



JRC SCIENCE FOR POLICY REPORT

# EntreComp: The Entrepreneurship Competence Framework

Margherita Bacigalupo, Panagiotis Kampylis  
Yves Punie, Godelieve Van den Brande

2016

This publication is a Science for Policy report by the Joint Research Centre, the European Commission's in-house science service. It aims to provide evidence-based scientific support to the European policy-making process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

#### **Contact information**

Name: Yves Punie  
Address: Edificio Expo, Calle Inca Garcilaso 3, E-41092 Seville, Spain  
E-mail: Yves.PUNIE@ec.europa.eu  
Tel.: +34 9544-88229

#### **JRC Science Hub**

<https://ec.europa.eu/jrc/entrecomp>

JRC101581

EUR 27939 EN

PDF ISBN 978-92-79-58538-8 ISSN 1831-9424 doi:10.2791/593884 LF-NA-27939-EN-N

© European Union, 2016

Reproduction is authorised provided the source is acknowledged.

How to cite: Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union; EUR 27939 EN; doi:10.2791/593884

All images © European Union 2016, except: Cover image, f/sco - Fotolia.com

Abstract

#### **EntreComp: The Entrepreneurship Competence Framework**

The development of the entrepreneurial capacity of European citizens and organisations is one of the key policy objectives for the EU and Member States. Ten years ago, the European Commission identified *sense of initiative and entrepreneurship* as one of the 8 key competences necessary for a knowledge-based society. The EntreComp framework presented in this report proposes a shared definition of entrepreneurship as a competence, with the aim to raise consensus among all stakeholders and to establish a bridge between the worlds of education and work. Developed through a mixed-methods approach, the EntreComp framework is set to become a reference de facto for any initiative aiming to foster entrepreneurial capacity of European citizens. It consists of 3 interrelated and interconnected competence areas: 'Ideas and opportunities', 'Resources' and 'Into action'. Each of the areas is made up of 5 competences, which, together, constitute the building blocks of entrepreneurship as a competence. The framework develops the 15 competences along an 8-level progression model and proposes a comprehensive list of 442 learning outcomes. The framework can be used as a basis for the development of curricula and learning activities fostering entrepreneurship as a competence. Also, it can be used for the definition of parameters to assess learners' and citizens' entrepreneurial competences.

## Table of Content

FOREWORD .....	2
ACKNOWLEDGEMENTS .....	3
EXECUTIVE SUMMARY .....	5
1. INTRODUCTION .....	7
1.1 The aims and objectives of the study .....	7
1.2 Methodology .....	7
1.3 Limitations .....	9
1.4 Structure of the report .....	9
2. ENTREPRENEURSHIP AS A COMPETENCE .....	10
3. THE ENTRECOMP FRAMEWORK .....	14
3.1 Progression Model .....	14
3.2 Learning outcomes .....	17
3.3 The EntreComp Framework at a glance: the overview table .....	17
4. LIST OF ABBREVIATIONS AND DEFINITIONS .....	20
5. REFERENCES .....	22
APPENDIX: THE FULL ENTRECOMP FRAMEWORK .....	23

## Foreword

The European Commission has proposed 'A New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness' to address the skills challenges that Europe is currently facing. The aim is that everyone should have the key set of competences needed for personal development, social inclusion, active citizenship and employment. These competences include literacy, numeracy, science and foreign languages, as well as more transversal skills such as digital competence, entrepreneurship competence, critical thinking, problem solving or learning to learn.

The *Entrepreneurship Competence Framework*, also known as EntreComp, offers a tool to improve the entrepreneurial capacity of European citizens and organisations<sup>1</sup>. The framework aims to build consensus around a common understanding of entrepreneurship competence by defining 3 competence areas, a list of 15 competences, learning outcomes and proficiency levels, which current and future initiatives can refer to.

EntreComp was developed by the Joint Research Centre (JRC) of the European Commission on behalf of the Directorate General for Employment, Social Affairs and Inclusion (DG EMPL). The current report is the first publication to be released by the EntreComp project after an intensive process of research and stakeholder consultations.

The origin of this work goes back to 2006 when the European Union proposed 8 key competences for lifelong learning, one of which was a 'sense of initiative and entrepreneurship'.

DG EMPL is working together with the JRC to strengthen the uptake and use of EntreComp in Europe. The release of this report, coincides with the publication of an update of the 2013 report on the *Digital Competence Framework for Citizens*, also known as DigComp<sup>2</sup>.

Both tools will enable public authorities and private actors to improve their guidance, training and mentoring services for young people and job seekers, and at the same time further an entrepreneurial mindset among citizens. We believe they can help to address some of the key skills challenges that Europe is currently facing.

Detlef Eckert

Director, DG Employment, Social Affairs and Inclusion

---

<sup>1</sup> <https://ec.europa.eu/jrc/entrecomp>

<sup>2</sup> <https://ec.europa.eu/jrc/digcomp>

## Acknowledgements

After eighteen months of research work, the list of people who deserve our gratitude has grown noticeably long.

We would like to start by acknowledging the valuable contribution of CARSA team, who has supported us in the initial stage of the project. Thanks to Antonio **Collado**, Johannes **Conrads** and Ivana **Komarkova**, who in the meanwhile has become colleague at the European Institute of Technology, as well as Dimitri **Gagliardi** (University of Manchester). Our gratitude also goes to Elin **McCallum** (Bantani Education and Research), who has provided support along all the phases of this work and especially the last one.

Also, we are grateful to the large group of experts who have challenged us along the way, commenting and validating each step of the development of reference framework, from the identification of the competence areas to the validation of every single learning outcome. The list is long and we mean no offence by mentioning them by their first name, namely: Rob **Aalders**, Euregio Entrepreneurial Experience; Luisa **Aleman**, Esade Entrepreneurship Institute; Mirela **Andoni**, Ministry of Education and Science, Institute for Educational Development, Albania; Javier **Aretxederreta**, Tknika; Carlos **Azevedo**, Social Business School; Martina **Bacigalupi**, fundraiser; Ania **Bourgeois**, EC-EACEA-Eurydice; Olena **Bekh**, ETF; Catherine **Brentnall**, Ready Unlimited; Ben **Bruyndoncx**, SYNTRA Flanders; Massimiliano **Cereda**, Atelier Descartes; Brian **Cookson**, NASUWT; Cristina **Crisan**, SIMULIMPRESA; Nigel **Culkin**, Institute of Small Business & Entrepreneurship at the University of Hertfordshire; Luisa **De Amicis**, EUCLID NETWORK; Vincent **De Coninck**, BENISI European Network of Incubators for Social Innovation; Ivan **Diego**, Valnalon; Anusca **Ferrari**, European Schoolnet; Jaime **Gastalver**, RES Espacio de resiliencia creativa; Jan **Gejel**, Catalonia in Europe; Marianna **Georgalis**, Youth Forum; Clara **Giardina**, Freelance designer; Anthony **Gribben**, ETF; Przemyslaw **Grzywa**, YES – European Confederation of Young Entrepreneurs; Efka **Heder**, SEECEL; Frank **Hennessey**; Andreas **Huck**, Climate-KIC Education; Lukas **Hula**, NUOV; Bianca **Isaincu**, Child and Youth Finance International; Karin **Jaanson**, Ministry of Education and Research, Estonia; Caroline **Jenner**, JA Europe; Magnus **Klofsten**, Linköping University; Gerard **Krauss**, Université de Rennes; Martin **Lackeus**, Chalmers University of Technology; Jose Manuel **Leceta**, Insight Foresight Institute; Francisco **Liñán**, University of Seville; Fiorenza **Lipparini**, PlusValue; Maja **Ljubic**, SEECEL; Carlos **Lora Calvo**, RES Espacio de resiliencia creativa; Vera **Martinho**, JA Europe; Elizabeth **McSkeane**; Kaare **Moberg**, The Danish Foundation for Entrepreneurship–Young Enterprise (FFE-YE); Veronica **Mobilio**, JA Europe; Manuel **Montoya**, Seville Chamber of Commerce; Maurizio **Mosca**, EIGE; Fiorina **Mugione**, UNCTAD; Helle **Munkholm Davidsen**, University College Lillebaelt; Haifa **Naffakhi-Charfeddine**, Universite de Caen; Breda **Naughton**, Ministry of Education and Skills, Ireland; Nadine **Nerguisian**, Ministry of Education, France; Antonella **Noya**, OECD; Loredana **Orhei**, LeadersTM; Annemarie **Østergaard**, Aalborg University; Alice **Pedretti**, CSR EUROPE; Andy **Penaluna**, University of Wales Trinity Saint David; Jared **Penner**, Child and Youth Finance International; Timo **Pihkala**, Lappeenranta University of Technology; Slava **Prm**, Cedefop; Vesna **Puratic**, Ministry of Civil Affairs, Bosnia and Herzegovina; Mari **Räkköläinen**, Finnish Education Evaluation Centre; Randi **Heneide**, Ministry of Education & Research, Norway; Anders **Rasmussen**, FFE-YE; Dana **Redford**, Portugal Entrepreneurship Education Platform; David **Rosendo Ramos**, Junta de Andalucía; Daniela **Runchi**, JADE; Elena **Ruskovaara**, Lappeenranta University of Technology; Jesus **Sabariego**, Centro de Estudos Sociais da Universidade de Coimbra; Slavica **Singer**, Strossmayer University in Croatia; Lucia **Sell-Trujillo**, University of Seville and Storing Our World research group; Friederike **Sözen**, Austrian Federal Economic Chamber; Raúl **Tabarés Gutiérrez**, Tecnalia; Josef **Tixier**, OECD; Austeja **Tinkunaite**, ECDL; Roberta **Trovarelli**, Lega Coop; Andreas **Tsiakkios**, Ministry of Education and Culture, Cyprus; Luc **Van Acker**, Flemish Office of Catholic Education; Ernesto **Villalba-Garcia**, Cedefop; Zoica **Vladut**, Ministry of Education, Research, Youth and Sports, Romania; Lilian **Weikert**, RES Espacio de resiliencia creativa; Petra **Wieninger**, Ministry of Finance and Economics Baden-

Württemberg, Germany; Håkan **Ylinenpää**, Luleå University of Technology; Radovan **Zivkovic**, Ministry of Education, Science and Technological Development, Serbia.

We are grateful to the members of Education and Training 2020 Working Group on Transversal Skills (ET2020 TSWG), and those of the Expert Group on Social Entrepreneurship (GECES) of the European Commission.

We wish to thank our colleagues at DG Employment, Social Affairs and Inclusion for a working relation that went far beyond contractual obligations, inter-institutional cooperation and professional duty. In them, we found intelligent readers, critical reviewers, informed and committed professionals. Among those who supported this piece of work we are very grateful to Ana Carla **Pereira**, DG EMPL E2 Head of Unit, who has invested trust and resources in our work; to Karin **van der Sanden**, for helping us out in defining the progression model; to Guy **Lejeune**, Maria **Nyberg** and Risto **Raivio** for their contribution to the relevance of the framework across domains.

We also wish to thank Simone **Baldassarri** at DG Internal Market, Industry, Entrepreneurship and SMEs, as his commitment made it possible to deliver a clearer and more comprehensive framework than would have been possible otherwise.

Our gratitude extends to Hannah **Grainger Clemson** and Maria **Podlasek Ziegler**, at DG Education and Culture, for helping us ensuring that entrepreneurship as a competence can be applied and nurtured at school as well as in the field of youth work.

