and coordinating public services the company might need. The number of companies participating in the program will reach 150 by the end of 2012. A related Team Finland concept packages public internationalization support both separately and in coordination with the Growth Track service.

The Funding support is mainly carried out by YVI project which is funded by European Social Fund (ESF) and nationally co-funded by the Finnish National Board of Education. Additionally, the project receives funding from the Centre for School Clubs, the Regional Development Centre (currently ELY Centre) and the Ministry of Employment and the Economy. YVI project includes web-based tool boxes of entrepreneurial teaching methods and the project as a whole strengthens the development of entrepreneurship education in Finnish teacher education. It focuses on the development of curricula and strategies and national networking. Moreover, it enhances teacher educators' pedagogical skills of entrepreneurship education.

### 3.3 THE EC&SP IN DENMARK

Denmark also is a Nordic country, with GDP of 333.6 billion (current US\$) and population of 5.571 million by 2011.

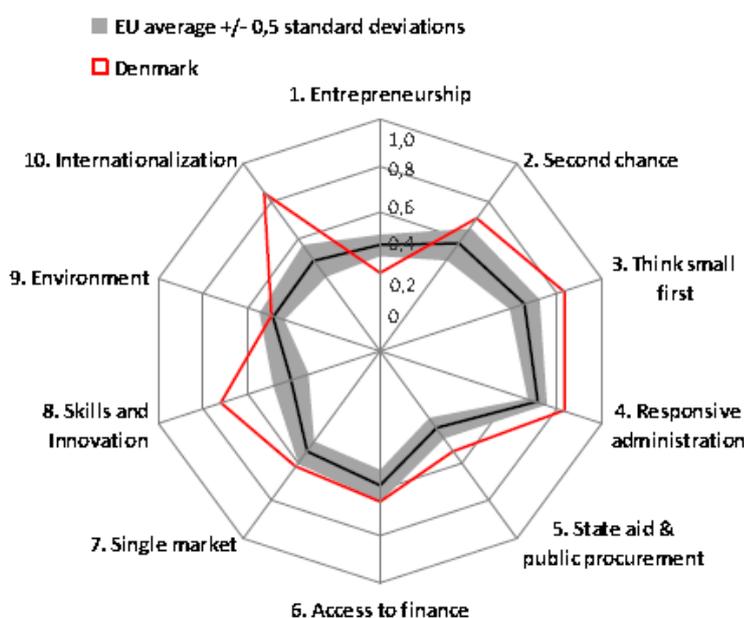
Entrepreneurship policies have been highly prioritized in Denmark during the past decade, and the policy focus has changed from merely addressing startup activity to also focusing on growth entrepreneurship by introducing initiatives aimed at making the new firms grow more.



Denmark was one of the first OECD countries engaging in a systematic surveillance of entrepreneurship performance and framework conditions, and has since 2004 contributed to the development of entrepreneurship indicators and models at OECD level.

#### SME'S OVERVIEW

Denmark has 198.083 companies who offered 1.257 million of employment with value added of €76 billion by 2011. Denmark is a small, dynamic economy, characterised by a relatively higher concentration of small and medium-sized businesses than the European Union as a whole, where very small firms (micros) are comparatively more prevalent<sup>1</sup>.



The sectoral distribution of SMEs in Denmark resembles the EU average, with a higher proportion of SMEs in services and a comparatively lower concentration of SMEs in manufacturing and trade. The crisis has taken its toll on Danish enterprises, putting a temporary halt on the positive long-term developments in the number of SMEs, and their contribution to

employment and economic value added. Danish SMEs produce more value-added

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<sup>1</sup> SBA Fact-Sheet Denmark 2012, EC, 2013.

but account for less employment than the EU average, which indicates a higher than average productivity, in particular, for micro and small companies. In Denmark, SMEs employ an average of 6.3 workers, more than the EU average of 4.2.

Overall, the statistics on SMEs present an SBA profile for Denmark which clearly exceeds the EU average in all but two domains. Denmark performance is close to the EU average in the area of Environment and lags behind in Entrepreneurship. Growth is very closely related to the level of exports, and consequently the degree of internationalisation of firms, which in turn is often combined with various forms of innovation and competence building.

It is therefore not surprising that Denmark tops all other EU countries in these SBA areas (Skills and innovation and Internationalisation). In 2011, the financial credit crunch was highlighted as the main challenge for the growth of SMEs. Consequently the government has focused its policies on initiatives related to the financing of new and existing ventures. With regard to most of the other policy fields, Denmark is clearly capitalising on substantial policy efforts made in previous years. Overall, Denmark offers an environment conducive to SMEs, which are largely seen as the main generators of future wealth and employment.

The share of opportunity-driven entrepreneurs, i.e. people who are drawn to entrepreneurship because they see it as an opportunity (as opposed to being pushed into it by a lack of viable alternatives), is by far the highest in the EU (81 % vs. 55%). Policy wise, Denmark published in 2011 a national guidance (Guide to business in crises – advices to a new start) on legal options for non-fraudulent SMEs and entrepreneurs declared bankrupt to facilitate second chance start-up as well as on public advisory service available for companies facing bankruptcy.

Start-up conditions in Responsive Administration, measured by the time and cost to open a business, are already among the best in Europe (6 days in Denmark instead of 14 the EU average). Other indicators important for day-to-day business operations, such as the number of and time spent on tax payments, and the time and cost involved in transferring property, score better than or are on par with the EU average. Similarly, in Denmark the indicator measuring the online availability of eight basic public services to businesses (such as social contributions, corporate tax, VAT, registration of a new company, submission of data to the statistical office, customs declaration, environment-related permits and public procurement) is 100%, while the EU average is 89%.

SMEs in Denmark account for a higher proportion of the value of public procurement contracts (45% vs. 38% in the EU), although this share is still clearly below their contribution to the economy (66 % of gross value-added). This better relative performance may be due to the fact that e-procurement procedures are clearly more accessible to potential bidders in Denmark than in other EU countries. Nevertheless, small businesses in Denmark — like most small businesses across the EU — only make marginal use of state aid schemes, with only about 0.3 % of total aid going to SMEs in 2009. All national and EU tenders are now accessible to the enterprises in one single location, and SMEs have an electronic opportunity to meet up with other suppliers who wish to form consortia. Secondly, a step-by-step

guide to establish SME consortia was published. Thirdly, a number of information sessions on procurement rules and consortia establishment were carried out amongst SMEs and local SME advisers. The information sessions aim to strengthen the SME knowledge of the procurement procedures and the procurement rules.

Denmark offers comparatively better conditions of access to various types of finance for SMEs, but progress in this policy area has stalled. To improve access to finance, the Danish government has taken an interesting policy initiative by establishing a public-private capital fund, the Danish Growth Capital (Dansk Vækstkapital). This initiative is an agreement between the Danish Ministry of Business and Growth and various Danish pension funds where the latter take on the role of venture capitalists, providing funding for new and small businesses with growth potential. The objective of this initiative is to provide better access to finance for these types of firms, creating more jobs in Denmark in the process. The newest policy initiative is the Development Package (Udviklingspakken) from March 2012 launched in order to strengthen especially Danish SMEs' access to finance. The package among other things contain (i) strengthening of a Danish loan guarantee scheme; (ii) a new loan scheme from the Danish Growth Fund and (iii) strengthening of existing export guarantee schemes that also helps SMEs in their internationalisation strategies. The Danish government has also expanded the target group of the Danish Growth Fund in June 2011 in order for firms with up to 250 employees to access to financial support and guarantee schemes that are administered by the Danish Growth Fund.

In the area of skill and innovation indicators, Denmark is the EU top performer. All but one of the indicators measuring innovative performance in SMEs are above par. About 38% of Danish SMEs have introduced product or process innovations, 40% have introduced marketing or organisational innovations, and about the same proportion have introduced them in-house. The only caveat is that the firms that innovate are slightly less successful than their EU peers in converting these new products or processes into sales revenues. Danish SMEs perform very well on the other indicators in this area, such as their IT readiness, the level of training and skills of their employees, and their participation in EU-funded research. The 85% of enterprises providing training to their employees, with an EU average of 58%; and, the rate of participation of employees in education and training is 36% instead of 11 as EU average.

In SME's internationalisation, once again, Denmark is the top performer in the EU. This very positive situation is both the result of advantageous general framework conditions for trading — as shown by the indicators measuring the time, cost, and number of documents necessary for importing or exporting — and the significantly better internationalisation performance of Danish SMEs. In Denmark, growth is very closely related to the level of exports, and consequently the degree of internationalisation of firms. This explains why internationalisation is often combined with other forms of innovation and competence building. One important initiative is the 'Innovationspakke', an initiative of the Danish Trade Council, which started in 2008 and is on-going. This initiative recognises that much of the knowledge that is required is available in international markets, and supports SMEs

in accessing these markets. Another example is the 2011 North Jutland GLOBAL initiative that focuses on internationalisation, particularly in relation to BRIC countries. Finally, in 2011 the Trade Council adopted various policy measures, e.g. financial support for hiring experts and setting up export networks, and an export guarantee scheme to focus specifically on the issue of internationalisation.

## NATIONAL INITIATIVES

Entrepreneurship policy has been highly prioritised in Denmark in past years, and in order to address the growth entrepreneurship challenges, the Danish government has implemented a number of initiatives. In the following, various recent policy initiatives are listed without providing an exhaustive overview.

In 2003, a national action plan for entrepreneurship was introduced, highlighting the economic impact of new firms as well as setting goals for high-growth start-ups. Moreover, the Danish globalisation Strategy from 2006 introduced reforms in several key areas, i.e. innovation and entrepreneurship. This comprehensive strategy aims at making substantial improvements in the framework conditions for growth and innovation in new and existing enterprises. In this strategy, a new initiative implementing Regional Business Development Centres was introduced. The centres are founded at local level, and their main role is to support the creation and expansion of high-growth start-ups<sup>1</sup>.

In 2009, the Danish Government launched a “**Strategy for education and training in entrepreneurship**”. The strategy is developed in a partnership between the Ministry for Science, Technology and Innovation, the Ministry of Culture, the Ministry of Education and the Ministry of Economic and Business Affairs. It describes an active investment in entrepreneurship training at educational institutions. In the future, laws, executive orders and performance/development contracts will address education and training in entrepreneurship wherever relevant, involving every level of education, earmarking funds and included entrepreneurship in the management of educational institutions.

The strategy is a framework for how Denmark will educate and train the entrepreneurial business managers and employees of the future. These entrepreneurial managers and employees will create social and commercial success not only in new enterprises and organisations but also within the framework of existing enterprises or public institutions. They will help to create Denmark’s future competitiveness and contribute to achieving the objectives contained in the Strategy for Denmark in the Global Economy. “*In Denmark we must not just be well educated, we must also be entrepreneurial*”<sup>2</sup>.

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<sup>1</sup> The objectives of this strategy are that Danish enterprises and public institutions should be among the most innovative in the world, and that Denmark should be one of the countries with the most high-growth entrepreneurs. Strategy for Denmark in the Global Economy Danish Government 2006.

<sup>2</sup> Strategy Strategy for education and training in entrepreneurship”, 2009.

