

European Commission
Directorate-General for Research and Innovation
Directorate C — International Cooperation

Unit ${\rm C.1-Strategy,\,EFTA}$ and enlargement countries, Russia, Asia an Pacific

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Manuscript completed in May 2017.

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Luxembourg: Publications Office of the European Union, 2017

PDF ISBN 978-92-79-69351-9 doi: 10.2777/614435 KI-04-17-540-EN-N

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Final Report

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[May - 2017]







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1. EXECUTIVE SUMMARY

The objective of this study is: To design an EU-wide scheme (EU scheme) to attract highly skilled non-EU resident entrepreneurial innovators, to facilitate the creation and development of high-tech companies in Europe, as well as smooth integration in the European economic ecosystem, for legal migrants and European returnees.

The EU scheme will build on existing initiatives and services at European, national, regional or city level in the Member States and create appropriate synergies. To do this, it looked at the following four aspects:

- WP 1 Refine the definition of the scheme and assess the EU added value;
- WP 2.1 Detailed architecture of the service platform;
- WP 2.2 Promotion ('marketing') of the support scheme inside and outside Europe;
- WP 2.3 Costing of the support scheme detailed by components and years.

Components of EU scheme and their implementation

The scheme's focus is on entrepreneurs at the early stages of their businesses' life-cycle (seed phase, start-ups, scale-ups), with potentially scalable businesses, in particular in high-tech and creative industries, but not exclusively. The following target audiences for the EU scheme have been identified:

Table 0.1 Beneficiary profiles

Groups of beneficiaries of the EU scheme	
Non-EU entrepreneurial innovators who are outside the EU, and wish to join the European start-up ecosystem to start-up or scale-up their innovative business.	'Aspiring migrants'
Non-EU innovators who are already in Europe and wish to prolong their stay to start-up or scale-up their innovative business (in particular students and researchers, but also other legal migrants and refugees).	'Legal migrants'
EU innovators who are outside the EU, and wish to join the European start-up ecosystem to start-up or scale-up their innovative business.	'Returnees'

The EU support scheme proposed adopts a holistic approach, including access to incubators and accelerators, coaching, and financial help for setting up a business, as well as a possible solution to addressing the visa/resident permit issue for international innovators.

The following five components were identified for the scheme:

- A web based service platform 'STARTUPEUROPE.EU';
- A publicity campaign;
- Business support (designated intermediaries);
- EU financial support;
- EU start-up visa/permit or support in getting a visa/permit.

Of these elements, the web based service platform is essential, as is a publicity campaign. In addition, a start-up visa/permit is identified as the most important remaining impediment to making the EU more attractive to non-EU entrepreneurs. The inclusion of a financial facility would be a useful addition to the other elements of the scheme, but neither necessary nor sufficient: the scheme can be a success without introducing a funding element.

Why is there a need of this EU scheme

Innovative start-ups are generally considered as one of the avenues for future economic prosperity. Start-ups may be the driving force behind innovations because their entrepreneurs 'dare to think in new models for business and society'. Start-ups create jobs and the digital revolution in which start-ups occupy an important place affect and benefit every European.

Coming from a low point, Europe is on the rise in regard to being seen as a fertile ecosystem for high-tech and start-ups. The number of start-ups is growing and increasingly more of them reach the 'unicorn'-phase with a net worth of over 1 billion EUR.¹ However when investors are being asked which cities offer the best chance of producing the 'next Google', Asian and North American cities are still favoured over Europe. An EU scheme that is attractive to talented non-EU entrepreneurs may enhance the start-up climate in Europe and bring the best global brains to the Union.

Web based service platform STARTUPEUROPE.EU

The study outlined the main functionalities a web based service platform tailored to non-EU entrepreneurs should provide in order to make the EU more attractive as a destination for them to build a start-up. The proposed platform has dedicated sections on:

- A smart matching functionality, allowing entrepreneurs to find the support (business, visa, other actors, financing opportunities) they need;
- An ecosystem map where start-ups, incubators and intermediaries appear after registering themselves;
- Country-specific information so that entrepreneurs may compare EU Member States on different issues (such as taxes, how to set up a company, infrastructure etc.);
- Access to funding where different (national) public funding opportunities can be searched, and there are links to private funding platforms;
- Information on available national visa/permits for entrepreneurs;
- Community of Practice with a forum function where entrepreneurs, intermediaries and policymakers can start discussion groups, and exchange best practices.

Designated intermediaries

The EU currently has no tailored and applicable support initiatives for non-EU entrepreneurial innovators. This is a new group that is yet to be served at EU level. At the same time, on the national and local scale, there is an abundance of support and funding opportunities. In particular for aspiring migrants navigating across these opportunities very difficult if not undoable. As the main goal of the scheme would be to provide a 'soft landing' to international entrepreneurs, it is proposed to create a network of designated intermediaries in every EU Member State, that can provide information and guidance to interested entrepreneurs. Entrepreneurs are, however, not required to utilise the designated intermediaries to access the available information, contact registered intermediaries or other start-ups, or applying for financial support.

Designated intermediaries also play a large role in managing the content of the STARTUPEUROPE.EU platform, through updating it with relevant news and events within their country and by moderating discussion groups.

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 $^{^{\}rm 1}$ GP. Bullhound, EUROPEAN UNICORNS 2016.

The STARTUPEUROPE.EU platform should be integrated with Startup Europe

Studying various options for branding, managing and hosting this EU scheme, an integration of the web based service platform with the Startup Europe platform is recommended. Most importantly, Startup Europe has been developed with our target group of entrepreneurs in mind and is currently managed jointly by DG CNECT, DG GROW and DG RTD. Such a merger further aligns with the recent Communication stressing both the importance of start-ups and scale-ups, as well as the central role of Startup Europe in improving the EU's start-up ecosystem (COM(2016) 733 final). The branding of the platform's additional functions would also be complementary. In effect, the Startup Europe platform would be further developed with the functionalities mentioned above (it already has an ecosystem map).

A number of technical recommendations are also provided regarding hosting and content management. To optimise the newly integrated Startup Europe platform's functionalities, the following recommendations are made:

- 1. To improve scalability and security we would recommend that the site is migrated to a Drupal site. This approach would also have the advantage that it could be potentially incorporated into DIGIT's Drupal based platform in the future;
- 2. The new site architecture should be modelled in a similar way to the site architecture used on the recently re-launched EURAXESS portal. This site architecture enables:
 - many member state mini-sites to be created and maintained within the context of the main site:
 - content supplied from these mini-sites can be easily incorporated into the main site;
 - advanced searching and matching capabilities.

An integrated promotion campaign is key to the success of the scheme

We propose the design of the promotion campaign to be activating while encompassing the promotion of Europe as a destination to start a business (nation branding). Europe is still relatively unknown to the global population as a place where life is inspiring and people innovate. Key messages have been designed to brand the European Union in this direction as well. The objective of the campaign is to inform non-EU resident, highly skilled entrepreneurial innovators about the EU scheme, direct them to the STARTUPEUROPE.EU platform, and encourage them, via this platform, to start-up their business in Europe. The study has developed key visuals that can be used for this, and has laid out a campaign strategy based on the three pillars paid – owned – earned, of which the latter two are most important.

The EU scheme will benefit from the inclusion of an EU visa/permit

Access to Europe and intra-EU mobility is key to answer the needs of non-EU start-ups and scale-ups. Interviewed non-EU entrepreneurs indicate that obtaining a visa/permit to start their business in one of the EU Member States has been the most pressing challenge. The added value of an EU visa/permit is in allowing mobility and access the European-wide ecosystems without the need for several national visa/permits as well as in enhancing retention of innovative migrants (such as students and researchers) that are already in Europe.

2. INTRODUCTION

The objective of the study is to design an EU-wide scheme to attract highly skilled non-EU resident entrepreneurial innovators, to facilitate the creation and development of high-tech companies in Europe, as well as smooth integration in the European economic ecosystem, for legal migrants and European returnees.