At JRC, we would like to thank Alexander **Coad**, Elisabetta **Marinelli** and Esperanza **Vera-Toscano** for their critical reviews and for expanding our network of experts. Also, we thank Funda **Celikel Esser** for her continuous support. Thanks also go to Patricia **Farrer** for proofreading the final version of this report. Finally, we are grateful to Ioannis **Maghiros**, DG JRC J3 Head of Unit, who has provided invaluable support in reaching out to the entrepreneurial learning community.

The interested reader will find all documents related to the project on the JRC EntreComp website: <https://ec.europa.eu/jrc/en/entrecomp>.

For further queries, please contact Yves Punie [yves.punie@ec.europa.eu]

## Executive summary

### Policy context

The development of the entrepreneurial capacity of European citizens and organisations has been one of the key policy objectives for the EU and Member States for many years. There is a growing awareness that entrepreneurial skills, knowledge and attitudes can be learned and in turn lead to the widespread development of entrepreneurial mind-sets and culture, which benefit individuals and society as a whole.

The European Commission first referred to the importance of entrepreneurship education in 2003, in the European Green Paper on Entrepreneurship in Europe. By 2006, the European Commission had identified a 'sense of initiative and entrepreneurship' as one of the eight key competences necessary for all members of a knowledge-based society. The 2008 *Small Business Act for Europe*, the 2012 *Communication on Rethinking Education*, the 2013 *Entrepreneurship Action Plan 2020*, and more recently the New Skills Agenda for Europe, have kept the need to promote entrepreneurship education and entrepreneurial learning under the spotlight. This has led to a wealth of initiatives across Europe.

Despite the vibrant interest in entrepreneurial capacity building, almost a decade after the 2006 Recommendation on 'Key competences for lifelong learning', there is still no consensus on what the distinctive elements of entrepreneurship as a competence are. As highlighted in the 2016 edition of the Eurydice Report on 'Entrepreneurship Education at School', about half the countries in Europe make use of the European Key Competence definition of entrepreneurship. A third of the countries use their own national definition and almost 10 countries have no commonly agreed definition at national level. Furthermore, the lack of comprehensive learning outcomes for entrepreneurship education is identified by Eurydice as one of the main hindrances to the development of entrepreneurial learning in Europe.

As a result, there is a clear need to define and describe entrepreneurship as a competence; to develop the reference framework describing its components in terms of knowledge, skills and attitudes; and to provide European citizens with the appropriate tools to assess and effectively develop this key competence.

In this context, the Entrepreneurship Competence study (EntreComp) was launched by the JRC on behalf of the Directorate General for Employment, Social Affairs and Inclusion (DG EMPL) in January 2015. One of the key objectives of EntreComp was to develop a common conceptual approach, which could support the development of entrepreneurship competence at European level.

### Key conclusions

This report presents the EntreComp Framework. By producing a common definition of what entrepreneurship as a competence is, the framework aims to establish a bridge between the worlds of education and work and to be taken as a reference de facto by any initiative which aims to foster entrepreneurial learning. The framework is a flexible source of inspiration, to be used or adapted to support different contexts. For instance, EntreComp could inspire the reform of curricula in the formal education and training sector, the design of practical entrepreneurial experiences in non-formal learning contexts, or the development of tools for citizens to self-assess their entrepreneurial proficiency.

The EntreComp Framework is made up of 3 competence areas: 'Ideas and opportunities', 'Resources' and 'Into action'. Each area includes 5 competences, which, together, are the building blocks of entrepreneurship as a competence. The framework develops the 15 competences along an 8-level progression model. Also, it provides a comprehensive list of 442 learning outcomes, which offers inspiration and insight for those designing interventions from different educational contexts and domains of application.



## Main findings

EntreComp defines entrepreneurship as a transversal competence, which applies to all spheres of life: from nurturing personal development, to actively participating in society, to (re)entering the job market as an employee or as a self-employed person, and also to starting up ventures (cultural, social or commercial).

It builds upon a broad definition of entrepreneurship that hinges on the creation of cultural, social or economic value. It thus embraces different types of entrepreneurship, including intrapreneurship, social entrepreneurship, green entrepreneurship and digital entrepreneurship. It applies to individuals and groups (teams or organizations) and it refers to value creation in the private, public and third sectors and in any hybrid combination of the three. Lastly, it is domain neutral: one can act upon ideas and opportunities to generate value for others in any domain and possible value chain.

The EntreComp framework has been developed through a mixed-methods approach, made up of a comprehensive review of academic and grey literature, an in-depth analysis of case studies, desk research and a set of iterative multi-stakeholder consultations.

## Related and future JRC work

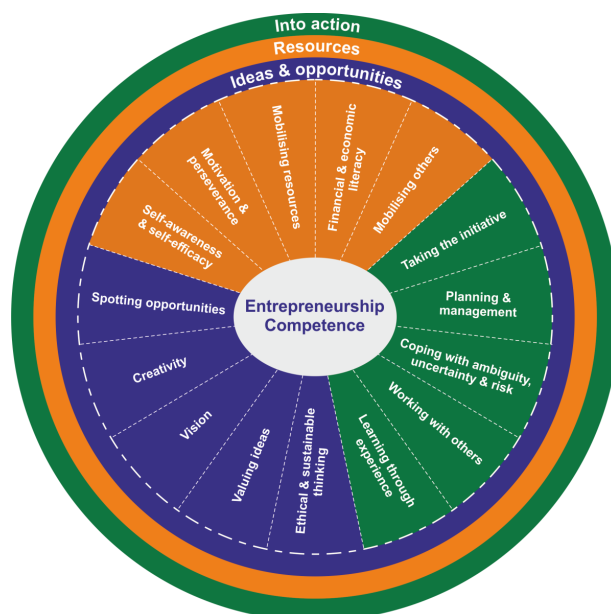
EntreComp builds on previous JRC work that was conducted to establish a common reference framework for citizens' digital competence, the widely known Digital Competence Framework for Citizens (DigComp).

## Quick guide

The JRC has carried out a study on behalf of DG Employment, Social Affairs and Inclusion in order to define **a common approach** to support the development of entrepreneurship as a competence.

The framework describes entrepreneurship as **a transversal competence**, which can be applied by citizens to all spheres of life from nurturing **personal development**, to actively participating in society, to **(re)entering the job market** as an employee or as a self-employed person, and to **starting up ventures** (cultural, social or commercial).

The EntreComp is made up by the 3 competence areas and 15 competences as illustrated in the figure below.



EntreComp can be used as a reference for the design of curricula in the **formal education and training** sector. It can also be used for activities and programmes in **non-formal learning contexts** (for instance, to foster intrapreneurship with existing organizations). It aims to establish a bridge between the worlds of **education and work** as regards entrepreneurship as a competence.



## 1. Introduction

Developing a reference framework with learning outcome descriptors is one of the measures identified by the European Commission to support the promotion of the entrepreneurship competence across the world of education and work.

This report presents the complete reference framework for Entrepreneurship Competence (EntreComp), which consists of 3 competence areas, 15 competences, an 8-level progression model and a comprehensive list of 442 learning outcomes. EntreComp framework has been validated through iterative stakeholder consultations.

The origin of this work goes back to 2006 when the 'Recommendation on key competences for lifelong learning' identified a 'sense of initiative and entrepreneurship' as one of the 8 key competences for all citizens (European Parliament and the Council, 2006).

Sense of initiative and entrepreneurship can be broadly defined as the capacity to turn ideas into action, ideas that generate value for someone other than oneself. Sense of initiative and entrepreneurship is a transversal key competence, which every citizen needs for personal fulfilment and development, active citizenship, social inclusion and employment in the knowledge society.

Today, the entrepreneurial learning community of practice most often refers to sense of initiative and entrepreneurship as '**entrepreneurship competence**'. Hence, EntreComp adopts this simplified label, reflecting how the competence is generally referred to. However, **the EntreComp framework presented herein is built on a broad understanding of entrepreneurship that also includes 'sense of initiative'**.

### 1.1 The aims and objectives of the study

The EntreComp study was launched by the JRC on behalf of DG Employment, Social Affairs and Inclusion, in January 2015. Its ambition is to build a **bridge between the worlds of education and work**, by contributing to a better understanding and promotion of entrepreneurship competence in Europe. The EntreComp ultimately aims to facilitate peer learning and exchange among Member States and eventually to have a positive impact on the mobility, employability and active participation of citizens in society and the economy. By establishing a common basis that initiatives dealing with the promotion of entrepreneurship as a competence across levels of education, sectors, domains and purposes of application can refer to, the EntreComp will contribute to unleash European citizens' potential to participate in all areas of society by transforming ideas into action.

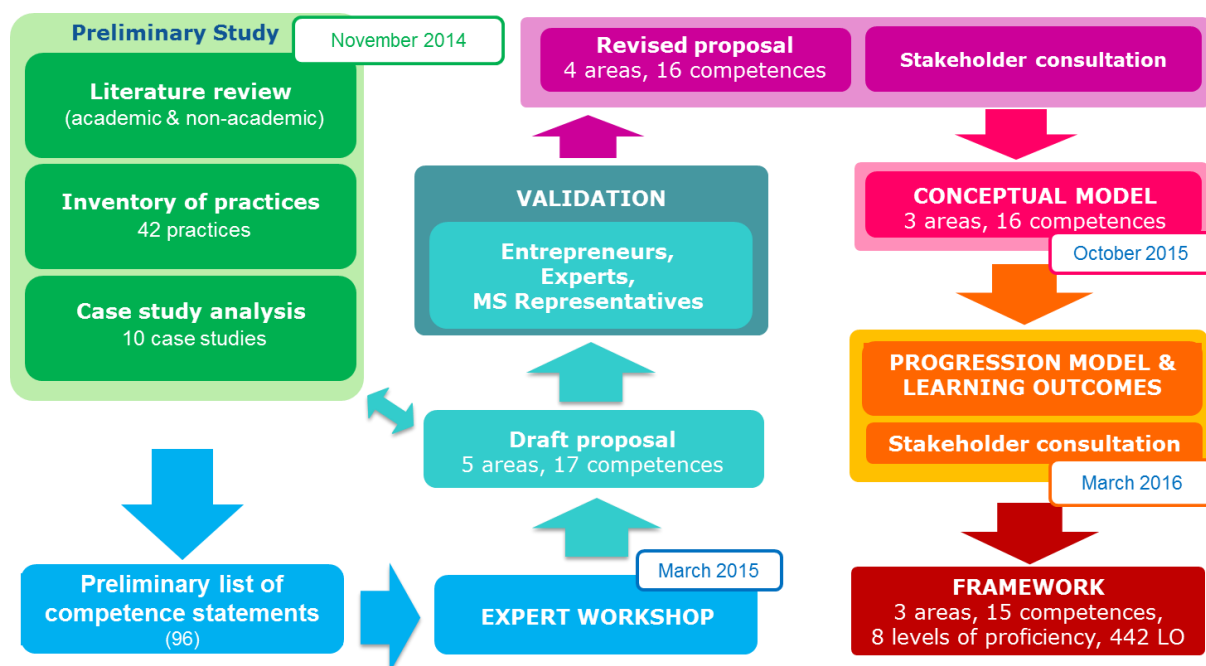
To achieve its aim, the study has been therefore designed to:

- Identify the **key components** of entrepreneurship as a competence;
- Describe these components to establish a shared **conceptual model** that all players in the field of entrepreneurial learning can refer to;
- Develop a number of **learning outcomes** to suggest what European citizens should know, understand and be able to do to demonstrate a certain level of proficiency in entrepreneurship competence.

EntreComp has used a robust mixed-method research process and each of its interim outputs has been validated through multi-stakeholder consultations, leading to progressive refinement and eventually to the consolidated framework presented in this report.