The strategy has three parts:

- In the first part the Danish government sets objectives for the folkeskole, upper secondary education and higher education;
- The second part of the strategy involves bringing all the supporting work together under a single player, the **Foundation for Entrepreneurship**<sup>1</sup>. The foundation will promote the training of teachers and the development of teaching methods and courses, etc., for pupils and students in all branches of education. In concentrating its efforts the Danish government aims to create a player of sufficient size to drive development forward, build up knowledge and create continuity between the works done at every level of the education system. To address the meager access to finance for entrepreneurs, the Danish Growth Fund (Vaekstfonden) was created in 1992 and redesigned in 2001. This has contributed to the development of the Danish venture capital market. Also, a number of financial packages have been introduced in recent years. Most recently, in 2011, Danish Growth capital new investment fund was introduced with significant amount of capital from some of the large Danish pension funds. The aim is to improve access to venture capital for entrepreneurs with growth potential. In addition, The Foundation for Entrepreneurship was established in 2010 to further promote Denmark's entrepreneurial culture. The purpose of The Foundation for Entrepreneurship is to unify national efforts for entrepreneurship education. Under the slogan "From ABC to PhD", the Foundation works to increase the number of students and educators who take part in entrepreneurial activities. The instruction provided at various educational levels should be progressively built up through the educational system. In primary and secondary school, the focus should be on stimulating a desire to create something new, whereas the closer the students come to completing their education, teaching of specific entrepreneurial skills should increase. The Foundation for Entrepreneurship is supported by a strong inter-ministerial partnership.
- The third part is creating the Partnership for Education and Training in Entrepreneurship between the Ministry of Culture, the Ministry of Science, Technology and Innovation, the Ministry of Education and the Ministry of Economic and Business Affairs. The interministerial partnership will cooperate on implementation of the strategy, including in the form of coordinating other initiatives aimed at achieving targets and collaborating with the Foundation for Entrepreneurship.

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<sup>1</sup> The creation of the Foundation for Entrepreneurship was, among other things, inspired by, the Kauffman Foundation in the USA. The Kauffman Foundation has been working to promote education and training in entrepreneurship for more than 40 years and has supported many new teaching initiatives, including the Kauffman Campuses project. The project is aimed at offering tuition in entrepreneurship to university students whatever their course. The university and the foundation sign a co-financing agreement. The foundation also works to enhance research into entrepreneurship education and training and influence new political initiatives.

The Partnership for Education and Training in Entrepreneurship will meet with parties from the education sector on an ongoing basis with a view to developing the strategy further through dialogue and cooperation. If the strategy is to succeed, it is vital that there is backing for it throughout the education sector. The government will use regional partnership agreements to involve regional growth forums in developing the foundation and training in entrepreneurship at all levels of education.

Education and training in entrepreneurship plays a role in two areas:

- First of all it aims to stimulate the desire to become entrepreneurial. This can happen through education or training in entrepreneurship, either as an integral part of education or as a separate topic;
- Secondly, the ability of pupils and students to become more entrepreneurial should be enhanced. This can be achieved by means of knowledge that is relevant when it comes to starting up, operating and growing an organisation or enterprise, including knowledge of innovation processes together with their organisation and work forms. Education and training in entrepreneurship can be an activity, an independent subject or elements integrated in existing subjects.

Teaching at the various levels of education should be structured progressively up through the education system (see the next table). Teaching in upper secondary education should build on the folkeskole, etc. In the folkeskole the emphasis should be on stimulating the desire to innovate, for example, while the need to teach concrete entrepreneurial competencies increases the closer students come to completing their education.

The objective is that people who have received education or training in entrepreneurship should create more value for themselves and other people than those who have not received such education and training. This initiative will help to create a labour force with entrepreneurial competencies and a large number of people who start their own highgrowth enterprises or become entrepreneurial employees in public institutions, associations or existing enterprises.

ENTREPRENEURSHIP STRATEGY IN DENMARK. MEASURES AND OBJECTIVES BY EDUCATION LEVEL		
Education Level	Objectives	Measures
<b>General Upper secondary education</b>	<ul style="list-style-type: none"> <li>In the long term, all the pupils in a general upper secondary year should have taken part in subjects or other educational activities to do with entrepreneurship.</li> <li>The Network for Entrepreneurship and Innovation in Schools (NEIS) must be nationwide and in the long term all institutions offering general upper secondary education should take part in it.</li> </ul>	Types of examinations and tests have been developed that make it possible to document entrepreneurial competencies in relation to general upper secondary education
		Professional postgraduate teacher training should contain a compulsory module in innovative educational theory and methodology.
		Activities must be instituted that prompt teachers to provide innovative education or training based on the connection between specialist competencies and innovative thinking that takes the surrounding community as its starting point.
		Relevant teachers have acquired teaching competencies in entrepreneurship subjects
<b>Vocational upper secondary education</b>	A much larger proportion of a vocational education year has taken part in subjects or other educational activities to do with entrepreneurship	Types of examination and test have been developed that make it possible to document relevant entrepreneurial competencies in relation to vocational education
		Activities must be established across industries that prompt pupils to use innovative thinking and development that takes their own industry as its starting point
<b>Professional bachelor and academy profession programmes</b>	The programmes should use innovative forms of teaching that develop the ability of students to see and work on opportunities, and their understanding of the commercial exploitation of creative ideas.	Types of examination and test have been developed that make it possible to document relevant entrepreneurial competencies in relation to the field of education
		Relevant teachers on higher education programmes must be given the opportunity to obtain qualifications and do in-service training based on a strong link between professional competencies and innovative thinking in relation to the sphere of work
		The Executive Order on Lecturer Evaluation will be revised with a view to introducing an element on competence in the use of the elements of a subject from an application-oriented perspective.
<b>Maritime programmes</b>	Education and training in and about entrepreneurship and innovative teaching methods must be introduced on all maritime programmes. Students on maritime programmes must also have the opportunity to experience entrepreneurial environments, in which they can work on the development of their own projects or enterprises with structured advice and guidance.	The qualification requirements for teachers must include entrepreneurial competencies. Relevant opportunities to obtain qualifications that focus on the link between a programme's elements and innovative thinking in relation to the sphere of work therefore need to be established for teachers at maritime educational institutions
		The Danish Maritime Authority must supervise maritime educational institutions with a view to ensuring that entrepreneurship is incorporated in the curriculum of as many subjects as possible, while respecting the individual subject and its culture
		Entrepreneurship must be incorporated in assessments on programmes where relevant
		In order to collect experiences from successful entrepreneurial environments, maritime educational institutions should bolster cooperation on entrepreneurship with other Danish and foreign educational/knowledge institutions, including the Department of Maritime Research and Innovation
		Entrepreneurship should be introduced on the programmes in such a way as to promote the development of small-scale shipping too
<b>Higher artistic programmes</b>	There must be a relevant increase in the proportion of students who receive education or training in entrepreneurship in the course of their studies. This can take the form of an independent activity, an independent subject or an integral part of an existing subject	The management of educational institutions must actively include entrepreneurship in its development strategies for programmes
		Educational institutions must strengthen cooperation on entrepreneurship with other educational institutions, with the business community and with other stakeholders, both nationally and internationally. With this in mind, there needs to be relevant development of education and training in entrepreneurship on individual programmes
		The opportunities for gaining experience of entrepreneurship must be enhanced on the PhD programme with the aim of students being motivated to start businesses and gain experience that will enhance their academic competencies in the area. The objective must be for all PhD students to be offered a course in entrepreneurship during their PhD programme.
		Interdisciplinary entrepreneurship courses must be set up to help strengthen this area, with the universities having the opportunity to coordinate their subject provision with the aim of opening the way for

<b>University programmes</b>	A much larger proportion of students must take entrepreneurship subjects and courses during their studies	interdisciplinary courses between different departments, faculties and universities
		Danish educational institutions must enhance cooperation on entrepreneurship with foreign universities with the aim of collecting experiences from the best international entrepreneurship environments. Contact with Danish innovation centres can be increased in this context
		The opportunities for gaining experience of entrepreneurship must be enhanced on the PhD programme with the aim of students being motivated to start businesses and gain experience that will enhance their competencies in the area. The objective must be for all PhD students to be offered a course in entrepreneurship during their PhD programme
Source: Strategy for education and training in entrepreneurship”, 2009		

In ISCED 2, entrepreneurship education is explicitly recognized as part of the compulsory subject Education, Business and Labour Market Orientation<sup>1</sup>. In ISCED 2 (last year), there is also an optional separate subject: Entrepreneurship. In ISCED 3, entrepreneurship education (development of creativity and innovation) is explicitly recognized as cross-curricular objective<sup>2</sup>.

During a transition period until 2011 the centres are funded by the state. In general, the Danish government is very ambitious about entrepreneurship policy. The government is aiming at becoming among the best in Europe in terms of new firms every year and one of the leading countries in the world by 2015 in terms of high-growth start-ups. Moreover, by 2020 Denmark should be one of the leading countries with respect to growth-firms. Since 2004, the Danish government has measured and monitored the development in entrepreneurship performance and framework conditions in order to ensure that the country is on track (the Entrepreneurship Index). This index is based on data for a number of OECD countries and identifies Denmark's strengths and weaknesses as an entrepreneurial country.

In addition, the Danish Business Authority and the Growth Council have developed a programme, called '**Strengthening the growth potential in Danish SMEs**' that allows SMEs to engage in competence building and improve their access to knowledge in order to generate growth. This programme focuses on improving the knowledge of the owner and manager of these firms, but also provides support to attract outside knowledge to these.

In the Government Work Programme 2012, it is stated that highly skilled foreigners may possess specific expertise and can thus help to increase Danish companies' value creation and presence in export markets. To address the challenge with lacking entrepreneurial talent, the Danish Business Authority launched a call for a pilot project in October 2012 to invite talented entrepreneurs with a proven growth potential for a year to Denmark –encouraging them to get involved with growth-seeking ventures in Denmark. Furthermore, they are encouraged to file for extension of the work- and residency permit when the program has ended. This initiative is inspired by, among others, the Start-Up Chile initiative, where qualified entrepreneurs are invited to Chile to start and develop their business there.

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<sup>1</sup> <https://www.retsinformation.dk/Forms/R0710.aspx?id=125973> (only DK).

<sup>2</sup> <https://www.retsinformation.dk/Forms/R0710.aspx?id=132647#K1> (only DK).

In recent years, Denmark has made a concerted effort to build up a public sector business support system to ensure that entrepreneurs are not tossed around by the system, but rather that they get the advice they need for moving forward the very first time they contact the system. Denmark's public business support system for entrepreneurs is based on a partnership idea and involves players from the public and private sectors to provide the best possible assistance to entrepreneurs. The municipalities are the public authorities charged with overall responsibility in Denmark for the public sector's local and regional business development centres. "No wrong door" is a guiding principle of Denmark's public business support system. All entrepreneurship guides – regardless of target group – must point the way as quickly as possible to the most appropriate advice, irrespective of whether this is offered by the public or private sector.

Five Regional Business Development Centres (Vaeksthuse) were established in 2007 as hubs for a cohesive public business support system. They provide problem clarification and individual growth charting for enterprises with growth potential. The charting process leads to a growth plan for the enterprise and possibly a referral to relevant schemes in the private or public sector that can offer unique skills in the areas where the enterprise is having difficulty. In addition, the Regional Business Development Centres manage a wide range of the government's entrepreneurial subsidy and grant schemes, e.g. the "capital coach scheme" ("kapitalcoach"), "board partnership" ("bestyrelsespartnerskabet") and "Early Warning", as well as a number of regional programmes.

To further assist entrepreneurs in navigating the public business support system, a website – [www.vækstguiden.dk](http://www.vækstguiden.dk) – has been developed in close collaboration with sector business organizations. Vaekstguiden (growth guide) provides a general overview of all public sector offers aimed at generating growth and development in enterprises. In two minutes, entrepreneurs can find subsidy schemes and consulting offers via this guide to help them on their way, or they can find offers concerning clarification processes at either their local business development centre or a Regional Business Development Centre (Vaeksthus).

Also, FFE-YE has set up calls for projects and offer funds for the development of programmes and courses. Funding for higher education (DKK 8.8 million in 2011) is much higher than primary level (DKK 1.7 million).