The scheme will build on existing initiatives and services at European, national, regional or city level in the Member States and create appropriate synergies. The study should recommend a scheme able to attract 20,000 migrants per year to the EU, which establish start-ups. This represents 1.4 per cent of the total number of immigrants coming to Europe annually. We think this number is too ambitious, as we will explain in Section 4.8.

The design study consists of two work packages with the following four aspects:

- WP 1 Refine the definition of the scheme and assess the EU added value;
- WP 2.1 Detailed architecture of the service platform;
- WP 2.2 Promotion ('marketing') of the support scheme inside and outside Europe;
- WP 2.3 Costing of the support scheme detailed by components and years.

2.1. Methodology

To conduct this study, we have combined a number of data collection and stakeholder consultations methods – which have evolved over the course of the study, to respond to issues that were flagged or limitations that were identified.

A literature study has been conducted to provide an overview of the topic area: what is known about the type of entrepreneurs that move to another continent and specifically to the EU? What is their profile (demographic, expertise areas, sex) and what are their main motivations? Additionally, the literature was reviewed for successful (and unsuccessful) initiatives to promote entrepreneurship and non-EU entrepreneurship specifically. This has provided an overall view of the state of research on the topic and shed light on the main obstacles that could be encountered.

Several interviews have been conducted with EU stakeholders as part of the scoping of this study, as well as with experts to highlight the main points of interest and issues that needed to be taken into account during the study.

There have been several internal workshops with the core team of the study and dedicated experts, to review information gathered, address feedback received from the Commission, and implement changes to our research approach as necessary.

We have used country reporters to analyse the implemented start-up visa/permit schemes. Recent comparative studies have also been analysed, in particular the ICF study for an evaluation and an impact assessment on a proposal for a revision of the EU Blue Card Directive.² This has provided us with a more detailed overview of the applicable national regulatory frameworks and highlighted different possible approaches to create legal residency options for non-EU entrepreneurs. In addition, a stakeholder workshop has been held in Austria, where various representatives from the entrepreneurial community shared their assessment and ideas about ways in which the European entrepreneurial landscape can be improved (by the Commission).

 $^{^2}$ ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016.

Several meetings with the Steering Group (DG RTD, DG HOME, DG CNECT, DG GROW, DG EMPL) have taken place to discuss the progress of the study and highlight issues to be addressed or where a change of course was necessary. This feedback has resulted in the adoption of some additional data-gathering methods.

Although not part of the Terms of Reference (ToR) to this study, we have distributed a survey amongst our two main stakeholder groups of concern: entrepreneurs via Allied for Startups and entrepreneur intermediaries (incubators, innovation centres, accelerators etc.) via the European Business and Innovation Centre Network (EBN).³ The intention was to supplement the literature findings with inputs from our stakeholder groups that could be quantified. However, the response rate to these surveys has been rather limited, with corresponding limitations on the usability of them for the findings of our study.

Furthermore, several targeted interviews have taken place with our three groups of beneficiaries: 'Aspiring migrants', 'Legal migrants' and 'Returnees' (Section 2.1).⁴ Although not foreseen in the Terms of Reference for this study, it was judged essential to gather first-hand experiences from the target group(s) of the scheme to be developed. These were indeed instrumental to designing a scheme that meets the needs of our target group (Table 2.1).

In the final stages of the study, the study team has held regular progress meetings with DG RTD as the main client, to discuss the progress of the study, highlight points of interest and brainstorm about the best approach to go forward in specific areas.

To design the web platform, we have consulted with web platform stakeholders involved in already existing European Commission web platforms (EURAXESS, Startup Europe) and internally with colleagues involved in managing the EPALE platform (under DG EAC contract). This has been helpful in the costing aspects of the study as well as the evaluation of the hosting options for the STARTUPEUROPE.EU web platform (current initiative to be merged with Startup Europe, as is explained in Chapter 5).

There have been several campaign workshops with marketing experts to develop, discuss, and finalise the promotion campaign, both in terms of the main message to be used and regarding the 'look and feel' of the campaign.

Finally, in order to be able to target the promotion campaign as effectively as possible (and thereby have as much 'value for money' as possible), we consulted a media bureau to conduct market research on the dissemination strategy for the paid arm of the promotion campaign. As a result, a strategy has been developed for reaching our target groups in all of the countries identified as a first priority.

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³ EBN is a network of 160+ quality-certified EU|BICs (business and innovation centres, incubators, accelerators and other support organisations) and 100 Associate Members that support the development and growth of innovative entrepreneurs, start-ups and SMEs.

See the interview reports in Annex IV (sent separately).

Table 2.1 Overview of targeted interviews

Name	Country of origin	Country of residence	Age Gender		Business
А	US	Netherlands	+/- 25	M	Biotech and 3D printing
В	Israel	France	+/- 30	M	3D printing for affordable housing
С	Iran	Netherlands	30	M	Predictive software for SME cash flows
D	Iran	Cyprus	+/- 32	M	IT company 'SockSeed'
Е	Serbia	Serbia*	24	F	Sale of national products abroad
F	US	Italy	28	F	Design
G	Indian	Cyprus	44	M	Cloud software
Н	South Africa	Netherlands	40	F	Retail store
1	Russia	Italy	+/- 35	M	Apps for travellers
J	US	Netherlands	50	M	General ICT
К	Portugal Denmark	London		M	Silicon Valley returnee

^{*}Travelling on tourist visa.

2.2. Scoping and definitions

For the purpose of clarity, a number of concepts have been be specifically defined, in order to clearly define the target audience (beneficiaries) of the EU scheme. The focus of this study is on attracting on non-EU resident highly-skilled entrepreneurial innovators, so a number of questions needed to be answered:

- · What is meant by 'highly-skilled'?
- · How to define non-EU resident?
- What is a 'migrant entrepreneur'?
- How to define an 'entrepreneurial innovator'?
- What do we mean by 'innovative sectors'?
- What is a start-up and which phases may we distinguish?

Before treating these issues, a clarification is needed regarding the usage of visa versus permits for these non-EU entrepreneurial innovators.

Visa or permit

The terms visa and permit are used interchangeably, and often incorrectly. A visa refers to the immigration status to a certain nation when a person is outside the country of destination. A visa provides access to a country and is not always needed (for example for Americans to enter Europe). A (residence) permit refers to the immigration status when a person is physically in a foreign country. It allows a foreigner to live or remain in the country for the purpose stated in the permit.

Residence permit = Any authorisation issued by the authorities of an EU State allowing a non-EU national to stay legally in its territory, in accordance with the provisions of Regulation 265/2010 amending the Convention Implementing the Schengen Agreements and Regulation 562/2006 as regards movement of persons with a long-stay visa.

Source: Regulation (EU) No 265/2010.

Visa (long stay) = Visa issued under national legislation allowing for stays beyond 90 days in a Schengen State. Holders of a national long stay visa also have the right to circulate within the territory of the Schengen States for 90 days per 180 days period.

Source: Regulation (EC) No 810/2009.

Visa (short stay) (Schengen visa) = An authorisation issued by a Schengen State with a view to: (a) transit through or an intended stay in the territory of the Schengen States of a duration of no more than 90 days in any 180 days period, (b) transit through the international transit areas of airports of the Schengen States.

Source: Regulation (EC) No 810/2009.

In this context, according to the EU definitions, the use of the term 'EU start-up visa' is, strictly speaking, wrong. If it is longer than 90 days it should be a permit. There is for example the debate on an 'EU start-up Visa', which is basically an 'EU start-up permit'.

In the context of this study we will speak of 'visa/permit' since most schemes also refer to visa, while a permit is formally more correct. It is also worth noting that one of the conclusions from the analysis of the existing 'visa schemes' is that these are often provided for only one year.

According to many start-ups one year is too short to get a business afloat. Therefore a more 'disciplined' use of the terminology of 'start-up permit' will be more appropriate – in particular in the context a discussion on how the scheme should be designed.