### 1.2 Methodology

The phases of the EntreComp study that have led to the definition of a consolidated EntreComp Framework are depicted in Figure 1 below:



**Figure 1:** Main phases of the study that have led to EntreComp Framework

The development of the framework has comprised the following steps:

1. A **literature review** of existing concepts, policies and initiatives referring to entrepreneurship as a competence (Komarkova, Gagliardi, Conrads, & Collado, 2015).
2. An **inventory of 42 initiatives** where entrepreneurship as a competence is either defined, taught, learnt and/or assessed (*ibidem*).
3. An **in-depth case study analysis**, where 10 existing initiatives were selected to capture in detail the elements that make up entrepreneurship as a competence and the key features of state-of-the-art entrepreneurial learning processes (Komarkova, Conrads, & Collado, 2015).
4. An **expert workshop**, where the preliminary findings from the literature review, inventory and in-depth case studies were presented and the scope of entrepreneurship as a competence was defined.
5. A **draft proposal** for a conceptual model based on the previous steps.
6. A **benchmark** of the draft proposal against existing frameworks.
7. The development of a set of **use scenarios** to evaluate the applicability of the draft conceptual model.
8. A set of iterative **multi-stakeholder consultations**<sup>3</sup>, where progressively refined proposals were distributed for comments.
9. A subsequent final proposal for a **conceptual model** consisting of 3 competence areas and 16 competences, based on the feedback received from stakeholders.
10. A **draft Entrepreneurship Competence (EntreComp) Framework** which has **8 proficiency levels** and an extensive list of approximately 500 **learning outcome statements**.
11. Twelve **multi-stakeholder online panel discussions** to review the draft Entrepreneurship Competence Framework proficiency levels and learning outcomes. The proficiency levels and learning outcomes were identified both through desk research and through interaction with more than a hundred experts in the field of entrepreneurial learning. Among them were the members of the ET2020 Working Group on

<sup>3</sup> Involving feedback collection twice from the ET2020 Working Group on Transversal Skills (TSWG); an online consultation of approximately 200 stakeholders; two informal workshops in a social entrepreneurship incubator and informal bilateral inter-service discussions; and the audience of the various panels where JRC has presented and discussed the interim results of the project.

Transversal Skills, experts of the EIT Climate KIC education programme and members of the Expert Group on Social Entrepreneurship (GECES) of the European Commission.

12. The consolidated **EntreComp Framework** has 3 competence areas and 15 competences, which unfold into 442 **learning outcomes** (see the complete list in Appendix) on 8 levels of proficiency.

### 1.3 Limitations

The EntreComp framework is the result of a robust research methodology<sup>4</sup>, where a large and heterogeneous group of experts has been consulted at different stages to obtain their feedback and progressively reach consensus around a validated proposal. Although widely endorsed, **the framework has not yet been adapted to, or tested in real settings**. A subsequent step will be to try the EntreComp Framework out in practice, by implementing and evaluating it in a specific context and, eventually, if necessary, to amend and refine it according to feedback from practitioners and end-users.

### 1.4 Structure of the report

After this Introduction, Chapter 2 provides the reader with the EntreComp conceptual model, namely its 3 competence areas, 15 competences and relative descriptors. Chapter 3 presents the progression model that underpins the development of different levels of proficiency in entrepreneurship competence and the key principles and characteristics of EntreComp learning outcomes. Finally, it provides a bird's eye view of the competence framework.

The full framework, including the complete list of EntreComp learning outcomes on the 8 levels of proficiency of the progression model is provided as an Appendix to this report.

---

<sup>4</sup> EntreComp study followed the methodological approach defined and validated for the Digital Competence Framework for Citizens (Ferrari, 2013).

## 2. Entrepreneurship as a competence

The EntreComp study was launched to establish a common reference framework for entrepreneurship as a competence to help citizens to develop their ability to actively participate in society, to manage their own lives and careers and to start value-creating initiatives. The conceptualisation of entrepreneurship as a competence was therefore the stepping stone for the development of a reference framework.

In the context of the EntreComp study, entrepreneurship is understood as a transversal key competence applicable by individuals and groups, including existing organisations, across all spheres of life. It is defined as follows:

Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social (FFE-YE, 2012).

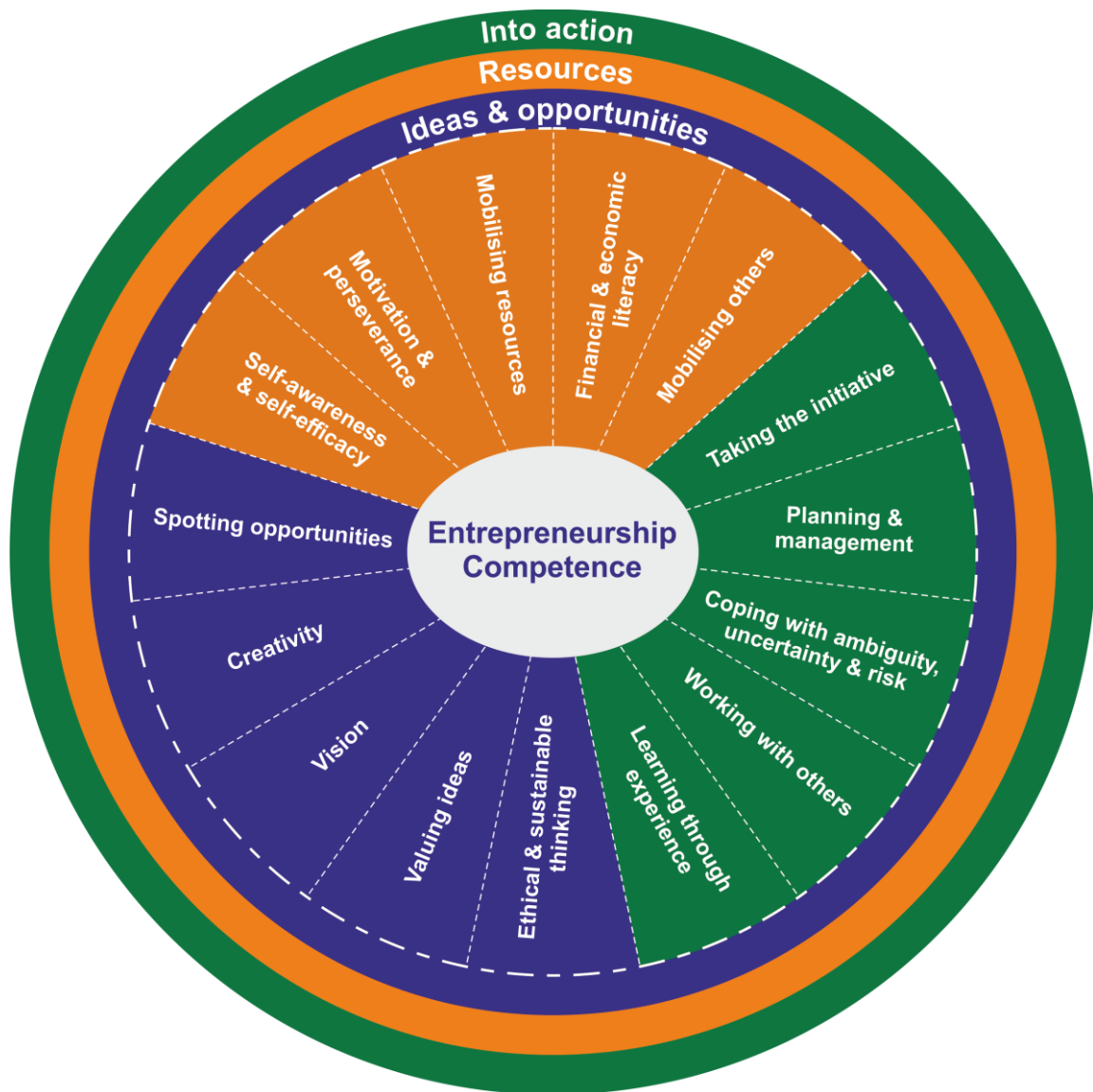
This definition focuses on value creation, no matter what type of value or context. It covers value creation in any domain and possible value chain. It refers to value creation in the **private, public and third sectors** and in any hybrid combination of the three. It thus embraces different types of entrepreneurship, including intrapreneurship, social entrepreneurship, green entrepreneurship and digital entrepreneurship.

Entrepreneurship as a competence applies to all spheres of life. It enables citizens to nurture their **personal development**, to actively **contribute to social development**, to enter the **job market** as employee or as self-employed, and to **start-up** or scale-up ventures which may have a cultural, social or commercial motive.

The EntreComp conceptual model is made up of two main dimensions: the **3 competence areas** that directly mirror the definition of entrepreneurship as the ability to turn ideas into action that generate value for someone other than oneself; and the **15 competences** that, together, make up the building blocks of the entrepreneurship as a competence for all citizens. We have listed the competences in Table 1. Each one is accompanied by a **hint or an exhortation** to the learner to put the competence into practice and a **descriptor**, which breaks it down into its core aspects.

'Ideas and opportunities', 'Resources' and 'Into Action' are the 3 areas of the conceptual model and they have been labelled to stress entrepreneurship competence as the ability to transform ideas and opportunities into action by mobilising resources. These resources can be personal (namely, self-awareness and self-efficacy, motivation and perseverance), material (for instance, production means and financial resources) or non-material (for instance, specific knowledge, skills and attitudes). The **3 competence areas are tightly intertwined**: entrepreneurship as a competence stands above all three of these together. The 15 competences are also interrelated and interconnected and should be treated as parts of a whole. We are not suggesting that the learner should acquire the highest level of proficiency in all 15 competences, or have the same proficiency across all the competences. The framework does, however, imply that entrepreneurship as a competence is made up of 15 building blocks.

Figure 2 depicts the EntreComp competences as slices of a pie chart. Each slice has a different colour: blue for the competences in the 'Ideas and opportunities' area, orange for those in the 'Resources' area and green for the competences in the 'Into action' area. The slices are surrounded by the three competence rings, which embrace all the 15 competences. This representation underlines that the coupling between competence areas and competences does not have taxonomic rigour. For example, creativity is presented as one of the competences in the 'Ideas and opportunities' area, even though the creative process entails both the use of resources and the capacity to act upon ideas to mould their value. The reader is welcome to establish new links among areas and competences to expand the elements of the framework and adapt them to best fit his/her focus.



**Figure 2:** Areas and competences of the EntreComp conceptual model.

Table 1 provides an overview of the EntreComp conceptual model, showing how the entrepreneurship competence has been broken down into its constituent parts within the framework. Competences are numbered for ease of reference – the order in which they are presented does not imply a sequence in the acquisition process or a hierarchy: no one element comes first, and none of them is more important than the others. There are no core competences and enabling competences in the EntreComp conceptualization.

Depending on the context of take-up, it is reasonable to expect that more emphasis may be put on some of the competences and less on others, or else that competences are streamlined to mirror an entrepreneurial process created to foster learning through entrepreneurship. In other words, the EntreComp Framework can be seen as a starting point for the interpretation of the entrepreneurship competence, which over time will be further elaborated and refined to address the particular needs of specific target groups.