Finally, the creation of a web-based tool "rådgiverbørsen" (exchange of consultants) has been realized as to ease the match between growth seeking entrepreneurs and private service providers. Here, private sector consultants can set up a profile so that entrepreneurs can search for a consultant to perform specific tasks. In return, it is also possible for entrepreneurs to upload jobs to the exchange for which consultants can submit bids.

## KEY STAKEHOLDERS

Today the Ministry of Business and Growth is responsible for entrepreneurship policies together with the Ministry of Science, Innovation and Higher Education. A number of agencies such as the Danish Business Authority and the Danish Council for Innovation and Technology are responsible for or involved in entrepreneurship policy development.

The most problematic area of the Danish framework conditions is entrepreneurial capabilities. This is mainly due to a low ranking on the immigration index (ranked 22nd in the OECD), which shows that Denmark is lacking the ability to attract well-educated foreign labour. While some countries such as the USA and Canada highlight immigration as a source of entrepreneurship, it is difficult for non-EU citizens to establish a new business in Denmark. In light of this, a centre for ethnic industry development is set to be established in 2010 – with the aim of supporting start-up, survival and growth in new and smaller enterprises with owners of foreign backgrounds. The centre is financed by the government, the regions and the municipalities. Also related to entrepreneurial capabilities is the Danish business and entrepreneurship education, which is modest compared to – for instance – the English-speaking countries. One such initiative is that implemented by the Danish Agency of Science Technology and Innovation, the Ministry of Research, Innovation and Higher Education and the six Regional Growth Funds, which focuses on how research and development centres can share their knowledge faster and more effectively with SMEs that have growth and innovative potential.

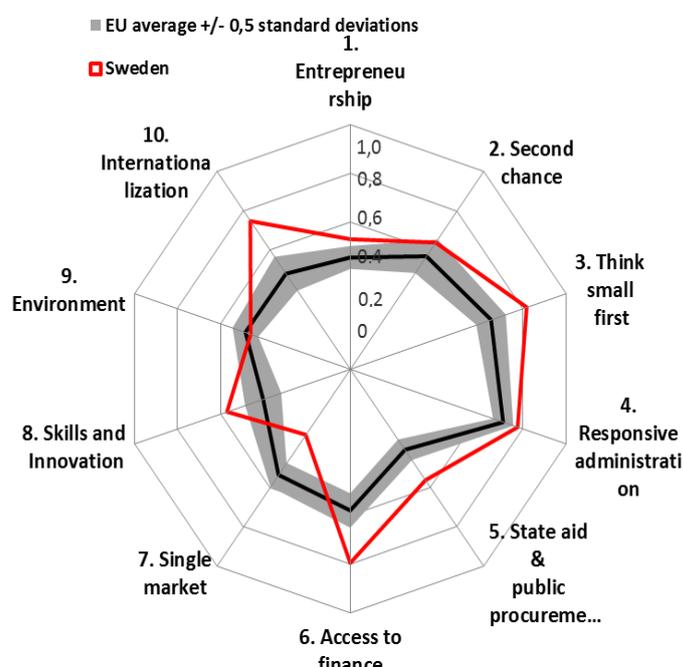
### 3.3 THE EC&SP IN SWEDEN

Sweden is the last Nordic country and the fourth case study of the Benchmarking. Also Sweden is the largest economy of the cases studied. It's reached the 539.7 billion (current US\$) by 2011 with a 9.449 million of people.



#### SME'S OVERVIEW

Sweden has 555.159 companies, with 1.837.178 employment and a value added of €110 billion in 2011. The sector specialisation of Swedish SMEs presents the same overall picture as the aggregate numbers for the EU; the main difference is that trade accounts for a somewhat smaller proportion of the total number of SMEs (25% vs. 30%) and of the jobs provided (25% vs. 27 %). However, these differences (of 5% and 2 %) are equally distributed among the other sectors (manufacturing, services and construction), so it can safely be said that Sweden mirrors the EU situation closely, with no sector diverging substantially from the mean.



Furthermore, the proportion of technologically advanced and knowledge intensive SMEs is also very close to the EU average. Hence Sweden can be considered a good example of the structure of the SME sector in the European Union<sup>1</sup>.

Sweden has good results in most SBA areas (see the spider chart): seven of the 10 indicators are above the EU average, two are close to it (i.e. within the 0.5

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<sup>1</sup> SBA Fact-sheet sweden 2012, 2013.

standard deviation band), and only one – the Single market - falls clearly below it. Sweden performs particularly well in Access to finance, Internationalisation and State aid and public procurement, where it ranks among the top three scorers.

In 2011, substantial progress was made in the areas of Think small first and Responsive administration, and, to a lesser degree, in the Single market, Skills and innovation and Environment. Less progress was made on Internationalisation, State aid/public procurement and Second chance.

Sweden's SBA profile shows a country with an overall above-average performance in addressing the 10 SBA principles, and stable development over recent years. Policy wise, despite the fact that the national authorities have not adopted a general strategy to implement the SBA, efforts in 2011 particularly have focused on the areas of Entrepreneurship, Second chance and Think small first.

Thus, two of the areas with a negative evolution are being addressed, while the remaining two do not give reason for concern on account of their high marks. Sweden has improved its overall rank by 3 spots (from 15th to 12th) over the last few years. The largest improvement is found within entrepreneurial culture, where the rank has increased from 26 to 13. Both sub-policy areas of attitude to entrepreneurship and entrepreneurial mindset contribute – the latter most – and are driven by a strong improvement in perceived opportunities. The Swedish enterprises' perception of access to debt financing and availability of venture capital has improved, causing Sweden to rank higher in access to financing. Sweden has made some progress regarding the business conditions for entrepreneurship – on business regulation. This applies to lower administrative burdens and stronger competition law. Entrepreneurial capacity has also progressed. The labor market regulations, on the other hand, have deteriorated compared to the other OECD countries.

In Think Small First, Sweden's performance is roughly average in terms of the licenses and permits systems, an indicator which focuses on the availability of a one-stop shop for obtaining them, and the existence of a 'silence is consent' rule. Since the latter does not exist in Sweden, it performs less well on this indicator than in the other two. In fact, this rule has less significance for Swedish SMEs, given that Sweden scores well in terms of the regulatory burden, and the communication and simplification of rules and procedures. Therefore, it can be said that in Sweden the 'Think small first' principle of the SBA is well applied. On the policy front, in 2007 the government introduced a comprehensive programme for reducing small businesses' costs, including a 'bottom-up' regulatory approach, which states that every regulation proposed by a governmental agency must be analysed from the point of view of the companies affected. The aim is to make sure that the new regulations do not cause an additional administrative burden.

Swedish SMEs are much more successful (47% vs. 38%) in winning public contracts than their EU peers, they can expect public authorities to pay them more promptly, and e-procurement is readily available to them. Regarding the use of EU funds, the regional funds are targeted much more effectively to entrepreneurship and SMEs in Sweden than in the average EU country, while the agricultural funds

are devoted to business creation and development in the same proportion as for the EU as a whole.

Overall, Swedish SMEs enjoy better financing conditions than the average EU SME: the country is among the top scorers in this SBA area. In particular, they have a much lower chance of seeing a loan application rejected or having a client default on a payment, they are more likely to get paid on time and attract venture capital investment, and are satisfied with their access to public financial support. Furthermore, they find that their banks have become more willing to grant a loan. The positive attitude of Swedish banks towards SMEs is probably a result of the good economic climate the country enjoyed in 2011, which saw a strong GDP growth of 3.9%. However, the conditions attached to smaller loans offers are, in comparison with those for larger ones, worse than the EU average. Lastly, Sweden's performance in terms of the strength of legal rights and the availability of credit information is in line with the average.

On the policy front, in June 2011 the government approved a proposition whereby Sweden accepted the European rules for investment funds (UCITS IV). This means that establishing Swedish investment funds in Europe and EU funds in Sweden will become significantly easier. This measure could encourage investment in Sweden, particularly due to the fact that from 11 January 2012, Swedish (and foreign) investment funds will be fully exempted from taxation. Moreover, the taxation of solely owned corporations is set to be changed, in order to reduce the costs associated with transfers to other owners. This will encourage investment, as well as ease the general burden for entrepreneurs. Lastly, the 2012 state budget includes important amendments regarding complementary financing measures for SMEs. They range from the possibility to facilitate private, early-stage investments through so-called public fund of-funds solutions, to encouraging later stage venture capital funding and the merger of two public actors (Almi Företagspartner AB and Innovation Bridge AB) whose extensive remit includes providing loans and venture capital to companies in order to promote economic growth.

Swedish SMEs have a good record in the Skills and innovation area. In particular, they are well ahead in the use of e-commerce: more than half of them purchase online, compared to a 28% EU average. They also excel in providing training to their employees (78% instead of 58% EU average), employees' participation rate in education and training (23% instead of 11 EU average), and fare well on inhouse innovating, inter-SME collaboration and introducing product or process innovations. On the policy front, on 1 January 2012 new provisions on a simplified 'expert tax' came into force. They are aimed at making the rules governing the recruitment of foreign experts, researchers and other key employees more flexible. Moreover, the Swedish Agency for Economic and Regional Growth has decided to develop a new 8- year programme for promoting hi-tech clusters; the programme is still in its development phase. It also plans to create an electronic identity for businesses, to enable e-invoicing and e-government transactions, which should have a positive effect on the IT skills and innovative potential of SMEs (particularly by facilitating procedures for those with a high IT profile).

Sweden, together with its Nordic neighbours, Denmark, Norway and Finland, belongs to the topscoring group in this SBA area. While Swedish SMEs are close to the EU average on the amount they import from outside the EU and slightly above it on the export side, Sweden really stands out in its ability to provide a friendly business climate for both exporters and importers. The time, cost and number of documents that are required are all well below average, except for the time needed for exporting, which is closer to the average than the other indicators (but still shorter by three days). In particular, only three documents are required for both export and import proposes, while the average EU SME has to provide five.

### NATIONAL EDUCATION STRATEGIES

A number of major economic reforms that have further significantly improved the entrepreneurial environment have been carried out in Sweden over the last decades: financial markets have been deregulated; price stability has been introduced as the main goal of economic policy; a number of state-owned enterprises have been sold or partially sold; network industries with a state monopoly like domestic railroads, airways, electricity, postal services, and telecommunications, but also the pharmacy sector have been deregulated; welfare markets previously closed for private entrepreneurship such as elderly care, schooling and healthcare have been opened up; private for-profit employment agencies have been legalized; wealth and inheritance taxes have been abolished; and the tax burden has decreased with nearly 10 percentage points.

In Sweden, in its Budget Bill 2009, the government announced its ambition for the teaching of entrepreneurship to be an integrated theme throughout the education system. This strategy for entrepreneurship is part of a reform process with government decisions and initiatives to support the development of entrepreneurship programmes. In May 2009, the Government presented its **strategy for entrepreneurship in the field of education**<sup>1</sup>, where measures aimed at encouraging the integration of entrepreneurship into all levels of education are described (see the table below).

Entrepreneurial skills increase the individual's chances of starting and running a company. Skills such as being able to recognise opportunities, take initiatives and transform ideas into practical action are also valuable to the individual and society in a broader sense.

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<sup>1</sup> Strategy for entrepreneurship in the area of education, Ministry of Enterprise, Sweden, 2009.