Highly-skilled

'Highly-skilled' may be defined in terms of education (higher education) or occupation (jobs in top occupational categories).⁵ Highly skilled is not by definition the same as highly educated.⁶

Definitions of highly-skilled vary considerably between EU Member States and may depend on a number of factors. These include educational qualifications, work experience, wages and job offers. In general, the definition used for a highly-skilled worker is on the basis of level of salary and/or educational qualifications and/or specific sectors or occupations. 8

⁷ OECD, Recruiting Immigrant Workers: Europe, 2016, p.66.

⁵ The Migration Observatory, 'Highly Skilled Migration to the UK 2007 – 2013, July 2014.

⁶ For example Steve Jobs had no university degree.

⁸ http://ec.europa.eu/dgs/home-affairs/e-library/documents/policies/legal-migration/pdf/general/emn_highly_skilled_workers_study_synthesis_report_may07.pdf.

The definition of 'highly skilled' in this design study is in line with the definition in the proposal for a revised Blue Card (Article 2), which replaces the concept of 'highly qualified employment' in the current Blue Card Directive (2009). This definition includes both 'higher education qualifications' and 'higher professional skills':

'Highly skilled' refers to paid employment, in accordance with national law and practice, by a person having the necessary competence as proven by "higher professional qualifications". The latter can be attested by either "higher education qualifications" (the successful completion of a post-secondary higher education or equivalent tertiary education programme, corresponding at least to level 6 of ISCED23 2011 or to level 6 of the European Qualification Framework) or by 'higher professional skills' (skills attested by at least three years of professional experience of a level comparable to higher education qualifications and relevant to the work or profession to be carried out). According to this definition it becomes mandatory for Member States to recognise professional experience as an alternative to education qualifications. Furthermore, the specific reference to ISCED and EQF levels is new, intended to provide added clarity.9

Migrant entrepreneur

A definition of 'migrant entrepreneur' may be derived from the DG GROW study on 'Good Practice in Promoting and Supporting Migrant Entrepreneurs':

A migrant entrepreneur is a migrant (including refugee) legally residing in the EU with ambitions to become an entrepreneur, or with experience in entrepreneurship. In this definition a 'migrant' is defined as a 'third country national legally staying in the host country'. 'Entrepreneurship' is defined as the 'capacity and willingness to develop, organise, and manage a business venture'. 10

Non-EU resident

'Non-EU resident' means that the person is 'not residing in the European Union'. Non-EU resident entrepreneurs are both EU and non-EU nationals not residing in the EU. In addition the scheme should focus on temporary residents, such as students and researchers who are in the EU on a temporary residence permit.

Entrepreneurial innovators

The title of the study refers to 'entrepreneurial innovators'. This means that the scheme should focus on entrepreneurs, which are people wanting to set-up or scale-up a business (i.e. those who are selfemployed, risk-taking, commercial) and not primarily on people looking for funding for a study (in order to be able to undertake research for a period of time) or looking for a job (with a regular income for a certain period of time) – although these individuals might have an entrepreneurial and innovative attitude in life and work, they may have no specific intention (yet) to start their own business.

Start-ups

According to the often cited definition by Steve Blank, a 'start-up company' ('start-up') is an 'organisation formed to search for a repeatable and scalable business model.'11 Start-ups may also be defined as 'starting entrepreneurs with a good idea, lots of potential and possibilities for the creation of jobs.'12 Another definition is that a start-up is a company working on solving a problem where the solution is not obvious and success is not guaranteed. 13 In other words, investing in a start-up involves a certain level of risk.

⁹ Proposal for a Directive of the European Parliament and of the Council on the conditions of entry and residence of third-country nationals for the

purposes of highly skilled employment, Strasbourg, 7.6.2016, COM(2016) 378 final, 2016/0176 (COD).

10 European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Evaluation and Analysis of Good Practices in Promoting and Supporting Migrant Entrepreneurship, Guide Book, August 2016.

¹¹ Forbes (2012) A Startup Conversation with Steve Blank.

¹² The Netherlands, Brief aan de Tweede Kamer, Doorstroom startups in de zelfstandigenregeling, 14 december 2015.

¹³ See http://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-start-up/.

The distinctive characteristic of a start-up compared to an SME is that a start-up is designed to rapidly develop a scalable business model. The European Startup Monitor 2015 (ESM 2015) contrasts conventional businesses and SMEs with start-ups by the fact that SMEs 'do not promote innovative products or services, or exist primarily to secure the livelihood of founders, without growth perspective. These 'mice companies' are primarily started to generate income, without the ambition to grow. Start-ups may typically be characterised as 'gazelle companies', meaning growing young ventures that are built to create wealth. 14 15

Start-up phases

With regards to the question as to whether the scheme should target 'genuine start-ups' or more mature innovative business, reference could be made to the following business stages:

- Seed phase;
- Start-up phase;
- Scale-up phase;
- Maturity.

Each of the phases has different characteristics following an idea from its development into prototype to economically sustainable business. Entrepreneurs face various challenges in each stage of their idea development (Table 2.2).

Table 2.2. Characteristics and challenges in each of the start-up phases

Start-up phases	Characteristic	Challenge ¹⁶
Seed phase	The start-up is in the conception phase and does not generate any revenues yet ¹⁷ .	Develop a prototype of the idea and find first client(s).
Start-up phase (early stage)	The start-up is about to complete a marketable product and generates its first revenue and/or customer value. ¹⁸	The search for a repeatable and scalable business model.
Scale-up phase (later stage)	The start-up has succeeded in creating a marketable product and/or service and achieves high sales and/or customer value growth. ¹⁹	Exponential growth and market development via strategic collaborations with establishes corporations.
Maturity ('Scaler') ²⁰	The start-up is an established player and/or is planning to conduct trade/sale has succeeded in/is going public. ²¹	Sustain market leadership and growth.

¹⁴ Definition from Andersson 2004.

¹⁵ The EU Definition of SME is presented in the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises as: An enterprise is considered to be any entity engaged in an economic activity, irrespective of its legal form. This includes, in particular, self-employed persons and family businesses engaged in craft or other activities, and partnerships or associations regularly engaged in an economic activity. Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (notified under document number C(2003) 1422), (2003/361/EC), Article 1 and 2.

16 Alberto Onetti, Scaleups. When does a Startup turn into a Scaleup, 2104. Retrieved from: http://startupeuropepartnership.eu/scaleups-when-

does-a-startup-turn-into-a-scaleup/.

¹⁷ Ripsas, S and S. Tröger, Deutsches Startup Monitor, 2015.

Ripsas, S and S. Tröger, Deutsches Startup Monitor, 2015.

¹⁹ Ripsas, S and S. Tröger, Deutsches Startup Monitor, 2015 ('Growth stage'). Onetti defines a scale-up as: 'a development-stage business, specific to high-technology markets, that is looking to grow in terms of market access, revenues, and number of employees, adding value by identifying and realizing win-win opportunities for collaboration with established companies. (...) A scale-up is past the search phase and rather in the execution phase of the business model."

²⁰ Alberto Onetti, Scaleups. When does a Startup turn into a Scaleup, 2104. Retrieved from: http://startupeuropepartnership.eu/scaleups-whendoes-a-startup-turn-into-a-scaleup/.

²¹ Later Stage: Ripsas, S and S. Tröger, Deutsches Startup Monitor, 2015.

2.3. Structure of this report

This report is structured according to the Terms of Reference for this study. In Chapter 2 we will set the scene by analysing the profiles of potential beneficiaries of the EU scheme. In Chapter 3 existing schemes in and outside the EU assessed. In Chapter 4 we will explore the EU scheme, its elements and scheme scenario's, EU funding options, and the EU added value for implementing this – as well as an outline of what an EU visa/permit scheme could look like. In Chapter 5 the service platform will be presented and in Chapter 6 the ideas behind, and outline of, the communication campaign. Chapter 7 brings all costs elements together and in Chapter 8 our conclusions and policy recommendations are formulated. In the Annex elements of our research – including reports of interviews with non-EU start-up entrepreneurs – are presented.