**Table 1:** EntreComp conceptual model

Areas	Competences	Hints	Descriptors
1. Ideas and opportunities	<b>1.1 Spotting opportunities</b>	Use your <sup>5</sup> imagination and abilities to identify opportunities for creating value	<ul style="list-style-type: none"> <li>Identify and seize opportunities to create value by exploring the social, cultural and economic landscape</li> <li>Identify needs and challenges that need to be met</li> <li>Establish new connections and bring together scattered elements of the landscape to create opportunities to create value</li> </ul>
	<b>1.2 Creativity</b>	Develop creative and purposeful ideas	<ul style="list-style-type: none"> <li>Develop several ideas and opportunities to create value, including better solutions to existing and new challenges</li> <li>Explore and experiment with innovative approaches</li> <li>Combine knowledge and resources to achieve valuable effects</li> </ul>
	<b>1.3. Vision</b>	Work towards your vision of the future	<ul style="list-style-type: none"> <li>Imagine the future</li> <li>Develop a vision to turn ideas into action</li> <li>Visualise future scenarios to help guide effort and action</li> </ul>
	<b>1.4 Valuing ideas</b>	Make the most of ideas and opportunities	<ul style="list-style-type: none"> <li>Judge what value is in social, cultural and economic terms</li> <li>Recognise the potential an idea has for creating value and identify suitable ways of making the most out of it</li> </ul>
	<b>1.5 Ethical and sustainable thinking</b>	Assess the consequences and impact of ideas, opportunities and actions	<ul style="list-style-type: none"> <li>Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment</li> <li>Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen</li> <li>Act responsibly</li> </ul>
2. Resources	<b>2.1 Self-awareness and self-efficacy</b>	Believe in yourself and keep developing	<ul style="list-style-type: none"> <li>Reflect on your needs, aspirations and wants in the short, medium and long term</li> <li>Identify and assess your individual and group strengths and weaknesses</li> <li>Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures</li> </ul>
	<b>2.2 Motivation and perseverance</b>	Stay focused and don't give up	<ul style="list-style-type: none"> <li>Be determined to turn ideas into action and satisfy your need to achieve</li> <li>Be prepared to be patient and keep trying to achieve your long-term individual or group aims</li> <li>Be resilient under pressure, adversity, and temporary failure</li> </ul>
	<b>2.3 Mobilizing resources</b>	Gather and manage the resources you need	<ul style="list-style-type: none"> <li>Get and manage the material, non-material and digital resources needed to turn ideas into action</li> <li>Make the most of limited resources</li> <li>Get and manage the competences needed at any stage, including technical, legal, tax and digital competences</li> </ul>
	<b>2.4 Financial and economic literacy</b>	Develop financial and economic know how	<ul style="list-style-type: none"> <li>Estimate the cost of turning an idea into a value-creating activity</li> <li>Plan, put in place and evaluate financial decisions over time</li> <li>Manage financing to make sure my value-creating activity can last over the long term</li> </ul>

<sup>5</sup> In the context of EntreComp framework, entrepreneurship competence is regarded both as an individual and collective capacity.

3. Into action	<b>2.5. Mobilizing others</b>	Inspire, enthuse and get others on board	<ul style="list-style-type: none"> <li>• Inspire and enthuse relevant stakeholders</li> <li>• Get the support needed to achieve valuable outcomes</li> <li>• Demonstrate effective communication, persuasion, negotiation and leadership</li> </ul>
	<b>3.1 Taking the initiative</b>	Go for it	<ul style="list-style-type: none"> <li>• Initiate processes that create value</li> <li>• Take up challenges</li> <li>• Act and work independently to achieve goals, stick to intentions and carry out planned tasks</li> </ul>
	<b>3.2 Planning and management</b>	Prioritize, organize and follow-up	<ul style="list-style-type: none"> <li>• Set long-, medium- and short-term goals</li> <li>• Define priorities and action plans</li> <li>• Adapt to unforeseen changes</li> </ul>
	<b>3.3 Coping with uncertainty, ambiguity and risk</b>	Make decisions dealing with uncertainty, ambiguity and risk	<ul style="list-style-type: none"> <li>• Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes</li> <li>• Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce risks of failing</li> <li>• Handle fast-moving situations promptly and flexibly</li> </ul>
	<b>3.4 Working with others</b>	Team up, collaborate and network	<ul style="list-style-type: none"> <li>• Work together and co-operate with others to develop ideas and turn them into action</li> <li>• Network</li> <li>• Solve conflicts and face up to competition positively when necessary</li> </ul>
	<b>3.5. Learning through experience</b>	Learn by doing	<ul style="list-style-type: none"> <li>• Use any initiative for value creation as a learning opportunity</li> <li>• Learn with others, including peers and mentors</li> <li>• Reflect and learn from both success and failure (your own and other people's)</li> </ul>



### 3. The EntreComp Framework

This chapter presents the EntreComp Framework progression model and the key characteristics of the learning outcomes that have been based on it.

The stakeholders involved in the review of the EntreComp regard it as a **very comprehensive** and broad-based tool with 3 competence areas, 15 competences, 15 descriptors, 8 proficiency levels and 442 learning outcomes (see Appendix). They acknowledge that the EntreComp Framework (i) reflects the complexity of the entrepreneurship competence domain, which touches upon several aspects of our everyday lives, and (ii) can be used as a multi-purpose reference guide. The advantage of having a broad yet comprehensive competence framework is that although it can accommodate bespoke customisations, it also allows initiatives that tackle entrepreneurship as a competence to be compared, facilitating a common understanding of what being entrepreneurial means.

The comprehensiveness of EntreComp is one of its main assets. However, the reader should bear in mind that **not all citizens, learners, or users will be interested in developing all the competences here described to the highest level of proficiency**. It is expected that institutions, intermediaries and initiative developers who are willing to adopt EntreComp as a reference framework adapt it to their own purposes and to the needs of the user group they intend to target. In other words, the EntreComp framework presented in this report should be considered as a starting point. It must be tailored to the context of use in order to be implemented (see also below, in Section 3.2).

#### 3.1 Progression Model

Entrepreneurship as a competence is developed through action by individuals or collective entities to create value for others.

The progression in entrepreneurial learning is made up of two aspects:

1. Developing increasing autonomy and responsibility in acting upon ideas and opportunities to create value;
2. Developing the capacity to generate value from simple and predictable contexts up to complex, constantly changing environments.

The EntreComp Progression Model does not lay down a linear sequence of steps that every citizen must take to become proficiently entrepreneurial or to start-up a venture. Instead, it shows that the boundaries of individual and collective entrepreneurial competences can be pushed forward, to achieve greater and greater impact through value creating endeavours.

The EntreComp Progression Model provides a reference for the development of proficiency starting from value creation achieved through external support, up to transformative value creation. It consists of four main levels: Foundation, Intermediate, Advanced and Expert. Each level is in turn split into two sub-levels, as illustrated in Table 2. At Foundation level, entrepreneurial value is created with external support. At Intermediate level, entrepreneurial value is created with increasing autonomy. At Advanced level, responsibility to transform ideas into action is developed. At Expert level, the value created has considerable impact in its reference domain.

These proficiency levels provide a way for the reader to look at the learning outcomes. For instance, the first learning outcome of the 8<sup>th</sup> proficiency levels is: *I can spot and quickly take advantage of an opportunity*. Although 'spotting and taking advantage of opportunity' is a skill that learners start developing at lower levels, level 8 emphasises the need to do it 'quickly'. At this expert level, timeliness in making use of a window of opportunity has a strategic importance which can lead to high growth, breakthrough innovation or radical transformation.

The EntreComp aims to be comprehensive and to offer a tool that can be adapted to different needs. It is not prescriptive and it does not suggest that all learners should

acquire the highest level of proficiency in the competences, or that they should reach the same proficiency across all the competences. For example, we could imagine designing an entrepreneurial learning experience targeted at the employees of the shoe-making district of our region. In our programme we could, for instance, aim at an advanced level of proficiency in competences like 'spotting opportunities', 'vision', 'mobilizing resources', 'mobilising others' and 'planning and organising'. At the same time, we could aim to achieve an intermediate level of proficiency in 'financial and economic literacy'. We could deem it important to provide our learners with the skills to understand the financial viability of their ideas, but not important to have them develop double-entry bookkeeping skills, which would require an advanced level of proficiency.

We remind the reader that entrepreneurial value creation and entrepreneurial learning can take place in any sphere of life. The EntreComp Progression Model does not refer to any specific setting, especially not to formal education settings. By focusing on the development of competences through the actual creation of entrepreneurial value, the progression model breaks down the boundaries between education, work and civic engagement. In this respect, the EntreComp Progression Model is transversal to formal, non-formal and informal learning contexts.

**Table 2:** EntreComp Progression model

Foundation		Intermediate		Advanced		Expert	
Relying on support <sup>6</sup> from others		Building independence		Taking responsibility		Driving transformation, innovation and growth	
Under direct supervision.	With reduced support from others, some autonomy and together with my peers.	On my own and together with my peers.	Taking and sharing some responsibilities.	With some guidance and together with others.	Taking responsibility for making decisions and working with others.	Taking responsibility for contributing to complex developments in a specific field.	Contributing substantially to the development of a specific field.
Discover	Explore	Experiment	Dare	Improve	Reinforce	Expand	Transform
Level 1 focuses mainly on discovering your qualities, potential, interests and wishes. It also focuses on recognising different types of problems and needs that can be solved creatively, and on developing individual skills and attitudes.	Level 2 focuses on exploring different approaches to problems, concentrating on diversity and developing social skills and attitudes.	Level 3 focuses on critical thinking and on experimenting with creating value, for instance through practical entrepreneurial experiences.	Level 4 focuses on turning ideas into action in 'real life' and on taking responsibility for this.	Level 5 focuses on improving your skills for turning ideas into action, taking increasing responsibility for creating value, and developing knowledge about entrepreneurship.	Level 6 focuses on working with others, using the knowledge you have to generate value, dealing with increasingly complex challenges.	Level 7 focuses on the competences needed to deal with complex challenges, handling a constantly changing environment where the degree of uncertainty is high.	Level 8 focuses on emerging challenges by developing new knowledge, through research and development and innovation capabilities to achieve excellence and transform the ways things are done.

<sup>6</sup> Support from others includes for example support by teachers, mentors, peers, advisors, or consultancy services.

## 3.2 Learning outcomes

**Learning outcomes** are statements of what a learner knows, understands and is able to do after completion of learning (Cedefop, 2009). These statements can be designed and used for educational planning and curriculum development or for different types of accountability such as legal or professional accountability (Prøitz, 2010).

Entrepreneurial learning can hardly be reduced to fixed pre-specified statements of learning outcomes since it deals with the creation of value that does not exist prior to the entrepreneurial learning process and cannot be foreseen in abstraction.

However, learning outcome statements are considered as crucial to make the framework actionable. EntreComp learning outcomes have been developed as references for different purposes. They could be used in the formal education and training sector for curricula design. In a non-formal learning context, they could be used to inspire the creation of programmes which aim to foster intrapreneurship within existing organisations. They could also be used to guide the definition of tailored pedagogies, assessment methods, and learning environments that foster effective entrepreneurial learning.

Thus, EntreComp learning outcomes should not be taken as normative statements to be directly transposed into actual learning activities, or be used to measure student performance. They are a basis for the development of specific learning outcomes that are fit for the specific context and a basis for the development of performance indicators.

Although the vast majority of learning outcomes have been formulated as 'I' statements, this does not mean that Entrepreneurship Competence only refers to the capacity of individuals. On the contrary, the subject of entrepreneurial learning and behaviour can be a group, like a project team, a non-profit organisation, a company, a public body or a civil society movement.

EntreComp learning outcomes are presented in the Appendix. Though comprehensive, the list of learning outcomes is not exhaustive as it aims to suggest transversal applicability across educational contexts and application sectors.

## 3.3 The EntreComp Framework at a glance: the overview table

The EntreComp overview table depicts the 3 areas and all the 15 competences, but develops them only on the three levels of proficiency that apply to all citizens: the foundation, intermediate and advanced levels. The expert level by definition captures a level of expertise that is beyond average, and more context-dependent and, as a result, it is not detailed in the overview table.