Objectives	Measures
The importance of encouraging the skills and abilities that form the basis of entrepreneurship will be emphasised in policy documents for compulsory school	The school's task to promote knowledge lays the foundations for pupils' future opportunities in life. Compulsory school is also required to stimulate pupils' curiosity, self-confidence and ability to take decisions and in other ways to focus on skills that are vital for entrepreneurship. The Government intends to strengthen this in a pending review of the compulsory school curriculum. In its future instructions, the Government intends to task the National Agency for Education with considering how this can be integrated into relevant syllabuses.
Entrepreneurship will be emphasised in upper secondary school policy documents	The Government intends to emphasise the importance of entrepreneurship in a pending review of the upper secondary school curriculum. In its future instructions, the Government intends to task the National Agency for Education with considering how entrepreneurship can be integrated into relevant upper secondary school syllabuses
Greater opportunities for more in-depth studies of entrepreneurship and enterprise in upper secondary school	The Government has proposed to the Riksdag the introduction of a new upper secondary programme, with a focus on economics. This programme will prepare pupils for both higher education and for running their own businesses. Knowledge of law, marketing and accounting will be important components of an education that will improve the possibilities to succeed as an entrepreneur. It is also important to encourage pupils to develop new ideas and to practise their business skills. The Government also intends to commission the National Agency for Education to investigate how entrepreneurship could be incorporated into the handicraft programme and the business and administration programme.
Upper secondary vocational education will be more closely linked to working life and companies. Apprenticeship training will be introduced and pupils taking part in vocational training will be given better insight into the conditions for enterprise	Pupils need to gain insight into the conditions for enterprise so that more young people will want to start their own businesses. This will be facilitated by close cooperation with the business sector and entrepreneurs. Workplace-based learning will be an important component of future upper secondary vocational training. A pilot project consisting of apprenticeship training where at least half the training is spent at the workplace was initiated in autumn 2008. The Government intends to introduce an upper secondary certificate and a final upper secondary project. In upper secondary vocational training suitable tasks can be designed in close cooperation with working life. This may mean, for example, that pupils are given a chance to test their vocational skills in a business-like context
A new concept for vocational competitions at school level should be developed	Putting one's ideas into practice, believing in one's own vocational skills and starting up a business require both courage and endurance. For this reason, pupils in vocational training at upper secondary level should be able to challenge themselves and compete with others in vocational skills. The Government intends to task the National Agency for Education with developing and testing out a new concept for vocational competitions at school level. This will be implemented after consultation with Youth Skills Sweden, the Swedish organisation for national vocational championships. The National Agency for Education will present cost estimates and proposals for piloting skills competitions at school level. The National Agency for Education will also report on how the pilot project can be evaluated
Support to schools to encourage work on entrepreneurship.	The Government has tasked the National Agency for Education with supporting and encouraging work in the field of entrepreneurship. This may involve, for example, promoting cooperation with working life, offering continuing professional development, facilitating the exchange of experience and distributing development funds
Mapping the work on entrepreneurship in compulsory and upper secondary schools is under way	While some work on entrepreneurship is already being conducted in schools, there is no overall picture of how this work is being carried out or its results, such as to what extent these efforts have contributed to increased entrepreneurship. The Government has therefore tasked the National Agency for Education with mapping, analysing and disseminating information on the efforts in the field of entrepreneurship of those responsible for schools. In these efforts, the National Agency for Education is expected to take into account the work being conducted in the entrepreneurship programme at the Swedish Agency for Economic and Regional Growth, and international experiences
Mapping and analysing work on entrepreneurship at post-upper secondary vocational schools outside the higher education institutions.	Entrepreneurship training is already being conducted in qualified vocational training programmes in close cooperation with representatives of local companies and in regional collaboration. The mapping and analysis of these programmes and the exchange of experience nationally and internationally can help inspire more organisers to develop this area further. It will be particularly interesting if we can see to what extent these programmes have contributed to increased entrepreneurship. The Government considers that this mapping, analysis and support could be tasks for the national agency for vocational higher education, which is to be established on 1 July 2009
Mapping and analysing education in entrepreneurship and innovation at higher education level	Many universities and other higher education institutions are already offering programmes at basic, advanced and post-graduate level aimed at encouraging entrepreneurship and enterprise. Most of these programmes have been established in the last five years. However, there is no overall picture of existing programmes and their content nor of the results achieved, such as the extent to which these programmes have contributed to increased entrepreneurship. The Government has therefore tasked the Swedish National Agency for Higher Education with mapping and analysing the development and availability of entrepreneurship, enterprise and innovation programmes, including fine arts

	programmes, at the higher education institution level. This task includes drawing attention to good practices at higher education institutions to encourage the development of entrepreneurship and enterprise
Support to universities and other higher education institutions to stimulate entrepreneurship	In 2009, the Government intends to task the Swedish Agency for Economic and Regional Growth with supporting activities that stimulate entrepreneurship at universities and other higher education institutions
Development of cutting-edge programmes in entrepreneurship and innovation	In addition to the activities at universities and other higher education institutions described in point 10, the Government intends to implement a targeted initiative at a minimum of two higher education institutions to create Swedish cutting-edge programmes in entrepreneurship and innovation. Advanced-level programmes in entrepreneurship and innovation of the highest international standard can help to create growth. In November 2008, universities and other higher education institutions were invited to submit expressions of interest in participating in this initiative to the Government Offices. The Swedish National Agency for Higher Education has been tasked with processing these expressions of interest with the help of international experts
Source: Strategy for entrepreneurship in the area of education, Ministry of Enterprise, Energy and Communications, Ministry of Education and Research, May 2009.	

These skills are required by employers, and entrepreneurship education can thus make it easier for young people to become established in the labour market. Other entrepreneurial skills such as learning to solve problems, planning one's work and cooperating with others can also help young people to complete their studies more successfully.

Entrepreneurship education may include the specific knowledge required to start and run a business, such as business administration and planning. Entrepreneurship education can also develop more general skills that are equally useful outside the business world, such as project and risk management. Educating entrepreneurs also means inspiring people to be creative and take own responsibility for achieving a goal. The education system has an important role to play in ensuring that young people develop the knowledge, skills and approaches they need to, independently or with others, realise their ideas and apply them in economic, social or cultural contexts. The education system also needs to work with entrepreneurs in the business sector, the cultural sphere and non-governmental organisations to provide inspiration to teachers and pupils.

Also, the national strategy involves actions for developing Swedish tourism and using procurement as a tool for encouraging innovations, the government has focused on improving the tax incentives to start and run enterprises and to accept job offers.

A cornerstone in this policy is the tax credit for taxes paid on earned income (skattereduktion för arbetsinkomster, the so called jobbskatteavdrag), which was introduced in four steps between 2007 and 2010. In 2007, a tax reduction for household services (the so called RUT-avdrag) was introduced which created a new market, in particular for female and immigrant entrepreneurs. A year later, a tax reduction for house repairs and maintenance (the so called ROT-avdrag) followed. The VAT for restaurant services has been reduced from 25 to 12 percent in 2012. The government is to propose that the corporate income tax will be decreased by 4.3 percentage points from 26.3 to 22 percent from January 2013. If approved by the Parliament, Swedish corporate income tax will be below the OECD and EU average. Moreover, there is an ongoing governmental inquiry on

capital taxation (företagsskattekommittén). A partial report (Skatteincitament för riskkapital) was submitted in January 2012. As suggested in the report, the Government proposes a tax deduction for investments in smaller growth companies (investaravdrag).

On the policy front, the government has launched a comprehensive initiative for entrepreneurship in education, as part of the reform of the Swedish high school system ('Gymnasireformen, Gy2011'). The fundamental idea is that entrepreneurship should run like a thread through a student's education (from elementary to secondary to tertiary), in line with the research which states that entrepreneurship initiatives need to be holistic and system-wide. The implementation of this initiative is delegated to the local administrative bodies, in order to increase the chances of systemic change in contrast to traditional 'top-down' initiatives. In 2012, the Swedish National Agency for Education is funding 72 projects for competence development and five programmes for developing entrepreneurship teaching. Lastly, the Ministry of Finance has begun a review of the corporate taxation system in order to ensure that, among other objectives, it does not adversely affect entrepreneurship.

In Sweden, entrepreneurship is part of the ISCED 3 school reform implemented in 2011, in the form of commentary material on how to look at entrepreneurship in the various programmes, and in the form of a forthcoming commentary material on the new subject of entrepreneurship, which will be published in 2012.

In ISCED 1 and 2, entrepreneurship is integrated in the curriculum as cross-curricular objective, as part of the school's values and mission: 'Schools should encourage students' creativity, curiosity and self-confidence and willingness to examine their own ideas and solve problems. Students should be able to take initiative and responsibility and develop their ability to work independently and with others. The school will thus contribute to students developing an approach that promotes entrepreneurship'.

Entrepreneurship is also described in the subject syllabuses (e.g. subjects Home and consumer studies, Art), expressing entrepreneurship generally as entrepreneurial abilities, although the concept is not always mentioned specifically. ISCED 1 and 2 has a new curriculum applying as from 1st July 2011: Curriculum for the compulsory school, preschool class and the leisure-time centre 2011.

Entrepreneurship is also part of the ongoing implementation of the ISCED 3 school reform, in the form of commentary material on how to look at entrepreneurship in the various programmes, and in the form of a forthcoming commentary material on the new subject of entrepreneurship, which will be published in 2012. As of autumn 2011, entrepreneurship is a cross-curricular objective as well as part of specific disciplines (natural sciences, economics and social sciences) and as a separate subject in the 'Economics' branch (and in four vocational programmes). Entrepreneurship is part of the curriculum and exam objectives, where it is described as entrepreneurial skills. The school reform also implies preparing a more comprehensive support material on entrepreneurship targeted to all types of school. The National Agency for Education has already published a general information brochure, as well as a summary of current research on

entrepreneurship in school education. The Agency also produces and disseminates more comprehensive support material on entrepreneurship targeted to all types of school, in order to stimulate entrepreneurship and entrepreneurial learning in school <sup>1</sup>.

ISCED 1 and 2 Technology (12-13 years old): 'The student can carry out very simple technology development and design work by systematically examining and reviewing possible solutions and ideas to formulate well-designed physical or digital models. During the work process, the student formulates and chooses options that lead forward in the process. Crafts (15-16 years old): 'The students can develop ideas by using offered inspirational materials and materials which students themselves have gathered. During the work process, the student formulates and selects alternative actions that lead forward in the process.

The low rank in entrepreneurial capabilities partly has its background in immigration (ranked 19th), which in turn is driven by low inflows of foreign labor and by low selfemployment among immigrants. Entrepreneurship is often not considered a good career choice; successful entrepreneurship does not give high social status; and preferences for self-employment are not high – leading to a relatively low rank regarding attitude to entrepreneurship and entrepreneurial mindset. This explains the low rank in entrepreneurial culture.

## KEY STAKEHOLDERS

Entrepreneurship policy is developed within The Ministry of Enterprise, Energy and Communications (Näringsdepartementet). The Ministry collaborates with other ministries to improve the general conditions for entrepreneurship. The Ministry supervises several national programmes and funds, and gives guidelines to a number of agencies that carry out programmes directed at the entrepreneurs. The most important agencies in this respect are Sweden's Innovation Agency, Vinnova, which is responsible for innovation policy, the Swedish Agency for Economic and Regional Growth, Tillväxtverket, which carries out policies targeted at startups and development of firms, and ALMI Företagspartner AB, which provides financing and business counselling for growth in small and medium sized enterprises. The Swedish Agency for Growth Policy Analysis (Tillväxtanalys – Myndigheten för tillväxtpolitiska utvärderingar och analyser), carries out analysis and evaluations of the policy programmes and other measure

Finally, steps have been taken to implement the new national strategy for innovation (Den nationella innovationsstrategin), with the purpose of encouraging employment and economic growth by improving the climate for innovation. Two of the largest public providers of early stage capital (Innovationsbron AB and Almi Företagspartner) will be merged with the intention to create a more efficient organization – providing guidance and capital for entrepreneurs in early phases of business development.