3. BENEFICIARIES OF THE EU SCHEME

As presented in the annex to the Terms of Reference for this design study, relevant EU representatives present at the expert meeting on 20 May 2015 in Brussels agreed that the targeted entrepreneurial innovators should be both new, highly-skilled migrant entrepreneurs (not yet residing in the EU) and students, graduates or researchers already in Europe who would like to stay in the EU in order to start-up their business.²² In addition to this, European returnees should be targeted as well as legal migrants in the EU, such as (highly skilled) migrants and refugees already present in the EU.²³

In sum the scheme should focus on the following three highly-skilled groups:

- Aspiring migrants (not yet residing in the EU), worldwide;
- Legal migrants (already residing in the EU), in particular students and researchers;
- European returnees.

3.1. Beneficiary profiles

The scheme will focus on entrepreneurs at early stages of their businesses life-cycle (seed phase, start-ups, scale-ups), with potentially scalable businesses, in particular in high-tech and creative industries, but not exclusively.²⁴

The following target audiences for the EU scheme may be identified:

Table 3.1 Beneficiary profiles

Groups of beneficiaries of the EU scheme	
Non-EU entrepreneurial innovators who are outside the EU, and wish to join the European start-up ecosystem to start-up or scale-up their innovative business.	'Aspiring migrants'
Non-EU innovators who are already in Europe and wish to prolong their stay to start-up or scale-up their innovative business (in particular students and researchers, but also other legal migrants and refugees).	`Legal migrants'
EU innovators who are outside the EU, and wish to join the European start-up ecosystem to start-up or scale-up their innovative business.	`Returnees'

The potential beneficiaries of the EU scheme will particularly be in the seed phase of their business, but may also be in a start-up phase or even scale-up phase. For the latter two phases, the entrepreneurs might have a successful business outside Europe, which they intend to establish or scale-up within the European Union. More detailed profiles (persona) of the three target groups, will be presented in Chapter 6 on the communication campaign.

²² Discussion paper for the expert meeting on a possible scheme at European level to attract, retain and support non-EU highly skilled entrepreneurial innovators, Brussels, 20 May 2015.

²³ It has been emphasised that 'a focus on other talents already present in the EU such as refugees and argued that a too narrow focus could alienate and discourage a lot of people who would want to come to Europe.' Discussion paper, Brussels, 20 May 2015.
²⁴ Most of the existing national support schemes for non-resident innovative entrepreneurs, take more narrow perspective on 'innovation.' For example consulting firms and import-export businesses are not eligible to the French Tech Ticket programme. On the other hand in Start-Up Chile for example the most represented industries are broader than high-tech: healthcare and biotechnology, finance, education, e-commerce, and clean tech.

Table 3.2 Target groups of the EU scheme and start-up development phases

	Seed	Start-ups	Scale-ups
Aspiring migrants	X	X	X
Legal migrants	х	Х	
Returnees		×	×

Start-up profiles form the European Startup Monitor

A more specified characterisation of the EU scheme target groups may be found in the European Startup Monitor 2015 (Table 3.3). In this monitor 2,365 start-ups from all EU Member States (plus Israel) are analysed. The businesses are all younger than 10 years, start-ups that feature (highly) innovative technologies and/or business models, and which have (or strive for) a significant employee and/or sales growth. Almost 70% of the sample covers start-ups in their seed and start-up phase. Within this amount, 24% is in a scale-up phase, and 5% may be labelled as maturity.

As follows from the monitor, the average age of start-up is Europe is 34.6 years. Start-ups are found by teams of at average 2.7 persons, of which 88% is from the country of the start-up residence and 4% is from outside the EU. Start-ups in the ESM study employ at average 10.3 employees (excluding founders). There are large differences across EU Member States, ranging between 15 employees at average in the UK, to 2.6 in Romania. Most start-ups (92.6%) stated to have plans to hire more staff over the next 12 months. European start-ups employ at average 3.1 interns or students.

Some 21% of the start-ups is active in other European countries and 30% operates worldwide (outside Europe). 36% of the start-ups have plans to expand the start-up to other European countries and 46% intends to expand outside Europe. The observation that almost two-thirds (21 + 36%) of start-ups is already or will be active in other EU countries is important: responding to their needs in regard to intra-EU mobility can be a strong argument for an EU start-up residence permit.

Table 3.3 Typology of start-ups in the EU and Israel (n = 2,365)

Typology of start-ups in the EU and Israel (n = 2,365)

Gender of the start-up founders: 85% male

15% female

Age of the start-up founders 56% younger than 34 years 29% between 35 and 44 years 23% 45 years and older Average age is 34.6 years

Country of origin:

88.1% country of residence 7.6% other EU countries 4.3% non-EU countries

The average team size is 2.7 persons 79.1% started by a team 20.9% started by one person

Previous experience:

41% of the founders have previously started at least one business 18% of the founders have previously started 2 businesses

Typology of start-ups in the EU and Israel (n = 2,365)

Employees:

68.3% from the home country 20.9% from other EU-countries 10.7% from a non-EU countries

International activities:

49.0% focus on home country only

21.2% active in other European countries

29.8% operate worldwide

Planned international activities:

18.4% no international ambitions

35.5% expansion to other European countries

46.1% expansion to countries outside the EU

Sources of funding:

Savings of the founders: 69.1% Friends and family: 25.1% Government subsidies: 21.9% Business angel: 14.8%

Internal financing (operating cash flow): 13.8% Incubator, company builder, accelerator: 12.6%

Venture capital: 9.3% Bank loans: 4.7%

Other capital resources: 3.8%

Crowdfunding, crowd investment: 0.0%

Source: European Startup Monitor 2015.

Following the results of the ESM study we may conclude that: Start-ups in Europe are relatively active in other EU countries and also outside the EU. This indicates that start-ups should be free to move and develop activities across the internal EU market.

The ESM study also provides a classification of the types of business activities in which start-ups are engaged. As start-ups are most often conceived as businesses linked to the digital economy, the report shows that this is indeed the case for the majority of the start-ups, but not exclusively. Start-ups may also occur in, for example, the fields of medical technology, creative industries, food production or education. In the Annex a list of entrepreneurial domains is presented that is relevant for the classification of start-ups in the EU scheme.

Table 3.4 Categorisation of start-up industries in Europe (n = 2,365 start-ups)

Sector	% of the start-ups
Software as service	16.4%
IT / software development	9.1%
Consumer mobile / web applications	7.6%
E-commerce	7.9%
Online marketplace	6.5%
Media and creative industries	6.5%
Industrial technology / production / hardware	5.8%

Sector	% of the start-ups
Consulting company, agency	5.3%
Green technology	4.4%
Bio-, nano-, and medical technology	4.2%
Online service portal	4.0%
Education	3.8%
Finance technology	3.6%
Food	2.6%
Games	2.1%
Offline services	1.6%
Other	8.9%

Source: European Startup Monitor 2015.

3.2. Capture brilliant entrepreneurs of the world (aspiring migrants)

The characteristics of the start-ups from the ESM study may be considered as a proxy for the profiles of the brilliant entrepreneurs of the world that the EU scheme aspires to attract. An analysis of the beneficiaries of current start-up visa/permit schemes in the EU (presented in the Annex) and the sample of our interviewees for this study (Table 1.1) confirm the wide variety of innovative activities that start-ups typically undertake. The general age profile of them being in their (early) thirties is also confirmed by our analysis.

With regards to the countries of origin, it seems that in the existing EU and non-EU start-up visa/permit schemes, applicants originate from all over the world. The majority of existing national start-up visa/permit beneficiaries are from OECD-countries, in particular the USA, and the so-called BRIC countries.

With some established links with the EU but still low levels of applications in absolute terms, these countries would provide the most fruitful ground for attracting more talented highly-skilled entrepreneurs. We will further expand on this in Chapter 6.

Nationalities (frequently) being mentioned as Top-3 beneficiaries:25

USA, Russia, Canada, Ukraine, China, India, Pakistan, Australia, Brazil

Our analysis of the profile of a sample of 61 start-up visa/permit beneficiaries of three current national schemes (French Tech Ticket, Italy Startup visa and Netherlands Startup visa) shows an average age of 32.2, 75% men and 25% women, with as Top-5 of nationalities: the USA, Russia, Canada, India and Chile (Table 3.5).