The overview table consists of descriptors that capture the essence of the different levels of proficiency. Its aim is to provide the general readership with a bird's eye view of the EntreComp Framework similar to those presented in the Common European Framework of Reference for Languages<sup>7</sup> or in the Digital Competence Framework (Ferrari, 2013; Vuorikari, Punie, Carretero, & Van den Brande, 2016).

---

<sup>7</sup> [http://www.coe.int/t/dq4/linguistic/cadre1\\_en.asp](http://www.coe.int/t/dq4/linguistic/cadre1_en.asp)

**Table 3:** EntreComp Overview

		Levels of proficiency		
Area	Competence	Foundation	Intermediate	Advanced
<b>Ideas and opportunities</b>	<b>Spotting opportunities</b>	Learners <sup>8</sup> can find opportunities to generate value for others.	Learners can recognise opportunities to address needs that have not been met.	Learners can seize and shape opportunities to respond to challenges and create value for others.
	<b>Creativity</b>	Learners can develop multiple ideas that create value for others.	Learners can test and refine ideas that create value for others.	Learners can transform ideas into solutions that create value for others.
	<b>Vision</b>	Learners can imagine a desirable future.	Learners can build an inspiring vision that engages others.	Learners can use their vision to guide strategic decision-making.
	<b>Valuing ideas</b>	Learners can understand and appreciate the value of ideas.	Learners understand that ideas can have different types of value, which can be used in different ways.	Learners can develop strategies to make the most of the value generated by ideas.
	<b>Ethical and sustainable thinking</b>	Learners can recognise the impact of their choices and behaviours, both within the community and the environment.	Learners are driven by ethics and sustainability when making decisions.	Learners act to make sure that their ethical and sustainability goals are met.
<b>Resources</b>	<b>Self-awareness and self-efficacy</b>	Learners trust their own ability to generate value for others.	Learners can make the most of their strengths and weaknesses.	Learners can compensate for their weaknesses by teaming up with others and by further developing their strengths.
	<b>Motivation and perseverance</b>	Learners want to follow their passion and create value for others.	Learners are willing to put effort and resources into following their passion and create value for others.	Learners can stay focused on their passion and keep creating value despite setbacks.

<sup>8</sup> Learner is a broad the term used to indicate the subject of lifelong learning. It refers to pupils, students, jobseekers, employees, entrepreneurs and citizens alike.

	<b>Mobilising re-sources</b>	Learners can find and use resources responsibly.	Learners can gather and manage different types of resources to create value for others.	Learners can define strategies to mobilise the resources they need to generate value for others.
	<b>Financial and economic literacy</b>	Learners can draw up the budget for a simple activity.	Learners can find funding options and manage a budget for their value-creating activity.	Learners can make a plan for the financial sustainability of a value-creating activity.
	<b>Mobilising others</b>	Learners can communicate their ideas clearly and with enthusiasm.	Learners can persuade, involve and inspire others in value-creating activities.	Learners can inspire others and get them on board for value-creating activities.
<b>Into action</b>	<b>Taking the initiative</b>	Learners are willing to have a go at solving problems that affect their communities.	Learners can initiate value-creating activities.	Learners can look for opportunities to take the initiative to add or create value.
	<b>Planning and management</b>	Learners can define the goals for a simple value-creating activity.	Learners can create an action plan, which identifies the priorities and milestones to achieve their goals.	Learners can refine priorities and plans to adjust to changing circumstances.
	<b>Coping with uncertainty, ambiguity and risk</b>	Learners are not afraid of making mistakes while trying new things.	Learners can evaluate the benefits and risks of alternative options and make choices that reflect their preferences.	Learners can weigh up risks and make decisions despite uncertainty and ambiguity.
	<b>Working with others</b>	Learners can work in a team to create value.	Learners can work together with a wide range of individuals and groups to create value.	Learners can build a team and networks based on the needs of their value-creating activity.
	<b>Learning through experience</b>	Learners can recognise what they have learnt through taking part in value-creating activities.	Learners can reflect and judge their achievements and failures and learn from these.	Learners can improve their abilities to create value by building on their previous experiences and interactions with others.

## 4. List of abbreviations and definitions

The EntreComp framework aims to establish a common understanding of what entrepreneurship as a competence is. Its goal is to become a reference for a broad spectrum of initiatives which aim to foster entrepreneurial learning in Europe and beyond. The definition of the basic terms that make up the backbone of this report is therefore a critical building block of the full framework.

Term	Definition & Source
<b>Attitudes</b>	'Attitudes' are motivators of performance. They include values, aspirations and priorities.
<b>Competence</b>	In the context of the EntreComp study, competence is understood as a set of knowledge, skills and attitudes.
<b>Crowdsourcing</b>	Crowdsourcing is the practice of outsourcing necessary services, ideas, or content to a large group of people, rather than assigning the tasks to traditional employees or suppliers. Crowdsourcing typically takes place via the internet.
<b>Digital entrepreneurship</b>	Digital entrepreneurship is entrepreneurship that involves the use of new digital technologies (particularly social media, big data, mobile and cloud solutions). The purpose of this use may be to improve business operations, invent new business models, improve business intelligence or to engage with customers and stakeholders. <sup>9</sup>
<b>End user</b>	In the context of the EntreComp study, an end user is the person for whom something was ultimately created or intended.
<b>Entrepreneurship</b>	Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social (FFE-YE, 2012).
<b>Green entrepreneurship</b>	Green entrepreneurship is entrepreneurship that has a positive effect on environment and can be seen as a move to a more sustainable future (Schaper, 2012).
<b>Intrapreneurship</b>	Intrapreneurship is entrepreneurship inside an organisation(see Pinchot, 1985).
<b>Knowledge</b>	Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual (European Parliament and the Council, 2008).
<b>Learning outcomes</b>	Learning outcomes are statements of what a learner knows, understands and is able to do after completion of learning (Cedefop, 2009). Such statements can be designed and used for educational planning and curriculum development or for different types of accountability such as legal accountability or professional accountability (Prøitz, 2010).

<sup>9</sup> See full definition at the Digital Entrepreneurship Monitor website: <https://ec.europa.eu/growth/tools-databases/dem/monitor/project-description>



<b>Practical entrepreneurial experiences</b>	Practical entrepreneurial experiences are educational experiences where the learner has the opportunity to come up with ideas, identify a good idea and turn that idea into action. They require the involvement of external partners in the design and/or delivery of this learning, to ensure relevance to the real world. Practical entrepreneurial experiences provide students with a supportive environment, where mistakes are embraced and failure is a learning tool, so that they gain the confidence and experience to turn their ideas into action in the real world. Practical entrepreneurial experiences should be a student led initiative either individually or as part of a small team, involve learning-by-doing and producing a tangible outcome (Thematic Working Group on Entrepreneurship Education, 2014).
<b>Resources</b>	In the context of this work, resources is a term that encompasses personal resources (namely, self-awareness and self-efficacy, motivation and perseverance), material resources (for instance, production means and financial resources) or non-material resources (for instance, specific knowledge, skills and attitudes).
<b>Skills</b>	Skills are the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments) (European Parliament and the Council, 2008).
<b>Social entrepreneurship</b>	Social entrepreneurship is entrepreneurship that aims to provide innovative solutions to unsolved social problems. Therefore it often goes hand in hand with social innovation processes, aimed at improving people's lives by promoting social change (see OECD, 2010).
<b>Stakeholders</b>	Stakeholders are individuals, groups and organisations with direct and indirect interest in value-creating activity and its impact.
<b>System</b>	A system as a dynamic complex whole made up of a set of interacting components that influence one another. A system is defined by the boundaries that distinguish it from the environment that surrounds it and interacts with it, and it is characterized by a structure, a purpose and way of functioning.
<b>Uncertainty</b>	Uncertainty is a situation which involves imperfect and (or) incomplete information, and which affects the predictability of outcomes. Uncertainty entails a risk of undesired effect or loss, whose probability and magnitude cannot be calculated.
<b>Value creation</b>	Value creation is the outcome of human activity to transform purposeful ideas into action which generates value for someone other than oneself. This value can be social, cultural or economic.

## 5. References

- Cedefop. (2009). *The shift to learning outcomes. Policies and practices in Europe*. Cedefop Reference series. Luxembourg: Office for Official Publications of the European Communities.
- European Commission. (2003). *Green Paper Entrepreneurship in Europe* COM(2003)27. Brussels.
- European Commission. (2008). *Think Small First - A Small Business Act for Europe*, COM(2008) 394 final. Brussels.
- European Commission. (2012). *Rethinking Education: Investing in skills for better socio-economic outcomes* COM(2012) 669 final. Brussels.
- European Commission. (2013). *Entrepreneurship 2020 Action Plan* COM (2012) 795 Final. Brussels.
- European Commission/EACEA/Eurydice. (2016). *Entrepreneurship Education at School in Europe*. Eurydice Report. Luxembourg: Publications Office of the European Union.
- European Parliament and the Council. (2006). Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. *Official Journal of the European Union*, L394/310.
- European Parliament and the Council. (2008). Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. *Official Journal of the European Union*, (2008/C 111/01).
- Ferrari, A. (2013). *DIGCOMP: A Framework for Developing and Understanding Digital Competence*. JRC Science and Policy Reports. Luxembourg: Publications Office of the European Union.
- FFE-YE. (2012). *Impact of Entrepreneurship Education in Denmark - 2011*. In L. Vestergaard, K. Moberg & C. Jørgensen (Eds.). Odense: The Danish Foundation for Entrepreneurship - Young Enterprise.
- Komarkova, I., Conrads, J., & Collado, A. (2015). *Entrepreneurship Competence: An Overview of Existing Concepts, Policies and Initiatives. In-depth case study report*. JRC Technical Reports. Luxembourg: Publications Office of the European Union.
- Komarkova, I., Gagliardi, D., Conrads, J., & Collado, A. (2015). *Entrepreneurship Competence: An Overview of Existing Concepts, Policies and Initiatives. Final Report*. In M. Bacigalupo, P. Kampylis & Y. Punie (Eds.), JRC Science and Policy Reports. Luxembourg: Publications Office of the European Union.
- OECD. (2010). *Social Entrepreneurship And Social Innovation SMEs, Entrepreneurship and Innovation*. Paris: OECD Publishing.
- Pinchot, G. (1985). *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur*. New York: Harper & Row.
- Prøitz, T. S. (2010). Learning outcomes: What are they? Who defines them? When and where are they defined? *Educational Assessment, Evaluation and Accountability*, 22, 22. doi: DOI 10.1007/s11092-010-9097-8
- Schaper, M. (2012). Understanding the green Entrepreneur. In M. Schaper (Ed.), *Making Ecoentrepreneurs: Developing Sustainable Entrepreneurship*. Farnham, Surrey: Gower Publishing.
- Thematic Working Group on Entrepreneurship Education. (2014). *Final Report of the Thematic Working Group on Entrepreneurship Education*. Brussels: European Commission.
- Vuorikari, R., Punie, Y., Carretero, S., & Van den Brande, L. (2016). *DigComp 2.0: the Digital Competence Framework. Update Phase 1: the Conceptual Reference Model*. JRC Science and Policy Reports. Luxembourg: Publications Office of the European Union.