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<sup>1</sup> <http://www.skolverket.se/skolutveckling/entreprenorskap> (only SE).

### 3.5 THE EC&SP IN FLEMISH REGION, BELGIUM

Other case that it's very important to study is the Flemish region in Belgium.

Belgium is a high income Country according to the OECD classification, being the Flemish region (Flanders), which has better economic indicators.

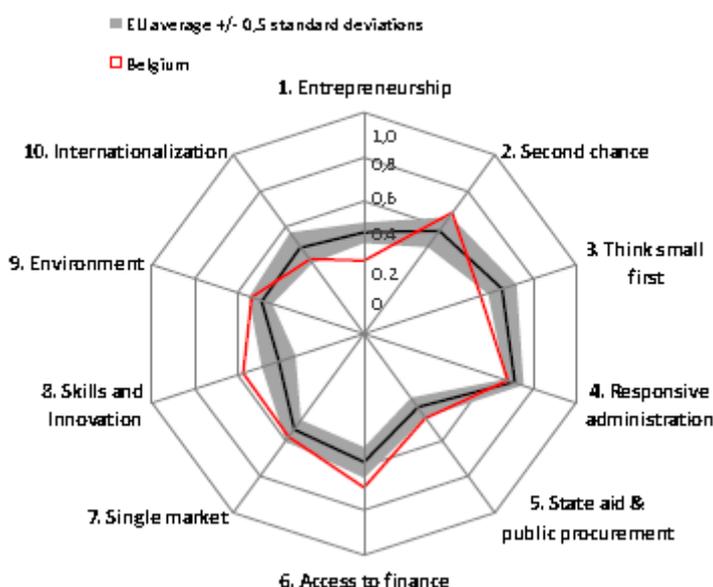
The GDP of Belgium was \$513.7 Billion (current US\$), with a population of 11 million in 2011.



#### SME'S OVERVIEW

In all Belgium, there are about 498.225 enterprises, with an employment of 1.695.611 and €110 billion of value added in 2011.

Overall, the Belgian SBA profile presents quite a positive picture (see the next spider chart)<sup>1</sup>. Belgium exceeds the EU average in four areas: Skills and Innovation, Access to finance, Second chance and State Aid, while it lags behind in two: Think Small First and, above all, Entrepreneurship. The other four areas fall within the EU average. Trends during the period 2007-2012, expressed in relative terms compared to the EU average, show a strong increase in the areas of Single market and Skills and Innovation, but fall behind in Internationalisation, Access to Finance and State Aid. From a policy point of view, Belgium was active in almost all SBA areas in 2011, with the efforts of the federal and regional governments focused above all on Environment, Skills and Innovation, Internationalisation and Entrepreneurship, the last two being particularly significant because of the negative trend and the low score, respectively.



To improve and maintain these positive indicators in economic crisis, various strategies have been implemented at regional and national level in the area of education, innovation and entrepreneurship.

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<sup>1</sup> SBA Fact-Sheet Belgium 2012, EC, 2013.

## NATIONAL STRATEGIES

On the policy front, Belgium has been very active in this area during the last year, particularly at the regional level. In the Flanders region, a new “Action plan for entrepreneurship education 2011-2014: **Action Plan for the promotion of Entrepreneurial Spirit and Entrepreneurship through Education**” has been developed.

The plan aims to nurture an entrepreneurial spirit among pupils and students and teach students the necessary entrepreneurial skills.

This Action Plan is built on the earlier action plan that served as a starting point for consultations between all the parties involved in this theme. The previous action plan was instrumental in setting up new specific actions such as the Entrepreneurial Class Week (Ondernemersklasseweek) and the study commissioned by the King Baudouin Foundation as well as in carrying on existing actions such as the calls for the bridging economy & education projects. It lays the foundation for the current policy which is a step towards more structured cooperation between all the departments and agencies involved.

The new Action Plan carries out the intentions of the Flemish Coalition Agreement. In this context, the Government of Flanders wants to facilitate entrepreneurship by continued awareness-raising. This awareness-raising must help counter the negative image of entrepreneurs. The purpose of the Action Plan is to support initiatives in the work field and to throw some light on the funding mechanism. Furthermore, the Government of Flanders committed itself to integrating entrepreneurial competences in cross-curricular attainment targets as well as in the competence profile of teachers.

Also, this Plan is included in the Entrepreneurship Action Plan launched in 2010 by the government as promoting an entrepreneurial attitude in education is one of the Entrepreneurship Action Plan's operational objectives in order to develop a strong entrepreneurial culture.

Another aim is to create sufficient synergy and alignment between the Action Plan on Entrepreneurial Education and the "Action Plan on the Promotion of Careers in Mathematics, Exact Sciences and Technology", which is launched by the Flemish Minister responsible for education in collaboration with the Flemish Minister responsible for science and technological innovation policy and the Flemish Minister responsible for employment policy. This action plan will especially focus on increasing the outflow from scientific and technical courses in secondary education, the inflow and transition to scientific and technical courses of study in higher education and the entry into the labour market. It will also be aligned to the actions announced in this field in the White Paper on New Industrial Policy.

This Action Plan starts from transparent objectives so that schools know which goals they are collaborating on and providers of initiatives relating to entrepreneurship education know which goals should be pursued. Nevertheless, the objectives will not be equally present at all times. Depending on the age and the developmental level of the pupil, student or course participant and the training

pathway he or she pursues, some of the objectives will be more focussed on than others (see table below).

Detail of Objectives of Action Plan for Flanders region	
Objectives	Measures
<p><b>Objective 1</b></p> <p>Pupils, students and course participants have the necessary entrepreneurial spirit when leaving education</p>	<p>When completing their educational pathway, pupils, course participants or students must be able to set objectives for themselves, take initiatives, be confident enough to go for it, be creative, organise themselves and demonstrate the perseverance required to achieve these objectives. They need this entrepreneurial spirit to shape their lives. Entrepreneurial spirit helps people outline their further educational career and complete it successfully, facilitate their access to the labour market and further develop their professional career and plan their leisure time and family life</p>
<p><b>Objective 2</b></p> <p>Before leaving education, pupils, students and course participants have had the opportunity to prepare themselves for entrepreneurship</p>	<p>When graduating, students, course participants or pupils must be sufficiently prepared to engage in entrepreneurship. This means that students, pupils and course participants know which steps to take to become an entrepreneur and have acquired sufficient basic knowledge at the end of their training course</p>
<p><b>Objective 3</b></p> <p>Pupils, students and course participants are motivated to become an entrepreneur</p>	<p>Pupils, students and course participants must adopt a positive attitude towards entrepreneurs and enterprises and consider entrepreneurship as a valuable career choice for themselves and for others</p>
<p><b>Objective 4</b></p> <p>Teachers show entrepreneurial spirit and have a balanced view of entrepreneurship</p>	<p>In order to make pupils, students and course participants gain a positive image of entrepreneurship, it is essential that teachers and other directly involved parties such as school management teams have a sufficiently balanced vision of entrepreneurship themselves. If this is not the case, they will not be able to convey a balanced image of enterprises and entrepreneurs. Teachers and school management teams need to have enough entrepreneurial spirit themselves in order to be able to provide Entrepreneurial Education</p>
<p>Source: Action Plan on Entrepreneurship, Government of Flanders, November 2010.</p>	

The following groups belong to the Action Plan's target group:

- Pupils in nursery and primary education;
- Pupils in full-time and part-time secondary education, including apprenticeship and Se-n-Se (secondary after secondary education);
- Pupils in part-time education in the arts;
- Students in higher education;
- Course participants in adult education, with the exception of the training course leading to the business management certificate.

The Action Plan agreed to focus on two aspects; first focus is **on instilling an entrepreneurial attitude into pupils and students** and **second focus is on imparting the necessary competences for independent entrepreneurship to pupils and students and on encouraging them to choose independent entrepreneurship**. 12 competences have been defined:

Generic entrepreneurship competences from the ENTRE profile
<b>FULL COMMITMENT TO ENTREPRENEURSHIP</b>
Perseverance
Self-knowledge
<b>ORGANISATIONAL ENTREPRENEURSHIP</b>
Understanding of return on investment
Decisiveness
<b>REASONED ENTREPRENEURSHIP</b>
Autonomy
Future-oriented planning
<b>COLLABORATIVE ENTREPRENEURSHIP</b>
Persuasiveness
Networking
<b>SEIZING OPPORTUNITIES</b>
Seeing opportunities
Understanding of market
<b>SOCIALLY CONSCIOUS ENTREPRENEURSHIP</b>
Acting in a solidarity-based and eco-friendly way
<b>PROACTIVE ENTREPRENEURSHIP</b>
Oriented towards learning

In the Action Plan, the Teachers and lecturers play a key role in providing Entrepreneurial Education. That is why it is important to provide sufficient support to teachers and lecturers of Entrepreneurial Education. In this context, different types of support are offered for teacher as facilitators: on-line support, face to face support by third parties, support through the exchange of experience with peers, provision of a qualitative offer of activities and the creation of teacher placements in industry (see the table below).

Detail of teacher support mechanisms	
Type	Description
On-line support	Teachers are supported by the provision of on-line teaching materials and pedagogical concepts. Competento has existed since 2007. Its on-line knowledge centre gives all training and education actors the opportunity to find information on the provision of activities, methodologies and concrete teaching materials as well as a calendar of specific initiatives. This website also tries to increase the visibility of entrepreneurial spirit and entrepreneurship and shows good practices at home and abroad with the aim of inspiring other teachers. In order to enhance the visibility and accessibility of the data on Competento's website, close cooperation will be set up with the educational portal site KlasCement in the future. Databases will be exchanged: in this way items from the Competento database will be opened up via KlasCement and reversely, relevant data of the KlasCement database will be accessible via the website of Competento. The Competento website and its external features will be maintained. Competento will also examine the possibility of cooperating with other websites and knowledge centres that have similar themes to those of Competento's website, e.g. <a href="http://www.projectloket.be">www.projectloket.be</a> , the Flemish Network for the promotion of entrepreneurship (Ondernemerschapsbevorderend Netwerk, <a href="http://www.von-online.be">www.von-online.be</a> ) and the websites of structural partners regarding Entrepreneurial Education. In addition, Competento will undertake a user analysis to further optimise the website.
Exchange of experiences	Exchange of experiences between teachers may have a stimulating effect. By asking (experienced) teachers to share good practices, others may be persuaded to organise an entrepreneurship project at their school too. An excellent tool is setting up informal group discussions for teachers and lecturers placing the focus on informal consultation. In the past year, this formula was tested and considered successful. Nevertheless, it is not desirable to organise isolated informal group discussions. Preference should be given to linking them to other activities, events, competitions, initiatives of structural partners, etc. in the field of Entrepreneurial Education or related subjects. The Vocational Training Service (DBO) and Competento work on this together. Some thought should be given to whether learning from other teachers' experiences can be stimulated by acknowledging the achievements of excelling teachers through awards.
Quality provision of activities	For the purpose of supporting teachers who are teaching Entrepreneurial Education, it is of importance that sufficient and high-quality materials and concepts are offered. In order to guarantee a minimum quality, a cross-policy area working group will elaborate quality standards that can be used as directives for awarding funding to activities promoting entrepreneurial spirit or entrepreneurship. In order to give greater publicity to the existing provision, Competento organises a biennial information fair featuring stands of Entrepreneurial Education providers. This information fair will be organised in close consultation with the structural partners in the field of Entrepreneurial Education and will take place in autumn 2011 and 2013.
Face-to-face support	A lesson we have learned from the past is that although plenty of inspiring examples of teaching materials and concepts are made available, teachers are still convinced that starting Entrepreneurial Education is a challenging task. The existing channels focus first and foremost on the needs of teachers who have already taken the first steps towards Entrepreneurial Education. Experiences in other regions (e.g. Wallonia and Wales) learn that it is worth the effort to go in person to the schools and teachers who are new to entrepreneurial spirit and entrepreneurship and familiarize them in a structural way with the possibilities of Entrepreneurial Education. Practical experiences in other regions also show that in this way even those institutions and individuals who are most reluctant towards Entrepreneurial Education can be reached and their enthusiasm for Entrepreneurial Education can be kindled. At present, the Enterprise Flanders Agency has a sectoral account manager for education. This account manager is charged with the task of making the Enterprise Flanders Agency's provision known and possibly designing (own) adapted tools (developed example - Startkompas). In autumn 2011 - early 2012, various workshops regarding Startkompas will also be given to teachers and teacher trainees. The non-profit organisation Flemish Young Enterprises and the Education and Enterprise Foundation also adopt a direct approach to education institutions, the main focus being placed on face-to-face support. In addition, educational guidance services may give support to education institutions and provide, promote and reinforce innovations in education. The actions taken by the above-mentioned actors can only partially meet the present need for face-to-face support.
Placements in Industry	Teachers are also supported by giving them the opportunity to get a feel for entrepreneurship. Teacher placements in industry are an effective means to do this, especially when the trainee is placed in a smaller enterprise. One of the reasons why few teachers have undertaken placements in industry is the problem of finding a substitute teacher for the duration of the placement. It often happens that when no substitute teacher is found, teachers who are interested in a placement in industry cannot start his/her work placement. Via a project designed to solve the replacement problem, efforts are made to enable more teachers to go on a teacher placement in industry. In this pilot project, a body will set up substitute educational activities while the teacher is away on a domestic placement in industry. This substitute educational activity must aim at promoting entrepreneurial spirit and/or entrepreneurship in pupils. On the basis of 30 'substitutions', this pilot project will assess whether this formula may succeed in making pupils and teachers simultaneously work on their entrepreneurial spirit and entrepreneurship. The pilot project will take place in 2012 and will be preceded by a call for projects. When assessing the submitted projects, the experience of the submitter with actions regarding Entrepreneurial Education will play an important role
Source: Action Plan on Entrepreneurship, Government of Flanders, November 2010	