 $^{^{\}rm 25}$ More than three, as the top 3 differs per destination country.

Table 3.5 Profile of non-EU start-up visa/permit beneficiaries

Profile of non-EU start-up visa beneficiaries Sample (n=61) of French Tech Ticket, Italy Start-up visa and Netherlands Star	t-up visa
Average age	32.3
Men	75%
Women	25%
USA	10
Russia	7
Canada	5
India	5
Chile	4
Macedonia, Vietnam	3
Brazil, China, Iran, Israel, Japan, Ukraine	2
Argentina, Burkina Faso, Hong Kong, Indonesia, Lebanon, Mexico, Morocco, New Zealand	1

Source: Ecorys calculations, presented in Annex II.

3.3. Bring the best brains back home (returnees)

One of the three target groups of the EU scheme are the EU innovators who are currently based outside the EU, and wish to join the European start-up ecosystem to start-up or scale-up their innovative business – the 'returnees'. Returnees have been referred to as an essential group for the development and strengthening of the European start-up ecosystem in the European Startup Manifesto under the label 'Bring the best brains back home'. It has been stated that:

'Virtually every country in the EU has watched helplessly as some of its best and brightest minds leave for the US. This "brain drain" has made a negative impact on all aspect of our economies, creating a vacuum in thought leadership, advanced researched and basic academia, to name a few. EU countries must launch targeted campaigns aimed at bringing their talent back home, through research grants, logistical support and public recognition.'26

18

²⁶ Source: EU Startup Manifesto, September 2013.

Brain drain

There is information available on the extent and directions of this 'brain drain', however little is known about the profiles of highly-skilled returnees, who returned to Europe to start-up or scale-up their businesses here.

Much of the 'brain drain' happens within Europe, mainly from southern to northern countries.²⁷ In addition, all EU countries are confronted with a serious brain drain problem to countries outside of the EU. The Startup Manifesto reports that "there are an estimated 50,000 Germans in Silicon Valley, and an estimated 500 start-ups in the San Francisco Bay area with French founders."²⁸ Of the 65 unicorns (unlisted companies valued at USD1 billion or more) recorded in California, at least 11 have European-born founders.²⁹

According to Campanella (2014), highly qualified professionals are attracted by the United States' higher salaries, world-class universities, and efficient bureaucracy.³⁰ Europeans are also increasingly migrating to Africa and South America. Since the outbreak of the financial crisis of 2008, countries such as Ireland, Italy, Greece, Portugal, and Spain in particular (the countries hardest hit by the crisis) have witnessed an exodus of highly qualified professionals.

Return?

What do we know about possible returns of these professionals to Europe? What is the profile of these returnees? And how could the EU work on a reversion of this elite brain drain? To answer this we have to rely on personal testimonials and observations and anecdotal evidence.

In a recent article in the Financial Times (September 7, 2016), Danish-Portuguese Silicon Valley entrepreneur, Lars Feldsjoe-Nielsen, observes that 'Silicon Valley's European stars are returning home'. According to the author there is a 'steady flow of European entrepreneurs returning home from Silicon Valley. They have come back bringing their experience, deep networks and global ambition with them.' Feldsjoe-Nielsen observes that the European tech ecosystem has transformed and that a new generation of start-up founders and technologists is returning to Europe:

'Wherever I go in Europe today, I come across veterans of the West Coast who feel the opportunities here are starting to match those in the US. They recognise that Europe, as a whole, is significantly underinvested in; and that, thanks to the quality of its maths, science and engineering education, start-ups have foundations on which to build — and at a fifth of the price of engineering talent in the Valley. (...) Furthermore, issues that were once obstacles in Europe have either been removed or have fallen away. Access to capital and top-tier talent, fellow travellers to scale alongside, as well as the ready availability of developer tools and services, mean that unicorns are increasingly likely to emerge on this side of the Atlantic.'31

According to Fjeldsoe-Nielsen, the brain-drain will continue, but 'they are no longer buying one-way tickets'. Feldsjoe argues that the return of European Silicon Valley entrepreneurs will be a growing trend in the coming years. Europeans who have left for Silicon Valley are returning to Europe. They establish themselves all over Europe. This is not restricted to the well-known start-up hubs as London and Berlin. You will find them everywhere. The people we now see returning to Europa is only the first wave of returnees.

 $^{^{27}\} http://www.european digital forum.eu/index.php/component/attachments/attachments?id=311\&task=view.$

²⁸ EU start-up Manifesto, from The Economist, July 28th 2012.

²⁹ Lars Fjeldsoe--Nielsen, Silicon Valley's European stars are returning home. Obstacles have either been removed or fallen away, Financial Times, September 7, 2016.

³⁰ Edoardo Campanella, Come Home, Europeans. Europe's Brain Drain Problem Is Becoming a Major Crisis, October 16, 2014 EuropeEconomics.

³¹ Source: Lars Fjeldsoe-Nielsen, 'Silicon Valley's European stars are returning home. Obstacles have either been removed or fallen away', in: Financial Times, September 7, 2016.

³² Interview with Mr. Fjeldsoe-Nielsen.

The reasons behind this are financial, according to Feldsjoe. Investments in the start-ups typically are paid-out after four years. The first wave of Europeans settling and founding businesses in Silicon Valley started about eight years ago. After two times four years, these Europeans have enough fuel in their tank to return to Europa, where the start-up climate has changed radically. These returnees now bring their networks and expertise to Europe. Opportunities in Europe have increased dramatically. The tech and start-up scenes are booming in Europe. Another trend is the increasing number of Americans settling down in European cities, for example Stockholm.

There are no data to support the claim of a reversing trend of start-up entrepreneurs – EU and non-EU – coming from Silicon Valley and settling in ecosystems all over Europe. Additional research to substantiate these observations, and investigate what European governments could to reinforce this trend, is needed.

Policies to stimulate return

Campanella (2014) argues that European policymakers should design policies on fostering return immigration of highly skilled talents: 'Returnees arrive in Europe with new human, social, and financial capital. Thanks to their professional and educational experiences abroad, returnees often foster the transfer of new technologies and encourage fruitful intellectual exchanges with the international labour force. If they have accumulated savings abroad, returnees can also help establish innovative new businesses, adapting successful models that they encountered during their years abroad.'33

What would help is to give favourable tax conditions to returnees. Secondly loans under favourable conditions will help as well (for example EIF could play a role in this). The idea of a tax exemption has also been put forward by Campanella (2014):

Come Home, Europeans³⁴

Campanella (2014) argues that returnees should be offered tax credits, preferential tracks to enter the job market, and special access to credit to run a business. To keep costs down, these reintegration policies should be targeted at specific age groups and skill sets. Engineers, scientists, and digital entrepreneurs below the age of 40 should be a priority, because they are the most likely to set up new companies and boost the growth of the economy.

"Nevertheless, the most brilliant emigrants won't be persuaded to return solely on the basis of financial incentives. They will also want to feel that Europe offers them the best opportunity to realize their potential. This will require structural changes to the European economy: European policymakers should remove regulatory barriers to innovation, open up insular universities to innovative research and teaching methods that are used abroad, and encourage continuous intellectual exchange between the private and public sectors. In general, Europe's conservative attitude toward innovation and entrepreneurship needs to profoundly change. Rather than be fearful of economic dynamism, Europeans need to embrace it.

Engaging the European diaspora will not necessarily be a panacea for Europe's economic challenges. There are at least two reasons why. First, EU member states will not evenly share the benefits of remigration. Those countries that are most in need of human capital will struggle to create attractive environments for returnees. Indeed, if southern Europeans return to Europe, they might prefer to move to the more stable countries of northern Europe.