## Appendix: The full EntreComp framework

					Level of proficiency	Foundation		Intermediate		Advanced		Expert	
					Progression	Relying on support from others		Building independence		Taking responsibility		Driving transformation, innovation and growth	
						Under direct supervision.	With reduced support from others, some autonomy and together with my peers.	On my own and together with my peers.	Taking and sharing some responsibilities.	With some guidance and together with others.	Taking responsibility for making decisions and working with others.	Taking responsibility for contributing to complex developments in a specific field.	Contributing substantially to the development of a specific field.
						Discover	Explore	Experiment	Dare	Improve	Reinforce	Expand	Transform
Area	Competence	Hint	Descriptor	Thread <sup>10</sup>	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	
Ideas and opportunities	Spotting opportunities	Use your imagination and abilities to identify opportunities for creating value.	Identify and seize opportunities to create value by exploring the social, cultural and economic landscape. Identify needs and challenges that need to be met. Establish new connections and bring together scattered elements of the landscape to create opportunities to create value.	Identify, create and seize opportunities.	I can find opportunities to help others.	I can recognise opportunities to create value in my community and surroundings.	I can explain what makes an opportunity to create value.	I can proactively look for opportunities to create value, including out of necessity.	I can describe different analytical approaches to identify entrepreneurial opportunities.	I can use my knowledge and understanding of the context to make opportunities to create value.	I can judge opportunities for creating value and decide whether to follow these up at different levels of the system I am working in (for example, micro, meso or macro).	I can spot and quickly take advantage of an opportunity.	
				Focus on challenges.	I can find different examples of challenges that need solutions.	I can recognise challenges in my community and surroundings that I can contribute to solving.	I can identify opportunities to solve problems in alternative ways.	I can take apart established practices and challenge mainstream thought to create opportunities and look at challenges in different ways.	I can judge the right time to take an opportunity to create value.	I can cluster different opportunities or identify synergies among different opportunities to make the most out of them	I can define opportunities where I can maintain a competitive advantage.		
				Uncover needs.	I can find examples of groups who have benefited from a solution to a given problem.	I can identify needs in my community and surroundings that have not been met.	I can explain that different groups may have different needs.	I can establish which user group, and which needs, I want to tackle through creating value.	I can carry out a needs analysis involving relevant stakeholders.	I can identify challenges related to the contrasting needs and interests of different stakeholders.	I can produce a 'roadmap' which matches the needs with the actions needed to deal with them and helps me create value.	I can design projects which aim to anticipate future needs.	

<sup>10</sup> Threads identify the theme running through out each row of the table.

				Analyse the context.	I can tell the difference between different areas where value can be created (for example, at home, in the community, in the environment, or in the economy or society).	I can recognise the different roles the public, private and third sectors play in my region or country.	I can tell the difference between contexts for creating value (for example, communities and informal networks, existing organisations, the market).	I can identify my personal, social and professional opportunities for creating value, both in existing organisations or by setting up new ventures.	I can identify the boundaries of the system that are relevant to my (or my team's) value-creating activity.	I can analyse an existing value-creation activity by looking at it as a whole and identifying opportunities to develop it further.	I can monitor relevant trends and see how they create threats and new opportunities to create value.	I can promote a culture within my organisation that is open to spotting the weak signals of change, leading to new opportunities for creating value.
<b>Creativity</b>	Develop creative and purposeful ideas.	Develop several ideas and opportunities to create value, including better solutions to existing and new challenges. Explore and experiment with innovative approaches. Combine knowledge and resources to achieve valuable effects.	Be curious and open.	I can show that I am curious about new things.	I can explore new ways to make use of existing resources.	I can experiment with my skills and competences in situations that are new to me.	I can actively search for new solutions that meet my needs.	I can actively search for new solutions that improve the value-creating process.	I can combine my understanding of different contexts to transfer knowledge, ideas and solutions across different areas.			
			Develop ideas.	I can develop ideas that solve problems that are relevant to me and my surroundings.	Alone and as part of a team, I can develop ideas that create value for others.	I can experiment with different techniques to generate alternative solutions to problems, using available resources in an effective way.	I can test the value of my solutions with end users.	I can describe different techniques to test innovative ideas with end users.	I can set up processes to involve stakeholders in finding, developing and testing ideas.	I can tailor a variety of ways of involving stakeholders to suit the needs of my value-creating activity.	I can design new processes to involve stakeholders in generating, developing and testing ideas that create value.	
			Define problems.	I can approach open-ended problems (problems that can have many solutions) with curiosity.	I can explore open-ended problems in many ways so as to generate multiple solutions.	I can take part in group dynamics aimed at defining open-ended problems.	I can reshape open-ended problems to fit my skills.	I can describe and explain different approaches to shaping open-ended problems and different problem-solving strategies.	I can help others create value by encouraging experimentation and using creative techniques to approach problems and generate solutions.	I can initiate, develop, manage and complete a creative project.	I can use a mix of creative techniques to keep generating value over time.	
			Design value.	I can assemble objects that create value for me and others.	I can improve existing products, services and processes so that they better meet my needs or those of my peers and the community.	I can identify the basic functions that a prototype should have to illustrate the value of my idea.	I can assemble, test and progressively refine prototypes that simulate the value I want to create.	I can create (alone or with others) products or services that solve my problems and my needs.	I can develop and deliver value in stages, launching with the core features of my (or my team's) idea and progressively adding more.	I can apply different design approaches to create value through new products, processes or services.	I can design and put in place innovative processes to create value.	

				Be innovative.	I can find examples of innovative products, services and solutions.	I can describe how some innovations have transformed society.	I can tell the difference between types of innovations (for example, process versus product innovation and social innovation, incremental versus disruptive innovation).	I can judge if an idea, product or process is innovative or just new to me.	I can describe how innovations diffuse in society, culture and the market.	I can describe different levels of innovation (for example, incremental, breakthrough or transformational) and their role in value-creating activities.	I can identify the steps needed to research the potential for an innovative idea in light of its development into an existing enterprise, a new venture or an opportunity for social change.	I can manage innovation processes that respond to emerging needs and make the most of opportunities as they become available.
<b>Vision</b>	Work towards your vision of the future.	Imagine the future. Develop a vision to turn ideas into action. Visualise future scenarios to help guide effort and action.	Imagine.	I can imagine a desirable future.	I can develop simple future scenarios where value is created for my community and surroundings.	I can develop (alone or with others) an inspiring vision for the future that involves others.	I can build future scenarios around my value-creating activity.	I can use my understanding of the context to identify different strategic visions for creating value.	I can discuss my (or my team's) strategic vision for creating value.	I can develop (alone or with others) and compare different future scenarios.	I can show different audiences the benefits of my vision during turbulent times	
			Think strategically.			I can explain what a vision is and what purpose it serves	I am aware of what is needed to build a vision.	I can explain the role of a vision statement for strategic planning.	I can prepare a vision statement for my (or my team's) value-creating activity that guides internal decision-making throughout the whole process of creating value.	I can plan backwards from my vision to design the necessary strategy to achieve it.	I can encourage enthusiasm and a sense of belonging around a convincing vision.	
			Guide action.			My vision for creating value drives me to make the effort to turn ideas into action.	I can decide what type of vision for creating value I would like to contribute to.	I can identify the changes needed to achieve my vision.	I can promote initiatives for change and transformation that contribute to my vision.	I can identify challenges related to my (or my team's) vision, while respecting the different levels of the system and the variety of stakeholders affected.	I can create (alone or with others) a 'roadmap' based on my vision for creating value.	
<b>Valuing ideas</b>	Make the most of ideas and opportunities.	Judge what value is in social, cultural and economic terms. Recognise the potential an idea has for creating value and identify	Recognise the value of ideas.	I can find examples of ideas that have value for myself and others.	I can show how different groups, such as firms and institutions, create value in my community and surroundings.	I can tell the difference between social, cultural and economic value.	I can decide which type of value I want to act on and then choose the most appropriate pathway to do so.	I recognise the many forms of value that could be created through entrepreneurship, such as social, cultural or economic value.	I can break down a value chain into its different parts and identify how value is added in each part.	I can develop strategies to effectively make the most of opportunities to create value in my organisation or venture.	I can state the value of a new idea from different stakeholders' perspectives.	

			suitable ways of making the most out of it.	Share and protect ideas.	I can clarify that other people's ideas can be used and acted on, while respecting their rights.	I can explain that ideas can be shared and circulated for the benefit of everyone or can be protected by certain rights, for example, copyrights or patents.	I can tell the difference between types of licences that can be used to share ideas and protect rights.	I can choose the most appropriate licence for the purpose of sharing and protecting the value created by my ideas.	I can tell the difference between trademarks, registered design rights, patents, geographical indications, trade secrets, confidentiality agreements and copyright licences, including open, public-domain licences such as creative commons.	When creating ideas with others, I can outline a dissemination and exploitation agreement that benefits all partners involved.	I can develop a tailored strategy on intellectual property rights that deals with geographic requirements.	I can develop a strategy on intellectual property rights that is tailored to the age of my portfolio.
<b>Ethical and sustainable thinking</b>	Assess the consequences and impact of ideas, opportunities and actions.	Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment. Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen. Act responsibly.	Behave ethically.	I can recognise behaviours that show integrity, honesty, responsibility, courage and commitment.	I can describe in my own words the importance of integrity and ethical values.	I can apply ethical thinking to consumption and production processes.	I am driven by honesty and integrity when taking decisions.	I can argue that ideas for creating value should be supported by ethics and values relating to gender, equality, fairness, social justice and environmental sustainability.	I can take responsibility for promoting ethical behaviour in my area of influence, (for example, by promoting gender balance highlighting inequalities and any lack of integrity).	I make it my priority to make sure that ethical behaviour is respected and promoted in my area of influence.	I take action against unethical behaviour.	
			Think sustainably.	I can list examples of environmentally friendly behaviour that benefits a community.	I can recognise examples of environmentally friendly behaviour by companies that creates value for society as a whole.	I can identify practices that are not sustainable and their implications for the environment.	I can produce a clear problem statement when faced with practices that are not sustainable.	I can discuss the impact an organisation has on the environment (and vice versa).	I can discuss the relationship between society and technical developments, relating to their implications for the environment.	I can choose adequate methods for analysing environmental impact based on their advantages and disadvantages.	I can contribute to self-regulation discussions within my sector of operations.	
			Assess impact.	I can find and list examples of changes caused by human action in social, cultural, environmental or economic contexts.	I can tell the difference between the impact of a value-creating activity on the target community and the broader impact on society.	I can identify the impact that taking up opportunities will have on me and my team, on the target group and on the surrounding community.	I can identify stakeholders who are affected by the change brought about by my (or my team's) value-creating activity, including stakeholders who cannot speak up (for example, future generations, climate or nature).	I can analyse the implications of my value-creating activity within the boundaries of the system I am working in.	I can define the purpose of the impact assessment, impact monitoring, and evaluation of impact.	I can choose 'measure indicators' to monitor and assess the impact of my value-creating activity.	I can carry out impact assessment, impact monitoring, and impact evaluation on my value-creating activity.	