This Action Plan was created in collaboration with all the policy actors involved, which form part of their society to implement:

- the Department of Education and Training,
- the Department of Economy, Science and Innovation,
- the Enterprise Flanders Agency,
- the Department of Work and Social Economy,
- the Department of Agriculture and Fisheries,
- the Flemish Agency for Entrepreneurship Training SYNTRA Vlaanderen,
- the ESF Agency,
- the office of the Minister-President of the Government of Flanders and Flemish Minister for Economy, Foreign Policy, Agriculture and Rural Policy,
- the office of Flemish Minister for Finance, Budget, Work, Town and Country Planning and Sport and
- the office of Flemish Minister for Education, Youth, Equal Opportunities and Brussels Affairs.

## FUNDING

Until now, various policy areas independently funded actions for the promotion of Entrepreneurial Education. This led to inadequate alignment and a fragmentation of initiatives. Ideally, all resources spent should be jointly managed so that a broad range of initiatives with a variation in methodologies are financed. That is why in the framework of the present Action Plan, all departments and agencies involved agreed on the use of the resources from a common perspective. All departments and agencies involved make arrangements on how the resources are used and on who finances which actions.

The following arrangements were made regarding the structural and project-based funding of initiatives and organisations during this term of office:

- COFEP which is responsible for the organisation of training enterprises receives structural support. The Department of Education and Training allocates these resources via the RTC network. VDAB contributes to staffing costs;
- The non-profit organisation Vlajo and Stichting Onderwijs en Ondernemen are already structurally funded by the Enterprise Flanders Agency. Both organisations provide various complementary concepts and materials for Entrepreneurial Education. These activities are guaranteed but in order to stimulate harmonisation of the actions of both organisations, the Enterprise Flanders Agency will take the initiative to consult with both organisations so

that they will submit a common proposal of activities, budget and reporting from 2013 onwards;

- For some school years, the dream factory of Vlajo has been receiving support from the Education and Training Department in the form of 1FTE seconded teacher. From 2013 onwards, the proposal of activities with the budget of Vlajo and UNIZO will also have to contain a proposal for the employment of seconded teachers. On the basis of these proposals, the number of FTE seconded teachers may be increased;
- Competento's operation is further guaranteed and funded by SYNTRA Vlaanderen. Competento is responsible for the on-line knowledge centre, the inspirational guide for Entrepreneurial Education and an Entrepreneurial Class Day;
- The Minister responsible for technological innovation policy ensures the structural funding of Flanders District of Creativity. Flanders DC takes initiatives to increase creativity within education. Flanders DC is also commissioned by the Enterprise Flanders Agency to organise the Flemish business plan competition for students;
- COOS, a competition for school teams regarding entrepreneurial spirit and entrepreneurship is funded by resources of the Education and Training Department. As participation numbers were low for the 2011 edition, this activity will be assessed after the 2012 edition. Only if the participation was sufficiently high in 2012, this activity will be continued for the rest of the term of office;
- New calls for Bridging Projects will be launched by the Enterprise Flanders Agency. Via the bridging projects, the Enterprise Flanders Agency provides resources to projects which create partnerships for the purpose of developing new forms of knowledge exchange between the business world and education. The Enterprise Flanders Agency has earmarked the necessary funds for a new call in 2012. In this context, room is also made for valorisation processes of the best practices arising from previous calls for Bridging Projects the operation of which is being embedded in Flanders. The practical launch of the call is done in consultation with the cross-policy area working group on Entrepreneurial Education;
- The Enterprise Flanders Agency funds an annual business plan competition for students and pupils. Various organisations will work on this together from the 2011-2012 school year. The "Beloftevolle Ondernemer competition" (Promising Entrepreneur) which was financed until 2011 by the Education and Training Department is no longer organised separately as it is included in the collaboration initiatives for the business plan competition. In the next period, maximum synergies between the business plan competition, the activities of Vlajo and the Stichting Onderwijs en Ondernemen and other initiatives within the framework of this Action Plan will be actively aimed at;

- The project entitled 'De wereld aan je voeten!' (The World at your Feet) in its current form will be extended for another year. This project receives means from different policy areas;
- Finally, the Education and Training Department provides project-based funding to Proleron bis and the pilot project for the promotion of teacher placements in industry;
- The Enterprise Flanders Agency also awards funding to 2 audio-visual creations with a cross-media character that specifically aim at raising the awareness of young people to entrepreneurship. These creations are:
  - 'Later als ik groot ben' (Later, as a grown-up): This programme is about career planning for young people aged 10 to 15 and will be broadcast by Ketnet;
  - 'Jonge bazen' (Young Bosses) broadcast by Kanaal Z is a concept designed for students in secondary and higher education with a competition formula similar to mini-enterprises.

## KEY STAKEHOLDERS

The Action Plan for Entrepreneurship Education is a shared initiative between the Prime Minister, Minister for Economy and Agriculture, Minister for Education and Minister for Employment. The Action Plan is also a contribution to the economic growth strategy Flanders in Action 2020.

The Flanders' Enterprise Agency has been particularly active. It has launched an awareness campaign to encourage older entrepreneurs to consider continuing their business. It selected eight projects to be presented in the media to promote a realistic image of the entrepreneur among the general public and it provided funding for two organisations that evaluate the feasibility of business plans and give advice to pre-starters, i.e. people about to set up a company. Lastly, under the so-called 'SME-wallet' instrument, it is possible in Flanders to receive a subsidy for strategic advice on the transfer of a company.

In the Flemish Community of Belgium and within the framework of the European Regional Development Fund, the project Proleron<sup>1</sup> aims to raise the standard of entrepreneurial education by training secondary school teachers in entrepreneurship and developing their entrepreneurial attitudes through adopting non-traditional approaches and teaching methods and by using nontraditional pedagogical tools.

On the policy front, on 1 November 2011 the consultancy service FINMIX was introduced in the Flanders region. It gives entrepreneurs the opportunity to present their projects to a panel of financial experts who will advise them on the optimal financing mix for their specific situation. FINMIX has been introduced in the

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<sup>1</sup> [http://www.ond.vlaanderen.be/dbo/en/projecten/projecten\\_proleron\\_bis.htm](http://www.ond.vlaanderen.be/dbo/en/projecten/projecten_proleron_bis.htm).

Flanders region. This provides entrepreneurs with the opportunity to present their project to a panel of financial experts, who will advise them on the optimal financing mix for their enterprise. The members of the panel are representatives of banks, innovation centres, business organisations and providers of public and private risk capital. Any company may use FINMIX, provided venture capital is needed for a balanced financing mix. The panel will advise on the need for risk capital and the possibility of government support measures. On the one hand, this should help more companies find the optimal financing mix, and, on the other hand, reduce the time taken to find financing. Although the measure was launched recently (1 November 2011), it can already be considered to be good practice because of its innovative approach. It does not focus on financing as such, but on the different sources of financing and their optimal mix, involving multiple parties with different types of expertise.

The steering group will monitor the implementation of this plan. At the official level, the necessary working groups are composed so that the relevant services cooperate on its operationalisation. In conformity with the declaration of intent, the partners in the field will be advised with.

## 5. CASE ANALYSIS

After detailed each national strategy to promote entrepreneurship education in the 5 cases analysed, we will have a comprehensive diagnosis in order to identify commonalities and differences.

In the following table, it's grouped information regarding specific initiatives that have been developed in the area of education and skills. First and taking into account the period of implementation, Norway constituted the forefront in the design and implementation of a national plan for entrepreneurship education (in 2004). Followed for Finland in 2007, Denmark and Sweden in 2009 and Flemish region in 2010.

MAIN DETAILS OF NATIONAL INITIATIVES FOR ENTREPRENEURSHIP EDUCATION						
Case	Education Strategy	National	Period	Executor	Other Organization	Entrepreneur National Plan
Norway	Strategic plan for entrepreneurship in education and training: See the opportunities and make them work		2004-2008	The Ministry Of Trade and Industry, the Ministry of Education and Research, and the Ministry of Local Government and Regional Development	The Industrial Development Corporation (SIVA), Innovation Norway and the Norwegian Research Council	Government entrepreneurship strategy
	Action Plan Entrepreneurship in Education and Training, from compulsory school to higher education in		2009-2014			
	Global entrepreneurship Training Programme		2010			
Finland	First Plan for education and research		2007-2011	Ministry of Labour and the Ministry of Trade and Industry, Ministry of Employment and the Economy (MEE)	Tekes, the Finnish Funding Agency for Technology and Innovation	Entrepreneurship Plan
	Second Plan for education and research		2012-2016			
	Guidelines for Entrepreneurship Education		2009			
Denmark	Strategy for Education and Training in Entrepreneurship		2009	Ministry of Business and Growth and Ministry of Science, Innovation and Higher Education	The Foundation for Entrepreneurship, Business Development Centres (Vaeksthuse)	National action plan for entrepreneurship 2003
Sweden	Strategy for Entrepreneurship in the area of education		2009	The Ministry of Enterprise, Energy and Communications (Näringsdepartementet)	Sweden's Innovation Agency, Vinnova, the Swedish Agency for Economic and Regional Growth, Tillväxtverket, and ALMI Företagspartner AB	Plan for Entrepreneurship
	Reform of the Swedish high school system 'Gymnasireformen, Gy2011'		2011			
	Education part of Entrepreneurship Action Plan		2010	Minister for Economy and Agriculture,	Enterprise Flanders Agency,	