Edoardo Campanella, Come Home, Europeans. Europe's Brain Drain Problem Is Becoming a Major Crisis, October 16, 2014 EuropeEconomics.
 Source: Campanella, Edoardo, Come Home, Europeans. Europe's Brain Drain Problem Is Becoming a Major Crisis, Foreign affairs, October 16, 2014 EuropeEconomics. See also: Campanella, Edoardo, Reversing the Elite Brain Drain: A. First Step to Address Europe's Skills Shortage, March 2015, Journal of International Affairs, Spring/Summer2015, Vol. 68 Issue 2, p195.

Second, remigration will inevitably be a source of social tensions. Those who have never left the country might resent the preferential treatment offered to returnees and could challenge their privileges. For that reason, it will be important for European policymakers to make investments in order to avoid widening inequality, not only in terms of income but also in terms of human capital. For example, governments should fund lifelong learning programs and other employment training programs."

Through the establishment of an information hub where entrepreneurs can find all the information they require to set up their business, complete their teams and find funding, the current scheme will make Europe more attractive to non-resident EU entrepreneurs as well. The information hub is further elaborated in Chapter 5.

3.4. Retain non-EU students and researchers

Retaining non-EU students and researchers by fostering their start-up and entrepreneurial ambitions within the EU, fits into the two -step approach top highly skilled migration that is currently advocated in many OECD countries.³⁵ In this two-step approach, innovative and entrepreneurial foreign potential that already resides in the country could be retained by changing the status for these people from, for example, student or researcher into entrepreneur. These policies have been advocated in the US and for example Australia by attracting students and changing their status once they have become entrepreneurs.

The advantage of retaining non-EU graduates is that they have gained understanding of the local, national, or even European context for starting-up a business, have established networks from their studies, and may have learned the local language – all increasing the chances of success. As we encountered in our interviews, language is often one of the major obstacles for start-ups coming to Europe. Since many successful entrepreneurs have started their business while still in university (see in the US for example Facebook's Mark Zuckerberg), foreign students should be allowed to do this as well.

Potential of international students

The EU is the single leading destination for international students and has overtaken the United States as the most popular destination of choice. The European Union more than doubled its international student population between 2000 and 2012. In 2012 the EU Member States hosted a total of 855,000 third country national students.³⁶ Detailed data on first study permits issued confirm a steady growth of the non-EU student population, with 454,000 first permits issues in 2012 and 525,635 permits issued in 2015 (16% growth in 3 years). Almost half of the permits were granted by the United Kingdom (44%), followed by France (13%), Poland (7%) and Spain (6%).

This data covers students permits for all types of higher education, and not particularly those permits related to specific studies that are disposed to start-up innovative high-tech businesses (such as technical, business, science, engineering, marketing, and design). However the relative high concentration of non-EU students in a relatively small number of EU Member States will give us some indication of the geographical concentration of the target group of non-EU students residence permit holders' for the EU scheme.

 $^{^{35}}$ OECD and EU (2016), Recruiting Immigrant Workers: Europe 2016, OECD Publishing, Paris. To be found online at http://dx.doi.org/10.1787/9789264257290-en.

³⁶ OECD and EU (2016), Recruiting Immigrant Workers: Europe 2016, OECD Publishing, Paris. To be found online at http://dx.doi.org/10.1787/9789264257290-en.

Table 3.6 First permits issued for education (study) by EU Member States, 2015

	Total	%
United Kingdom	229,097	44%
France	70,027	13%
Poland	39,308	7%
Spain	33,096	6%
Italy	22,870	4%
Ireland	22,075	4%
Other EU-countries	109,162	21%
TOTAL	525,635	100%

Source: Eurostat, First permits issued for education reasons by reason, length of validity and citizenship [migr_resedu] Last update: 02-09-2016; Education reasons: study.

With regard to the countries of origin, the majority of the international students in the EU are coming from China, with India as the number two country of origin, followed by Russia, the US, Ukraine and Nigeria (Table 3.7, 2012 data). 37

Table 3.7 Global flows of tertiary-level students to the EU-28 from selection of countries, 2012

	China	India	Russia	US	Ukraine	Nigeria	Total Top-6	%
United Kingdom	76,913	29,713	3,574	14,950	822	17,542	143,514	49%
Germany (2013)	19,441	5,645	9,480	3,884	5,444	504	44,398	15%
France	26,479	1,955	4,300	3,201	1,524	238	37,697	13%
Other EU	25,138	6,770	11,283	3,877	14,797	3,449	65,314	22%
TOTAL TOP-6	147,971	44,083	28,637	25,912	22,587	21,733	290,923	100%
% of total	50.9%	15.2%	9.8%	8.9%	7.8%	7.5%	100.0%	

Source: http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx.

³⁷ Countries that appear in start-up programmes in Europe are for example: Iran: 17.155; Brazil: 16.623; Pakistan: 16.008; Vietnam: 13.949; Korea: 11.891; Canada: 9.434; Australia: 3.096; South Africa: 2.151.

Student retention

However, student retention ratios are relatively low in Europe. A study by Weisser (2016) suggests that the retention ratios of students in the EU are between 16% and 30%, depending on the calculation method used. The percentage of students that remain varies across the EU Member States, however the overall conclusion is that international students in the European Union mostly leave when they graduate.³⁸

As EU Member States vary significantly in their national visa and residence-permit policies, there are also large differences for students in relation to their rights to work and undertake entrepreneurial activities. There are differences in: the number of hours they can work, work permit requirements, measures to help students stay on after graduation, maximum duration of the studies, conditions to keep student status, conditions for the post-graduation job permits (OECD and EU 2016, p.67). In most countries foreign students are not allowed to start-up a business. For example, in the Netherlands, Dutch students can start-up a business during their studies, but that is not permitted for foreign students. This is an obvious obstacle for these students to engage in entrepreneurship.³⁹

The revised Students and Researchers Directive 40 has introduced at EU level the possibility for foreign students and researchers to stay for at least nine months in an EU country, to look for work or set up a business and making it easier for foreign nationals to move around Europe. With Directive 2016/801, a first step in the right direction has been taken to help those who find a job to stay after their studies.

The EU scheme could foster the mobilisation of non-EU innovative and entrepreneurial talent by supporting students to stay on after their studies and start-up their own business in Europe, as it will foster one-stop-shop information on start-up ecosystems in the EU and tailored business support to non-EU entrepreneurial innovators, and (potentially) additional start-up visa opportunities and funding opportunities.

3.5. Refugees and asylum seekers

Refugees and asylum seekers with a highly skilled innovative or entrepreneurial background might be specific groups to target. There are some local initiatives located throughout Europe which are aimed at supporting aspiring refugee entrepreneurs to start-up their own business. For example, Delitelab in Amsterdam, DesignLab of the University of Twente in the Netherlands or Startup Refugees in Finland, and a recent initiative in Germany. DG GROW has launched two calls for proposal to 'to support the creation, the improvement and the wider dissemination of support schemes for migrant entrepreneurs'. Also worth mentioning is Science4refugees', the EURAXESS – Researchers in Motion initiative to match refugees and asylum seekers who have a scientific background with European scientific institutions (no current data are available in regard to number of persons supported).

The DG GROW Guidebook on Migrant Entrepreneurship that was recently compiled provides a comprehensive analysis of Good Practices in Promoting and Supporting Migrant Entrepreneurship. ⁴² A number of recommendations are made to improve migrant entrepreneurship support, such as leveraging volunteering and corporate sponsorship; ensuring diversification of funding to make support initiatives more resilient; and use information technology to make information easily accessible. Although the Guidebook's main target group is much broader than only highly-skilled entrepreneurs, its main conclusions apply equally well to our target groups: the importance of local knowledge and access to business networks are paramount to fostering success.

³⁸ Weisser (2016) based on Eurostat data (retrieved from OECD/EC, 2016, p.247.

³⁹ See also the ToR, p34.

 $^{^{\}rm 40}$ The Directive does not apply in Denmark, Ireland or the UK.

 $^{^{41}\} More\ information:\ https://ec.europa.eu/growth/smes/promoting-entrepreneurship/we-work-for/migrants_en.$

⁴² It may be found here: http://ec.europa.eu/DocsRoom/documents/18421.