				Be accountable.				I can tell the difference between accounting for use of resources and accounting for the impact of my value-creating activity on stakeholders and the environment.	I can tell the difference between input, output, outcomes and impact.	I can discuss a range of accountability methods for both functional and strategic accountability.	I can use the accountability methods that hold me responsible to our internal and external stakeholders.	I can design ways to be accountable to all of our stakeholders.
<b>Resources</b>	<b>Self-awareness and self-efficacy</b>	Believe in yourself and keep developing.	Reflect on your needs, aspirations and wants in the short, medium and long term Identify and assess your individual and group strengths and weaknesses. Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures.	Follow your aspirations.	I can identify my needs, wants, interests and goals.	I can describe my needs, wants, interests and goals.	I can commit to fulfilling my needs, wants, interests and goals.	I can reflect on my individual and group needs, wants, interests and aspirations in relation to opportunities and future prospects.	I can translate my needs, wants, interests and aspirations into goals that help me reach them.	I can help others to reflect on their needs, wants, interests and aspirations and how they can turn these into goals.		
				Identify your strengths and weaknesses.	I can identify things I am good at and things I am not good at.		I can judge my strengths and weaknesses and those of others in relation to opportunities for creating value.	I am driven by the desire to use my strengths and abilities to make the most of opportunities to create value.	I can team up with others to compensate for our weaknesses and add to our strengths.	I can help others identify their strengths and weaknesses.		
				Believe in your ability.	I believe in my ability to do what I am asked successfully.	I believe in my ability to achieve what I intend to.	I can judge the control I have over my achievements (compared with any control from outside influences).	I believe I can influence people and situations for the better	I believe in my ability to carry out what I have imagined and planned, despite obstacles, limited resources and resistance from others.	I believe in my ability to understand and take the good out of experiences that others may label as failures.		
				Shape your future.	I can list different types of jobs and their key functions.	I can describe which qualities and abilities are needed for different jobs, and which of these qualities and abilities I have.	I can describe my skills and competences relating to career options, including self-employment.	I can use my skills and competences to change my career path, as a result of new opportunities or from necessity.	I can discuss how a realistic understanding and evaluation of my personal attitudes, skills and knowledge can influence my decision-making, relationships with other people and quality of life.	I can choose professional development opportunities with my team and organisation based on a clear understanding of our strengths and weaknesses.	I can design professional development strategies for my team and organisation based on a clear understanding of our strengths and weaknesses, in relation to both current and future opportunities to create value.	I can design strategies to overcome my (or my team's or organisation's) weaknesses and to develop our strengths in anticipating future needs.



<b>Motivation and perseverance</b>	Stay focused and don't give up.	Be determined to turn ideas into action and satisfy your need to achieve. Be prepared to be patient and keep trying to achieve your long-term individual or group aims. Be resilient under pressure, adversity, and temporary failure.	Stay driven.	I am driven by the possibility to do or contribute to something that is good for me or for others.	I am motivated by the idea of creating value for myself and others.	I can anticipate the feeling of achieving my goals and this motivates me.	I can regulate my own behaviour to stay driven and achieve the benefits of turning ideas into action.				
			Be determined.	I see tasks as challenges to do my best.	I am motivated by challenges.	I can set challenges to motivate myself.	I am willing to put effort in and use resources to overcome challenges and achieve my (or my team's) goals.	I drive my effort by using my desire for achievement and belief in my ability to achieve.	I can coach others to stay motivated, encouraging them to commit to what they want to achieve.	I can create the right climate to motivate my team (for example, by celebrating successes, by learning from failures and by encouraging innovative ways to tackle problems).	I consider all outcomes as temporary solutions appropriate to their time and context, and so am motivated to make sure they develop in a continuous cycle of improvement and innovation.
			Focus on what keeps you motivated.		I can recognise different ways of motivating myself and others to create value.	I can reflect on the social incentives associated with having a sense of initiative and creating value for myself and others.	I can tell the difference between personal and external factors that motivate me or others when creating value.	I can use strategies to stay motivated (for example, set goals, monitor performance and evaluate my progress).	I can use strategies to keep my team motivated and focused on creating value.	I can design effective ways to attract talented people and keep them motivated.	I can reward initiative, effort, and achievement appropriately within my team and organisation.
			Be resilient.	I show passion and willingness to achieve my goals.	I am determined and persevere when trying to achieve my (or my team's) goals.	I can overcome simple adverse circumstances.	I can judge when it is not worth continuing with an idea.	I can persevere in the face of adversities when trying to achieve my goals.	I can devise strategies to overcome standard adverse circumstances.	I can cope with unexpected change, setbacks and failures (for example, job loss).	I can make sure that my team or organisation stay positive when making difficult decisions and dealing with failure.
			Don't give up.	I do not give up and I can keep going even when facing difficulties.	I am not afraid of working hard to achieve my goals.	I can delay achieving my goals in order to gain greater value, thanks to prolonged effort.	I can maintain effort and interest, despite setbacks.	I can celebrate short-term achievements, in order to stay motivated.	I can inspire others to work hard on their goals by showing passion and a strong sense of ownership.	I can stay focused on my vision and goals, despite challenges.	
<b>Mobilising resources</b>	Get and manage the resources you need.	Get and manage the material, non-material and digital resources needed to turn ideas into action. Make the most	Manage resources (material and non-material).	I recognise that resources are not unlimited.	I can appreciate the importance of sharing resources with others.	I can experiment with different combinations of resources to turn my ideas into action.	I can get and manage the necessary resources to turn my idea into action.	I can develop a plan for dealing with limited resources when setting up my value-creating activity.	I can get together the necessary resources to develop my value-creating activity.	I can allocate enough resources to each step of my (or my team's) action plan and for the value-creating activity (for	I can judge the key resources needed to support an innovative idea or opportunity to develop an existing

			of limited resources. Get and manage the competences needed at any stage, including technical, legal, tax and digital competences (for example through suitable partnerships, networking, outsourcing and crowd-sourcing).								example, time, finances, and my team's skills, knowledge and experience).	business, launch a new venture, or initiate a social enterprise.
				Use resources responsibly.	I value my possessions and use them responsibly.	I can describe how resources last longer through reuse, repair and recycling.	I can discuss the principles of circular economy and resource efficiency.	I use resources responsibly and efficiently (for example, energy, materials in the supply chain or manufacturing process, public spaces).	I take into account the non-material cost of using resources when taking decisions about my value-creating activities.	I can choose and put in place effective resource-management procedures (for example, life-cycle analysis, solid waste).	I can identify the opportunities that use resources efficiently and the circular economy brings to my organisation.	I can design and put in place innovative ways to lower the overall impact of my value-creating activity on the environment, the community and society, and measure the improvement.
				Make the most of your time.	I can recognise different uses for my time (for example, studying, playing, resting).	I value my time as a scarce resource.	I can discuss the need for investing time in different value-creating activities.	I can use my time effectively to achieve my goals.	I can manage my time effectively, using techniques and tools that help make me (or my team) productive.	I can help others manage their time effectively.	I can put in place effective time-management procedures.	I can develop effective time-management procedures that meet the specific needs of my value-creating activity.
				Get support.	I can look for help when I am having difficulty achieving what I have decided to do.	I can identify sources of help for my value-creating activity (for example, teachers, peers, mentors).	I can describe the concepts of division of labour and job specialisation.	I can find and list public and private services to support my value-creating activity (for example, incubator, social enterprise advisors, start-up angels, chamber of commerce).	I can find digital solutions (for example, free, paid for, or open-source) that can help me manage my value-creating activities efficiently.	I can find support to help me take advantage of an opportunity to create value (for example, advisor or consultancy services, peer or mentor support).	I can effectively delegate tasks within and outside my organisation to make the most value (for example, outsourcing, partnering, acquisitions, crowd-sourcing).	I can develop a network of flexible and responsive providers from outside the organisation who support my value-creating activity.
	<b>Financial and economic literacy</b>	Develop financial and economic know-how.	Estimate the cost of turning an idea into a value-creating activity. Plan, put in place and evaluate financial decisions over time. Manage financing to	Understand economic and financial concepts.	I can recall basic terminology and symbols related to money.	I can explain simple economic concepts (for example, supply and demand, market price, trade).	I can use the concept of opportunity costs and comparative advantage to explain why exchanges happen between individuals, regions and nations.	I can read income statements and balance sheets.	I can explain the difference between a balance sheet and a profit-and-loss account.	I can build financial indicators (for example, return on investment).	I can use financial indicators to assess the financial health of a value-creating activity.	I can use financial indicators to compare the financial health of my value-creating activity with that of competitors

			make sure my value-creating activity can last over the long term.	Budget.	I can judge what to use my money for.	I can draw up a simple household budget in a responsible manner.	I can draw up a budget for a value-creating activity.	I can judge the cash-flow needs of a value-creating activity.	I can apply the financial planning and forecasting concepts that I need to turn ideas into action (for example, profit or not for profit).	I can judge the cash-flow needs of a complex project.	I can judge the cash-flow needs of an organisation that handles many value-creating activities that depend on each other.	I can create a plan for the financial and economic long-term sustainability of my (or my team's) value-creating activity.
				Find funding.	I can identify the main types of income for families, businesses, non-profit organisations and the state.	I can describe the main role of banks in the economy and society.	I can explain that value-creating activities can take different forms (a business, a social enterprise, a non-profit organisation and so on) and can have different structures of ownership (individual company, limited company, co-operative and so on).	I can identify public and private sources of funding for my value-creating activity (for example, prizes, crowd-funding, and shares).	I can choose the most appropriate sources of funding to start up or expand a value-creating activity.	I can apply for public or private business support programmes, financing schemes, public subsidies or calls for tender.	I can raise funds and secure revenue from different sources, and manage the diversity of those sources.	I can judge an opportunity as a possible investor.
				Understand taxation.	I can outline the purpose of taxation.	I can explain how taxation finances the activities of a country and its part in providing public goods and services.	I can estimate the main accountability and tax obligations I need to fulfil to meet the tax requirements for my activities.	I can estimate how my financial decisions (investments, buying assets, goods and so on) affect my tax.	I can make financial decisions based on current taxation schemes.	I can make financial decisions based on taxation schemes of different countries and territories.		
<b>Mobilising others</b>	Inspire, engage and get others on board.	Inspire and enthuse relevant stakeholders. Get the support needed to achieve valuable outcomes. Demonstrate effective communication, persuasion, negotiation and leadership.	Inspire and get inspired.	I show enthusiasm for challenges.	I am actively involved in creating value for others.	I do not get discouraged by difficulties.	I can lead by example.	I can get endorsement from others to support my value-creating activity.	I can inspire others, despite challenging circumstances.	I can maintain momentum with my team, partners and stakeholders when involved in a challenging situation.	I can form coalitions to turn ideas into action.	
			Persuade.		I can persuade others by providing a number of arguments.	I can persuade others by providing evidence for my arguments.	I can persuade others by appealing to their emotions	I can pitch effectively in front of potential investors or donors.	I can overcome resistance from those who will be affected by my (or my team's) vision, innovative approach, and value-creating activity.	I can create a call to action that gets internal stakeholders on board, such as co-workers, partners, employees or senior managers.	I can negotiate support for ideas for creating value.	