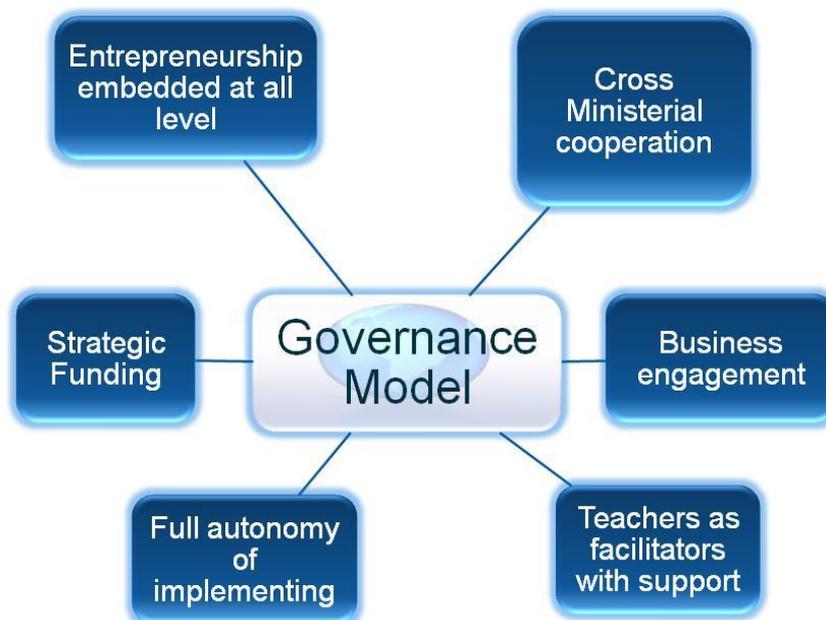
<b>Flemish Region, Belgium</b>	Action plan for entrepreneurship education	2011-2014	Minister for Education and Minister for Employment	Flemish Agency for Entrepreneurship Training SYNTRA Vlaanderen, ESF Agency, others	Entrepreneurship Action Plan 2010

Either way, it's possible to note that policies to promote entrepreneurship education are relatively new and have no more than five years on average application. Because of its geographical position, it is possible to note that these experiences are concentrated in the north and especially in the Nordic countries, as four of them belong this region.

For the specific case of Brazil, this means that –by one side- there isn't a huge gap in the implementation of such policies with the top at international level, and – in other side-, there are also five years of practical experience in the implementation of the various measures.

In all the cases, from the beginning there are a cross ministerial approach due to the complexity of action, stakeholders and resources. These tasks exceed the limits of a single ministry, which is not obvious that it is one the most dynamic in the implementation. On average, three ministries are involved in the case studies, where Sweden and Denmark have Ministry of Enterprise and Business Ministry. Instead, the traditional Trade and Industry Ministry is responsible for promoting entrepreneurship in Norway and Finland. This work requires collaboration and efforts from a number of parties, including: Private actors: business and industry, and commercial and industrial organisations; Organisations: pupil and student organisations, the social partners, Association of Local and Regional Authorities; and Public actors: municipalities, county authorities and other regional development actors.

These ministries are aided by the acting of strategic organizations involved in educational issues and business, forming a partnership that is what allows the governance and sustainability of the intervention model. This model of governance, despite having differences from country to country, but it's possible to distinguish common components. It presented in the following diagram the scheme governance model for policy entrepreneurship education.



The components of this model are:

- The Entrepreneurship education embedded at all levels and types of education, from primary and secondary education, vocational and University level. This means that, it must include actions to promote entrepreneurship at all levels of education from the beginning;
- Cross ministerial cooperation present in all cases. The complexity of the actions to be taken beyond the scope of a ministry or two, and it takes the coordination of various public entities. The main Ministry is in charge of managing the entrepreneurship education action plan;
- Intensive business engagement. In all the Plans analysed, it tried to involve enterprise in educational activities, both with teachers and with students. Company insert in the classroom is a phrase that describes it well intensive collaboration with business sector;
- Teachers' role to function as facilitators. Teachers become facilitators and agents promoting entrepreneurship. For which, different actions are geared to teach teachers, "Train of trainers". At this point, teachers of entrepreneurship include teachers at all levels of education (university, business school, high-school, secondary and primary schools) as well as other relevant stakeholders working with entrepreneurship such a service providers;

- Full autonomy of implementing entrepreneurship education by educational institutions as long as they comply with National Qualification Framework or steering documents;
- Strategic funding. From the beginning it involves the creation of financing mechanisms of actions, in order to give financial sustainability. In the 5 cases studied there is a comprehensive list of the various possible mechanisms to use.

Also, the common characteristics of good practices were focus on experiential learning; and the ability to cope and manage with the scarce human resources and funding; networks with external stakeholders; high level of international cooperation and media exposure. In the majority of cases, there were public funds and the recovery rate was very low at the start or practically non-existent.

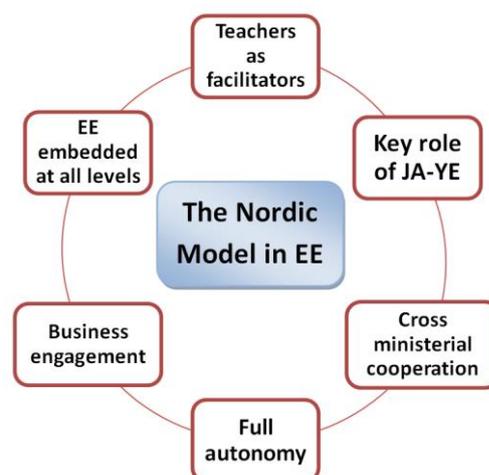
Factors promoting good practices include organizations specializing in their own strongest area and leveraging others' expertise in other areas; effective communication and promotion strategy; and deliberately matching and selecting partners from business sector

## THE CASE OF NORDIC COUNTRIES

The Nordic countries, through years of developing, have established a distinguished 'Nordic model in entrepreneurship education'. This could also provide certain opportunities for cooperation between Nordic countries and various actors in the area.

The model includes the following common features (see the chart):

- Key role of Junior Achievement
- Young Enterprise organizations
- Cross ministerial cooperation
- Full autonomy of implementing
- Intensive business engagement
- Entrepreneurship education embedded
- Teachers' role to function as facilitators.



A point that it need to remake, is the effort around the creation of entrepreneur statistics, especially what is called an '**entrepreneurship ecosystem index**'. The

ecosystem index consists of regional data for critical elements in ecosystems including: venture capital (venture capital indicator), concentration of established businesses (LQ indicator), service providers and knowledge institutions (patent indicator) and experienced business people (dealmaker indicator). The reason that regional data is used rather than national data is that entrepreneurship ecosystems are regional and local entities<sup>1</sup>.

On the other hand, the following main obstacles were identified in the application of Nordic model<sup>2</sup> :

- Teachers' motivation and engagement in entrepreneurship education
- Lack of sufficient funding and human resources
- Entrepreneurship education perspective not incorporated in the current examination system
- Insufficient interaction between the policy makers and practitioners
- Lack of national platforms for good practices
- A need for curriculum and tool development

The main barrier for this is often lack of sufficient entrepreneurship training capabilities in the education system. In order to strengthen the Nordic capabilities within entrepreneurship education, it is suggested to work more strategically with enhancing the abilities to teach entrepreneurship.

A Nordic Entrepreneurship Education could provide training to entrepreneurship teachers in the Nordic countries, also by linking up to and collaborating with elite international entrepreneurship educations focusing on "train-the-trainers" such as the one at Harvard Business School.

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<sup>1</sup> Entrepreneurship education in the Nordic countries, NORDIC Innovation Report, December 2012.

<sup>2</sup> Ibid, pag. 21.

## 6. LESSON LEARNED FOR BRAZIL

### THE START POINT: THE ENTREPRENEURSHIP EDUCATION & SKILLS POLICY FOR BRAZIL

As has already been mentioned, the Brazilian Government, in partnership with the private sector and other stakeholders, has set about developing and implementing a National Entrepreneurship Policy (NEP). NEP is already being developed by the Ministry of Development, Industry and Foreign Trade (MDIC) in partnership with leading stakeholders at the national level.

As part of NEP, this Ministry is designing Entrepreneurship Capabilities and Human Resources Skills Policy for Brazil, for which it has edited since June 2012 a Draft Report Entrepreneurship Review of Brazil – Entrepreneurship Capabilities and Human Resources Skills<sup>1</sup>.

In order to support this policy and contribute to the experience of the implementation of this policy entrepreneurship education in other countries, is carried out this Benchmarking.

According with the Minister's ordinance, PNCA shall beacon the setting up of a loose governance system of all executive not-for-profit stakeholders in charge of training programs catering to the needs of entrepreneurs leading sole proprietorships, micro, and small businesses. Those stakeholders comprehend governmental executive agencies at the federal, state and local level, quasi-autonomous non-governmental organizations (Sebrae, Senai, Senac, etc.) and similar public and private organizations. The governance system shall facilitate the attainment of the Multi-Year Plan targets concerning labor force training, what will be done through the coordinated implementation of public policies in this area. Appropriate strategic management tools shall be developed.

PNCA shall:

- Foster synergies between all existing training programs catering to the needs of entrepreneurs leading sole proprietorships, micro, and small businesses;
- Enable government to enlarge the funding of the education and training programs focused on entrepreneurs leading sole proprietorships, micro, and small businesses. PNCA shall enable government to allocate better those relatively scarce resources;
- Facilitate the availability of subsidized credit, tax deductions incentives and similar monetary and fiscal instruments to stimulate the education and training of entrepreneurs leading sole proprietorships, micro, and small businesses;

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<sup>1</sup> Entrepreneurship Review of Brazil - Entrepreneurship Capabilities and Human Resources Skills, June 2012.

- Foster the networking of all relevant stakeholders using appropriate ICT resources as, for instance, an internet directory, reference and talking shop.

## LESSON LEARNED

From the cases discussed above and analysed key documents in this Benchmarking, it is possible to draw the following lessons learned for the implementation of these kinds of policies in Brazil:

- ☞ Entrepreneurship as an integrated part of education and training: Entrepreneurship is defined as an objective in education, so it must be included in the instruction strategy. This is a matter of attitudes and qualities in general, whereas knowledge and skills are particularly emphasized within specific subject areas mentioned in the curricula;
- ☞ Collaboration with the local community: Training in entrepreneurship preresquires close collaboration between schools and the local business and social sector. There is therefore a need for more arenas for contact between educational institutions and various players in society. In such arenas educational institutions and the local social and business sectors will get to know one another better, and cultural barriers may be dismantled. This will result in mutual benefit inasmuch as it will increase the quality and relevance of education and strengthen recruitment to the local business sector and development of competence;
- ☞ Teachers's competence: Teachers are important role models. A positive attitude among young people in schools toward entrepreneurship, innovation and reorientation requires that teachers have knowledge of this. It is therefore important to focus on entrepreneurship in teacher training, and also provide courses in competence development to working teachers. The teacher is the most important prerequisite for solid, meaningful instruction. The teacher and the instructor can mean all the difference to many pupils and apprentices;
- ☞ The attitudes of school-owners and school managers: School-owners must follow up the focus on entrepreneurship in curricula and management documents, and build competence and insight among school managers. It is important that educational institutions are given legitimacy and motivation to work on entrepreneurship. School managers must be able to follow up, encourage and motivate teachers to be good role models and disseminators of knowledge. Both school-owners and school managers must take the initiative in collaborating with the business sector and other agencies in the municipality. The school-owner is the best guarantor of good educational institution;

- ☞ Organized collaboration with the local business and work sector can give pupils an insight into different work processes, practical work experience, knowledge of working life and contribute to work on entrepreneurship in education and training. Insight into the changes that occur in business and working life can make visible the usefulness of active participation in innovative activities and entrepreneurship. Proper interaction between schools and business and working life, art and culture and other parts of the local community can make training in the subject curricula. Concrete and realistic, thus increasing pupils' ability and desire to learn. Local communities differ, and what pupils think as local will change regardless of their age and development and of changes in society.
  