Amsterdam-based **DELITELABS** brings together refugees, migrants, and locals in a pre-startup school, equipping them with business skills and helping them integrate into European society. DELITELABS, co-founded by Christof Hawle and Michaela Krömer, is a place for people to learn how to develop a solid business idea and to gain a better understanding of what it is like to start their own company. Originally started in 2015 to combat youth unemployment in Spain, Italy, and Greece, DELITELABS moved to Amsterdam in 2016 and began accepting refugees and migrants in cooperation with the City of Amsterdam and THNK School of Creative Leadership and Innovation.

DesignLab at the University of Twente is currently a home-base for aspiring refugee entrepreneurs. Fourteen young Syrian refugees from a pre-startup school Delitelabs are based at the University working on their business ideas. Delitelabs is a non-profit foundation offering free of charge intensive courses for aspiring entrepreneurs. The initiative is based in Amsterdam and focuses on teaching refugees and young unemployed people, who wish to explore entrepreneurship and develop their professional ideas.

Turning asylum seekers into entrepreneurs! Startup grants from **Startup Refugees** promote the employment ideas, and integration into society, of entrepreneurial people who are being granted asylum in Finland. The seeds of businesses can already be sown in refugee reception centres. The Startup Refugees programme maps out the skills, entrepreneurial experience and business ideas of residents at reception centres – and offers startup grants for the best ideas. The first microenterprises could, for example, support the statutory tasks of reception centres, such as housing and food provision.⁴³

3.6. Beneficiaries' needs

The EU scheme will be designed from the perspective of non-resident entrepreneurial innovators according to their needs and potential attracting factors. It follows from the general literature, discussions among EU experts (and our own investigations, that the main needs and attraction factors are: access to specific local ecosystems (geography); access to local support and information; access to via/residence permits access to funding (public and private); favourable taxation regimes; attractive conditions in which to live ('liveable cities'); and access to infrastructure (IT and physical infrastructure).

In addition to these direct needs and attraction factors, a favourable macro-economic, regulatory, legal and social context is imperative. For example, access to markets for goods and services, a favourable climate for innovation and entrepreneurship, levels of red tape and (over)regulation, flexibility of labour markets, general attitudes towards innovation and entrepreneurship, rule of law, defence of property rights and privacy, levels of corruption and a safe and stable society.

As follows from the Startup Heatmap Europe 2016 study, ,the main reasons why start-ups move are, in particular, to gain access to talent and the quality of the ecosystem, followed by a low burnout rate. Access to funding is rated lowest of the four factors (Table 3.8).

 $^{^{43}}$ Technology Review (2016) How Finland is Turning the Refugee Crisis Into a Brain Gain. Retrieved from: http://technologyreview.me/en/business/how-finland-is-turning-the-refugee-crisis-into-a-brain-gain/.

Table 3.8 Relevance of factors for start-up location choice

	Relevant	Not Relevant
Access to talent	71%	10%
Access to ecosystems	69%	7%
A low burnout rate	51%	15%
Access to capital	44%	16%

Source: Startup Heatmap Europe 2016, p.11.

In the table on the next page, the main needs and attraction factors that could be addressed by the EU scheme, are presented, including supporting evidence from the general literature, experts and our own investigations:

- · Access to specific local ecosystems (including networking);
- Local support and information;
- Funding;
- · Visa and residence permits.

Table 3.9 General overview of needs

Need Attraction factor	Evidence from literature	Evidence from interviews (examples)
Access to specific local ecosystems (including networking)	Migrants are likely to be attracted by specific local ecosystems rather than the EU as a whole; bright people are attracted where there is a critical mass of other bright people; entrepreneurs are attracted by clusters, especially in the university setting (such as Cambridge, and university based incubators in Germany: Gründungszentrum). In a study by Leatherbee and Eesley (2014) among beneficiaries of Start-UP Chile, it appears that (out of 157 respondents), 45% stated that networking was the most relevant aspect of the program and 29% of respondents stated peer learning as a relevant aspect. Only 17% of respondents stated that the USD 40,000 grant was important. Access to talent and the quality of the ecosystem (access to support, partners and customers) is key for founders in their location choice. Access to capital is less relevant.	Interview B: The ecosystem location is decisive: a start-up will want to locate as close as possible to the R&D headquarters of the main players in their business. () The element of networking is most important for start-ups that are very early-stage and for entrepreneurs that are still quite young and have to build up their network. For more mature start-ups and experienced entrepreneurs, the peer groups themselves are less relevant.
Local support and information	Lack of information to highly skilled immigrants on rules and procedures and on what support is available where in Member States and Europe, are major obstacles. ⁴⁷ Clear information on how to access local capital and the availability of financial resources can help entrepreneurs in navigating the new system and save them time to start and build a company. Integration of financial support can be an incentive for entrepreneurs, (e.g. through creating a 6 months hub with including financing via a competition). A good example is Start-up Chile. ⁴⁸ However, it is not the most important factor. Immigrant entrepreneurs may lack language skills, country-specific business skills and have limited familiarity with the mainstream business support infrastructure. They lack specific knowledge about procedures needed to set-up a business, getting access to capital, fiscal requirements, recruitment procedures, social security obligations and other bureaucratic regulations and procedures. ⁴⁹ Migrants cannot count on established business networks to build and expand their suppliers and custom base. ⁵⁰	Interview B: Language barriers and difficulties in navigating the bureaucracy of the host country play a big role. If there is no support from an incubator programme or government support package (e.g. French Tech Ticket), it is less likely that start-ups will relocate or become a success. Interview Ms. Pottharst: Support of a local business initiative that can guide you through the bureaucratic maze, helps overcome the language barrier, and can give you advice on business support is crucial for people that want to start-up outside their home country. Face-to-face contact is essential here. It is important to note that incubators are not always necessary: there is a trade-off and some are simply too expensive for starting entrepreneurs to be able to afford.

⁴⁴ Discussion paper for the experts meeting on A POSSIBLE SCHEME AT EUROPEAN LEVEL TO ATTRACT, RETAIN AND SUPPORT NON-EU HIGHLY-SKILLED ENTREPRENEURIAL INNOVATORS Brussels, 20 May 2015, p.34 and 35.

⁴⁵ Michael Leatherbee and Charles E. Eesley, Boulevard of Broken Behaviours: Socio-Psychological Mechanisms of Entrepreneurship Policies, Pontifical Catholic University of Chile - Department of Industrial Engineering Stanford University - Management Science & Engineering, August 15, 2014.

⁴⁶ Startup Heatmap Europe 2016, p.11.

⁴⁷ Discussion paper for the experts meeting on A POSSIBLE SCHEME AT EUROPEAN LEVEL TO ATTRACT, RETAIN AND SUPPORT NON-EU HIGHLY-SKILLED ENTREPRENEURIAL INNOVATORS Brussels, 20 May 2015.

⁴⁸ Discussion paper for the experts meeting on A POSSIBLE SCHEME AT EUROPEAN LEVEL TO ATTRACT, RETAIN AND SUPPORT NON-EU HIGHLY-SKILLED ENTREPRENEURIAL INNOVATORS Brussels, 20 May 2015, p.35.

⁴⁹ Maria Vincenza Desiderio, Policies to support immigrant entrepreneurship, MPI, August 2014.

⁵⁰ Maria Vincenza Desiderio, Policies to support immigrant entrepreneurship, MPI, August 2014.

Funding

Credit constraints tend to be greater for immigrant entrepreneurs than for native born, due to shorter credit histories, lack of collateral (e.g. home) ownership, typically higher failure rates of migrant enterprises.⁵¹ The DG Growth Study on Migrant Entrepreneurs confirms that difficulties in accessing funding from host countries' credit institutions and lenders are among the most stubborn obstacles that migrants face to start up or expand a business in their host country. Only very few migrant entrepreneurship support schemes directly provide funding to their clients – in the form of microloans and grants.⁵² The experts explained the importance of the existence of a number of venture capital funds and/or business angle circles and a transparent access to financial capital through accelerators, incubators, venture capitalists, business angles etc. Clear information on how to access local capital and financial resources available can help entrepreneurs in navigating the new system and save them time to start and build a company. Financial support through the support scheme would be a great incentive for entrepreneurs, (e.g. through creating a 6 months hub with including financing via a competition). A good example is Start-up Chile.53

Interview B: Generally speaking, the people you are trying to attract come from a less strong economy or do not have much money, so the issue of how you are paying for your living expenses is important. When this is taken care of through a subsistence allowance, you are completely free to focus on your business. Interview Ms. Pottharst: Especially for non-EU entrepreneurs, funding for the first concept development stage is essential. You want to put as much time, effort and funds into product development to build your business. Subsistence funding could be of great assistance – not only because it would enable a new group to come to the EU, but also because it would allow entrepreneurs that would have come anyway to put more focus into what they want to achieve.