				Communicate effectively.	I can communicate my ideas clearly to others.	I can communicate my team's ideas to others persuasively by using different methods (for example posters, videos, role-play).	I can communicate imaginative design solutions.	I can communicate the value of my (or my team's) idea to stakeholders from different backgrounds effectively.	I can communicate the vision for my (or my team's) venture in a way that inspires and persuades external groups, such as funders, partner organisations, volunteers, new members and affiliate supporters.	I can produce narratives and scenarios that motivate, inspire and direct people.	I can take part in constructive discussions with the community that my idea is targeted at.	I can get all relevant stakeholders to take responsibility to act on an opportunity for value creation.
				Use media effectively.	I can provide examples of inspiring communication campaigns.	I can discuss how different media can be used to reach audiences in different ways.	I can use various methods, including social media, to communicate value-creating ideas effectively.	I can use media appropriately, showing that I am aware of my audience and purpose.	I can influence opinions in relation to my value-creating activity, through a planned approach to social media.	I can design effective social-media campaigns to mobilize people in relation to my (or my team's) value-creating activity.	I can define a communication strategy to mobilize people in relation to my (or my team's) value-creating activity.	I can sustain and increase the support for my vision.
<b>Into action</b>	<b>Taking the initiative</b>	Go for it.	Initiate processes that create value. Take up challenges. Act and work independently to achieve goals, stick to intentions and carry out planned tasks.	Take responsibility.	I can carry out the tasks I am given responsibly.	I am comfortable in taking responsibility in shared activities.	I can take individual and group responsibility to carry out simple tasks in value-creating activities.	I can take individual and group responsibility in value-creating activities.	I can delegate responsibility appropriately.	I can encourage others to take responsibility in value-creating activities.	I take responsibility in complex value-creating activities.	I can take responsibility in seizing new opportunities and when facing unprecedented challenges in value-creating activities.
				Work independently.	I show some independence in carrying out tasks I am given.	I can work independently in simple value-creating activities.	I can initiate simple value-creating activities.	I am driven by the possibility of being able to initiate value-creating activities independently.	I can initiate value-creating activities alone and with others.	I can help others work independently.	I praise initiative taken by others and reward it appropriately within my team and organisation.	
				Take action.	I can have a go at solving problems that affect my surroundings.	I show initiative in dealing with problems that affect my community.	I actively face challenges, solve problems and seize opportunities to create value.	I take action on new ideas and opportunities, which will add value to a new or existing value-creating venture.	I value others taking the initiative in solving problems and creating value.	I can encourage others to take the initiative in solving problems and creating value within my team and organisation.		
	<b>Planning and management</b>	Prioritise, organise and follow up.	Set long-, medium- and short-term goals. Define priorities and action plans. Adapt to unforeseen	Define goals.	I can clarify what my goals are in a simple value-creating activity.	I can identify alternative goals to create value in a simple context.	I can describe my goals for the future in line with my strengths, ambitions, interests and achievements.	I can set short-term goals that I can act on.	I can define long-term goals arising from the vision for my (or my team's) value-creating activity.	I can match short-term, mid-term and long-term goals to the vision for my (or my team's) value-creating activity.	I can design a strategy to achieve goals in line with my (or my team's) vision.	I can manage the balance between the need for creativity and for control so that my organisation's capacity to

			changes.							achieve its goals is protected and nurtured.		
				Plan and organise.	I can carry out a simple plan for value-creating activities.	I can deal with a range of simple tasks at the same time without feeling uncomfortable.	I can create an action plan which identifies the necessary steps to achieve my goals.	I can allow for the possibility of changes to my plans.	I can summarise the basics of project management.	I can apply the basics of project management in managing a value-creating activity.	I can develop and stick to a detailed project management plan, adjusting to changing circumstances to make sure goals are reached.	I can design managerial procedures to effectively deliver value in challenging circumstances.
				Develop sustainable business plans.			I can develop a business model for my idea.	I can define the key elements that make up the business model necessary to deliver the value I have identified.	I can develop a business plan based on the model, describing how to achieve the value identified.	I can organise my value-creating activities using planning methods such as business and marketing plans.	I can keep my planning methods updated and adapt them to changing circumstances.	I can adapt my value-creating activity's business model to face new challenges.
				Define priorities.	I can recall the order of steps that was needed in a simple value-creating activity I took part in.	I can identify the basic steps that are needed in a value-creating activity.	I can prioritise the basic steps in a value-creating activity.	I can set my own priorities and act on them.	I can define the priorities to meet my (or my team's) vision.	I can stay focused on the priorities set, despite changing circumstances.	I can define priorities in uncertain circumstances, with partial or ambiguous information.	
				Monitor your progress.	I can recognise how much progress I have made on a task.	I can monitor whether a task is going to plan.	I can identify different types of data that are necessary for monitoring the progress of a simple value-creating activity.	I can set basic milestones and observation indicators to monitor the progress of my value-creating activity.	I can describe different methods for performance and impact monitoring.	I can define what data is needed to monitor how effective my value-creating activities are and an appropriate way to collect them.	I can develop the performance indicators I (or my team) need to monitor progress towards a successful outcome in changing circumstances.	I can design and put in place a data-collection plan to monitor whether my venture is achieving its aims.
				Be flexible and adapt to changes.	I am open to changes.	I can confront and deal with changes in a constructive way.	I can change my plans based on the needs of my team.	I can adapt my plans to achieve my goals in light of changes that are outside my control.	I can embrace change that brings new opportunities for value creation	I can anticipate and include change along the value-creating process.	I can use the results of monitoring to adjust vision, aims, priorities, resource planning, action steps or any other aspect of the value-creating process.	I can communicate effectively to the organisation the reason for changes and adjustments.

	<b>Coping with uncertainty, ambiguity and risk</b>	Make decisions dealing with uncertainty, ambiguity and risk.	Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes. Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce risks of failing. Handle fast-moving situations promptly and flexibly.	Cope with uncertainty and ambiguity.	I am not afraid of making mistakes while trying new things.	I explore my own ways to achieve things.	I can discuss the role that information plays in reducing uncertainty, ambiguity and risk.	I can actively look for, compare and contrast different sources of information that help me reduce ambiguity, uncertainty, and risks in making decisions.	I can find ways of making decisions when the information is incomplete.	I can pull together different viewpoints to take informed decisions when the degree of uncertainty is high	I can make decisions evaluating the different elements in a situation that is uncertain and ambiguous.	I can set up appropriate strategies for collecting and monitoring data, which help me take decisions based on sound evidence.
				Calculate risk.	I can identify examples of risks in my surroundings.	I can describe risks related to a simple value-creating activity in which I take part.	I can tell the difference between acceptable and unacceptable risks.	I can weigh up the risks and benefits of self-employment with alternative career options, and make choices that reflect my preferences.	I can apply the concept of affordable losses to make decisions when creating value.	I can compare value-creating activities based on a risk assessment.	I can assess the risks my venture is exposed to as conditions change.	I can evaluate high-risk long-term investments using a structured approach.
				Manage risk.			I can critically evaluate the risks associated with an idea that creates value, taking into account a variety of factors.	I can critically evaluate the risks related to the formal set-up of a value-creating venture in the area in which I work.	I can demonstrate that I can make decisions by weighing up both the risks and the expected benefits of a value-creating activity.	I can outline a risk management plan for guiding my (or my team's) choices while developing my value-creating activity.	I can use strategies to reduce the risks that may arise during the value-creating process.	I can come up with strategies to reduce the risk of my value-creating initiative becoming obsolete.
	<b>Working with others</b>	Team up, work together, and network.	Work together and co-operate with others to develop ideas and turn them into action. Network. Solve conflicts and face up to competition positively when necessary.	Accept diversity (people's differences).	I can show respect for others, their background and situations.	I am open to the worth that others can bring to value-creating activities.	I can combine different contributions to create value.	I can value diversity as a possible source of ideas and opportunities.		I can support diversity within my team or organisation.	Outside of my organisation, I can find ideas that create value and make the most of them.	
				Develop emotional intelligence.	I can show empathy towards others.	I can recognise the role of my emotions, attitudes and behaviours in shaping others people's attitudes and behaviours and vice versa.	I can express my (or my team's) value-creating ideas assertively.	I can face and solve conflicts.	I can compromise where necessary.	I can deal with non-assertive behaviour that hinders my (or my team's) value -creating activities (for example, destructive attitudes, aggressive behaviour and so on).	I can manage conflicts effectively.	

				Listen actively.	I can show empathy towards others.	I can discuss the benefits of listening to other people's ideas for achieving my (or my team's) goals.	I can listen to other people's ideas for creating value without showing prejudice.	I can listen to my end users.	I can describe different techniques for managing relationships with end users.	I can put in place strategies to actively listen to my end users and act on their needs.	I can pull together information from a wide range of sources to understand my end users' needs.	
				Team up.	I am open to working alone as well as with others, playing different roles and taking some responsibility.	I am willing to change my way of working in a group.	I can work with a range of individuals and teams.	I share the ownership of value-creating activities with the members of my team	I can build a team based on the individual knowledge, skills and attitudes of each member.	I can contribute to creating value by teaming up with distributed communities through digital technologies.	I can design physical and virtual spaces that encourage team members to work together.	I can build an organisation's capacity to create value by encouraging people to work together.
				Work together.	I am open to involving others in my value-creating activities.	I can contribute to simple value-creating activities.	I can contribute to group decision-making constructively.	I can create a team of people who can work together in a value-creating activity.	I can use techniques and tools that help people to work together.	I can give people the help and support they need to perform at their best within a team.	I can work with a remote team of people who can independently contribute to a value-creating activity.	I can design working methods and incentives that enable team members to work well together.
				Expand your network.	I can explain the meaning and forms of association, co-operation and peer-to-peer support (for example, family and other communities).	I am open to establishing new contacts and cooperation with others (individuals and groups).	I can use the relationships I have to get the support I need to turn ideas into action, including emotional support.	I can establish new relationships to get the support I need to turn ideas into action, including emotional support (for example, joining a mentor network).	I can use my network to find the right people to work on my (or my team's) value-creating activity.	I proactively make contact with the right people inside and outside my organisation to support my (or my team's) value-creating activity (for example, at conferences or on social media).	I can use my network to bring together different perspectives to inform my (or my team's) value-creating process.	I can design effective processes to build networks of different or new stakeholders and keep them engaged.
<b>Learning through experience</b>	Learn by doing.	Use any initiative for value creation as a learning opportunity. Learn with others, including peers and mentors. Reflect and learn from both success and failure (your own and other people's).	Reflect.	I can find examples of great failures that have created value.	I can provide examples of temporary failures that have led to valuable achievements.	I can reflect on failures (mine and other people's), identify their causes and learn from them.	I can judge if and how I have achieved my goals, so that I can evaluate my performance and learn from it.	I can reflect on my (or my team's) achievements and temporary failures as things develop so as to learn and improve my ability to create value.	I can help others reflect on their achievements and temporary failures by providing honest and constructive feedback.	I can take my team or the organisation to a higher level of performance, based on the feedback collected and by learning lessons from achievements and failures.		
			Learn to learn.	I can provide examples that show that my abilities and competence have increased with experience.	I can anticipate that my abilities and competence will grow with experience, through both successes and failures.	I can reflect on the relevance of my learning pathways for my future opportunities and choices.	I am always looking for opportunities to improve my strengths and reduce or compensate for my weaknesses.	I can find and choose opportunities to overcome my (or my team's) weaknesses and to develop my (or my team's) strengths.	I can help others develop their strengths and reduce or compensate for their weaknesses.	I can identify opportunities for self-improvement in my organisation and beyond.	I can design and put in place a strategy for my venture to continue to generate value.	



				Learn from experience.	I can recognise what I have learnt from taking part in value-creating activities.	I can reflect on my experience in taking part in value-creating activities and learn from it.	I can reflect on my interaction with others (including peers and mentors) and learn from it.	I can filter the feedback provided by others and keep the good from it.	I can integrate lifelong learning into my personal development strategy and career progress.	I can help others reflect on their interaction with other people and help them learn from this interaction.	I can learn from the impact-monitoring and evaluation activities that I have designed to track the progress of my value-creating activity.	I can learn lessons from monitoring and evaluation processes and establish them into my organisation's learning processes.
--	--	--	--	------------------------	---	---	--	---	--	---	--	--

### **How to obtain EU publications**

Our publications are available from EU Bookshop (<http://bookshop.europa.eu>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

Europe Direct is a service to help you find answers to your questions about the European Union  
Free phone number (\*): 00 800 6 7 8 9 10 11  
(\*): Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server <http://europa.eu>

## JRC Mission

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new methods, tools and standards, and sharing its know-how with the Member States, the scientific community and international partners.

*Serving society  
Stimulating innovation  
Supporting legislation*

doi:10.2791/593884

ISBN 978-92-79-58538-8