- ☞ Primary school level: Training in entrepreneurship at this stage shall have its main focus on developing the pupils' ability to trust themselves, take responsibility, permit trial and error and develop creativity and the desire to find things out. Further, development of social skills and the ability to collaborate are at the very centre. Pupils will develop their own identity and community awareness through knowledge of the distinctive qualities of their home environment. Understanding of cultural and economic resources in the local community can be acquired through simple pupil enterprises. An elementary understanding of cultural and economic resources in the local community can be acquired by working on various programmes.
  
- ☞ Lower secondary school level: At this stage the focus will be on development of central skills such as concept development, problem-solving, decision-making and network-building. Pupils should be encouraged to utilize resources and exploit opportunities locally, feel responsibility for common work tasks and learn to take the consequences of their own choices. Increased knowledge of and contact with the local community and working and social life will provide a better basis for the choice of education and occupation. It may be natural to take up these themes in optional programme subjects and a number of other subjects, by allowing pupils to work for example using pupil enterprises as a method.
  
- ☞ Upper secondary level: At this stage training will be dominated by theory and practice focusing on learning through practical work, for example in the form of a youth enterprise. Competence milieus outside the school can be used in all programme subjects to increase relevance and realism. Knowledge of working life, of enterprise-founding, of ethics/environmental theory, economics and resource utilization will be important elements in training. Within the vocational programmes the pupils and apprentices will get to know different kinds of business and industry. The 2+2 model is based on 2 years education in school and 2 years training in a training

establishment. The time spent in the establishment is divided between training and productive work, which means that the apprentices are expected to contribute to the production in the businesses. The international perspective and a broad network as a basis for learning and collaboration will be important at this level.

- ☞ University and college level: At this level there should be greater concentration on various perspectives connected with entrepreneurial activity. Focus should be on national and global changes and trends, and what consequences these will have for development of trade and industry and society. Knowledge of working life, of enterprise- founding, customer and market relations, ethics/environmental theory, economics and resource utilization will be important elements in knowledge development. Student enterprises are a suitable pedagogical tool for learning how to establish and run an enterprise. That includes learning how to draw up a business plan, identification and evaluation of business opportunities, as well as collaboration and interaction with relevant external parties. Students must also work on thinking entrepreneurially in relation to other subjects. The educational programme should encourage students to identify ideas, and do something with them.
  
- ☞ Translation of policy commitment into concrete action starts from a well structured cooperation between different departments of the national administration (notably, Ministries of Economy or Industry, and Education), which seems to be either still lacking or not yet thoroughly developed in most countries;
  
- ☞ The first step of a global and coherent policy is usually the creation of a high level inter-ministerial committee or working group on entrepreneurship education. The second step will be launching a specific strategy or action plan;
  
- ☞ While the concept of entrepreneurship education is to a certain extent generally accepted (at least in theory) when applied to secondary school, this is not yet the case for primary school. Awareness-raising campaigns and activities are needed: it is necessary to explain what entrepreneurship teaching means at that level of education, and to offer concrete examples.
  
- ☞ Schools at all levels, starting from their headmasters and directors, are encouraged to recognise the importance of spreading the enterprise spirit among young people, including nurturing personal qualities such as creativity and spirit of initiative; to become committed to this new approach

in teaching; to support the teachers in implementing it; and to create a focal point to coordinate these activities. By doing this, schools will raise the profile of their educational offer, providing new basic competences that are most needed in our society, and will offer a better and more complete career orientation to young people.

☰ The application of concrete measures of support and promotion of entrepreneurship targeting the education systems (as well as other relevant actors) appears to be still rather limited and with the following difficulties:

- One common initiative has been to revise the curriculum (but only in few cases addressing all levels of education). Disseminating good practice is a preferred strategy, but has not been applied extensively so far. Measures of incentive have been developed in some countries. Development of teaching material and training for the teachers are insufficient.
- Existing international and regional networks and programmes whose mission is to promote entrepreneurship education - normally by means of partnerships with the business world - represent a potential that is not fully exploited by the education systems. These programmes offer well experimented models that can be easily adapted to the local environment.
- The insufficient provision of specific training to teachers on how to bring the concept of entrepreneurship into the classroom - and the current lack of systematic plans to address this gap - risk being a major obstacle to greater application of these programmes and activities.

☰ Pay attention to monitoring and the development of indicators and measures for the programs performance. Here the comprehensive quantitative data on entrepreneurship education will not be available in the short term. Therefore, for the purpose of monitoring progress, it will be necessary to use qualitative indicators, as well as quantitative indicators that are related to a limited number of specific and well-known programmes or methodologies. Here, setting concrete targets - to be reached on a voluntary basis and in a local context - will be helpful in order to achieve progress. However, the same quantitative targets should not be applied to all countries, given that the structure of their education systems is different, as well as their current situation and priorities. Each country should set its own, individual targets on entrepreneurship education, and monitor achievements as a part of a national process

☰ Systematically evaluate the programs and E-Policy and reporting.

## 7. CONCLUSIONS AND RECOMMENDATIONS

### MAIN CONCLUSIONS

- There are important experiences in implementing entrepreneurial capabilities and skills policies in Europe, which it is possible to extract lessons learned, real contacts, manuals, etc. Because of its geographical position, it is possible to note that these experiences are concentrated in the north and especially in the Nordic countries, as four of them belong this region.
- It's possible to note that policies to promote entrepreneurship education are relatively new and have no more than five years on average application. For the specific case of Brazil, this means that –by one side- there isn't a huge gap in the implementation of such policies with the top at international level, and – in other side-, there are also five years of practical experience in the implementation of the various measures.
- The components of the governance model for the entrepreneur education and skills derived from the case studies are: The Entrepreneurship education embedded at all levels and types of education (from primary and secondary education, vocational and University level); Cross ministerial cooperation present in all cases; Intensive business engagement; Teachers's role to function as facilitators; Full autonomy of implementing entrepreneurship education by educational institutions; and strategic funding.
- This work requires collaboration and efforts from a number of parties, including: Private actors: business and industry, and commercial and industrial organisations; Organisations: pupil and student organisations, the social partners, Association of Local and Regional Authorities; and Public actors: municipalities, county authorities and other regional development actors.
- The entrepreneurs education policy include as key aspects action addressed on: Entrepreneurship in Primary and Secondary school; Training of the teachers on the subject of entrepreneurship; Cooperation between schools/universities and businesses aimed at the promotion of entrepreneurship; Entrepreneurship chairs and activities at University level;
- Teacher training is particularly important to fulfill the intentions for entrepreneurship in primary, lower and upper secondary education and training, especially through further and continuing education for teachers within this field.
- Whether or not they go on to found businesses or social enterprises, young people who benefit from entrepreneurial learning, develop business knowledge and essential skills and attitudes including creativity, initiative, tenacity, teamwork, understanding of risk and a sense of responsibility.

This is the entrepreneurial mind-set that helps entrepreneurs transform ideas into action and also significantly increases employability.

## RECOMMENDATIONS

*Make Benchmarking, implies that the institution is continuously studied itself down analysing their situation and internal processes and implementing improvement incessantly*

We finally summarize a series of recommendations for the design of an E-Politics for Brazil:

- ☐ Many good examples of policy action aiming to promote entrepreneurship education, or promising initiatives going in that direction, can be found across Europe, in all areas and in different countries. The greatest challenge lies in spreading these positive examples. National and local authorities, educational establishments and all other organisations and actors concerned may learn from each other's best practice, or draw some inspiration from it.
- ☐ Enhance cooperation between different departments in the public administration that need to be involved in promoting entrepreneurship education, for example between the Ministry of Economy or Industry (MDIC); Ministry of SME's and the Ministry of Education. This cooperation should lead to creating dedicated inter-service working groups.
- ☐ Adopt a definition for entrepreneurship education, to be used as a reference for activities to be developed at a national level and for data collection. This definition should be compatible with the one adopted by experts at regional and international level. On the basis of established inter-department cooperation, launch a national strategy or action plan on entrepreneurship education, thus ensuring not only the necessary thrust but also a coherent and global approach to an issue which is horizontal.
- ☐ Create an inter-department function or structure (observatory, committee, etc.) that will be responsible to give impulse to - and coordinate - the gathering of information at national level. The aim should be to gradually develop the collection of quantitative data on entrepreneurship programmes and activities, to step up the gathering of information on pedagogical tools and methodologies, to disseminate good practice.

- ❑ Particular attention will be dedicated to set up concrete schemes and initiatives that will allow increasing the provision of specific training to the teachers on entrepreneurship, including opportunities to gain practical experience through direct relations with businesses.
- ❑ Step up activities of dissemination of good practice, both at a national and at a regional level, and the exchange of information between public administrations of American Countries, European Countries, OCDE, UNCTAD, EFTA/EEA Countries, and other Countries.
- ❑ Built Institutional Cooperation with the benchmarking case. This aspect is very important in the field of public administration and assesses the potential to establish bonds of cooperation and collaboration between the institution undertaking the benchmarking and good practice identified. This cooperation effective channel for technology transfer, may materialize in the form of missions, on-site consultation, staff internships, etc.
- ❑ Building successful private-public partnerships is a crucial aspect of promoting entrepreneurship education. These programmes, which draw support from the business world in various forms, from funding to active participation of business people in the teaching, provide some possible models of cooperation.
- ❑ Devise new and innovative ways of promoting public/private partnerships, and disseminate successful experiences; identify resources that could be matched by private funds, so that public initiative can act as a catalyst of private participation in education.
- ❑ In general, and in order to promote entrepreneurship education, many instruments or methodologies in use are: working on projects, visits to enterprises (or entrepreneurs visiting the schools), learning by playing. Mini-companies can be also used in primary school. Increase the application of programmes based on practical experience, e.g. by means of students running mini-companies or virtual firms. One way of achieving this objective was to support - through funding or with other means – the activity of European/international networks and NGOs already promoting these programmes across Europe.
- ❑ A company the inclusion of entrepreneurship in the national curriculum with support measures targeting the schools and the teachers, thus

promoting concretely the application of programmes. These were include, among others, funding pilot projects in the schools, training and motivating the teachers, making teaching material available, encouraging links between schools and enterprises, supporting organisations that promote entrepreneurship programmes, raising awareness, disseminating good practice.

- Some important and widespread programmes are promoted at European level by dedicated networks and NGOs. As these activities provide a well-established methodology for delivering entrepreneurship education in schools, public support could be increased and assume a more regular feature. Support may be given not only - and not necessarily - in the form of funding. There is also a need for improved recognition at national level. The curriculum should offer more opportunities to include these programmes coherently into schools' activities, and incentives and motivation should be provided also by means of training for teachers. Moreover, a more certain legal status is needed for student companies in some countries. Examples of what can be achieved through cooperation between the public sector and these organisations should be disseminated.
  
- In order to ensure continuous development, there is a need to further increase the number of private partners and businesses involved in these activities. This could be seen – and promoted – as an important aspect of corporate social responsibility, as young people represent the future of the country..Private parties (business associations, companies, entrepreneurs, business consultants, etc.) are encouraged to become more involved in education programmes, both by sponsoring and funding specific initiatives, and by participating directly in the teaching (e.g. as tutors or mentors). This involvement should be seen by firms as a long-term investment, and as an aspect of corporate social responsibility.

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