Visa and residence permits

A start-up visa is key to be able to access the benefits of a single market with one visa or residence permit. Thus, the visa issues must be solved (...) Removal of visa issues is important, but the visa is not the 'pull factor', it is an enabler for aspiring entrepreneurs (...) A visa itself cannot attract entrepreneurs, but it can at least remove barriers (...) The visa issue is only a barrier that needs to be removed. (...) Issues related to visa include complicated application procedures and problems related to the renewal/extension of a visa after the initial company start.⁵⁴

Interview Fragomen: The biggest limitation now is that entrepreneurs cannot expand their activities to the European Union as a whole, since their permit is linked to a single Member State. Interview B: Current limitations to travelling around to do business deals are also not restricting: many visa/residence permits grant permission to spend up to 50% of the time abroad. However, national visa/residence permits do become a limitation when you want to scale up: it is not possible to establish subsidiaries abroad. (...) Startups that have a European teammember do not face many difficulties fully exploiting the EU Single Market.

⁵¹ Maria Vincenza Desiderio, Policies to support immigrant entrepreneurship, MPI, August 2014.

⁵² Interview DG Growth and website: http://ec.europa.eu/DocsRoom/documents/18421.

⁵³ Discussion paper for the experts meeting on A POSSIBLE SCHEME AT EUROPEAN LEVEL TO ATTRACT, RETAIN AND SUPPORT NON-EU HIGHLY-SKILLED ENTREPRENEURIAL INNOVATORS Brussels, 20 May 2015, p.35.

⁵⁴ Discussion paper for the experts meeting on A POSSIBLE SCHEME AT EUROPEAN LEVEL TO ATTRACT, RETAIN AND SUPPORT NON-EU HIGHLY-SKILLED ENTREPRENEURIAL INNOVATORS Brussels, 20 May 2015, p.34-36.

Favourable taxation

Targeted tax incentives lower the cost of capital for small businesses, startups, and those that invest in intellectual property. Favourable depreciation rules for small businesses, for example, help startups. However, the net effect of tax policies on any particular firm depends on its specific circumstances. These are conclusions of the study Tax Policy and Investments by Startups and Innovative Firms carried out by Joseph Rosenberg and Donald Marron.⁵⁵

Interview D: The taxation regime is important, not only because it directly impacts your profitability (start-ups should be exempt from VAT in the earliest phase). A favourable taxation regime is crucial to attracting investors as well. Interview F: One of the first things to do is to check the taxation regime, because in the beginning you really need all the money you can get to invest in your product development. If the taxation regime is much less favourable than e.g. the US, it is a non-starter as a destination.

⁵⁵ Tax Policy and Investments by Startups and Innovative Firms, Joseph Rosenberg, Donald Marron, Tax Policy Centre, February 9 2015.

Needs per target group

The table on the previous pages provides a general overview of needs factors. However these will differ per specific target group (Table 3.10). For example, visa/permits are not needed for returnees. Returnees may also require less – or less specific – business support. Migrants that already reside in the EU might need an extension if their current visa/permit is about to expire, or have to seek a status change (for example from a student and researcher permit, or an employee resident's permit to an entrepreneur or start-up permit).

In the design of the EU scheme, as well as with the promotion campaign, the different needs and attraction factors among different target groups will be taken into account.

Table 3.10 Specific needs per target group

	Aspiring migrants	Legal migrants	Returnees
Access to specific local ecosystems	YES	YES	YES
Local support and information	YES	To a lesser extent	To a lesser extent
Funding	YES	YES	YES
Residence permit	YES	Status change?	-
Favourable taxation	YES	YES	YES

Next to the entrepreneurs' needs, Europe has various characteristics that make it attractive for entrepreneurs. The reasons for which non-EU entrepreneurs would come to Europe are highlighted in the next section.

3.7. Why Europe?

In order to gain a better understanding of the motivation for non-EU entrepreneurs to start-up their business here, the study team has conducted a number of interviews that further explored this topic.⁵⁶ The main findings of these are outlined below.

One quite simple motivator is that non-EU entrepreneurs come here because they are invited by partners. Some multinationals that are headquartered in Europe scout for innovative, lean partners to work with and coax them into moving to Europe.⁵⁷ Moreover, incubators and accelerators can proactively look for start-ups to join and strengthen their ecosystem.⁵⁸

Top quality of research and universities

The European Union is also a world leader in research.⁵⁹ This holds especially for certain sectors such as pharmaceutical companies, but it is clear that 'Europe' is on the cutting edge of research developments in other areas as well.

⁵⁶ The reports of interview referred to below can be found in the Annex.

⁵⁷ Interview B.

⁵⁸ Interview A.

⁵⁹ Interview A.

Moreover, this also means that there are a lot of possibilities for non-EU citizens to study at excellent universities in the EU, which act as an easy way in for a prospective entrepreneur: through learning about the culture and local partners as a student, you identify market possibilities and increase your chances to succeed with a start-up. This is complemented by a business environment that is friendly to graduates wanting to establish a start-up.60

Favourable start-up regulatory (tax) regimes

In addition, some countries in Europe have a very favourable regulatory regime for start-ups. For example, in Denmark establishing a business costs just EUR 1.- and grants are made available by the government for innovative ideas.61 And in Italy, a favourable tax regime for start-ups means that starting businesses do not have to have too many concerns about paying large amounts of taxes while they are still busy establishing their market presence. 62

It certainly helps that some of the countries that already introduced a Start-Up visa/ permit have a 'landing desk' available for non-EU entrepreneurs, where government officials will pro-actively help them through the process with advice on taxes and regulations, 63 and take care of much of the red tape.64

Single European market

The Single Market of the European Union offers substantive opportunities and offers the potential of exponential growth when tapped into well. This most obviously holds for market opportunities, but it is instructive to look at this from the perspective of the support on offer for these entrepreneurs as well: one should see the EU as an accumulation of local ecosystems with complementary competitive advantages.65

Proximity of local ecosystems

A complement to the above is that in the European Union, several essential ingredients to a successful start-up life are in close proximity to each other:66

- The various local ecosystems are all located close to each other (interviewee A);
- Knowledge and know-how are within easy reach even if all the social media start-ups are in Silicon Valley, the serious start-ups are in the EU (interviewee A);
- Qualified and skilled people are available from various countries (and for competitive rates) (interviewee A and D);
- Different cultures to enjoy and to learn from are to be found practically within a stone's throw, broadening your horizons immensely (interviewee F).

Availability of public funding

Moreover, even if there is not as much private funding available as in the US, there is a wealth of public funding (grants and subsidies) available in the EU from regional, national and EU governmental bodies – although this is only available once you have already established your company in the EU.⁶⁷

⁶⁰ Interview C.

⁶¹ Interview D.

⁶² Interview F. 63 Interview F.

⁶⁴ Interview B.

⁶⁵ Interview B.

⁶⁶ Interview A (local ecosystems; knowledge and know-how; qualified and skilled people), interview D (qualified and skilled people), interview F (diversity of cultures).

Interview C.

Culture to live and work

Finally, as compared to other destinations such as the US or in Asia, the EU represents a much more stable work environment, where companies tend to genuinely take care of their employees rather than fire them at will, and one can find a better work-life balance.⁶⁸ Motivations for favouring Europe as a start-up destination, may be a mixture of personal relations (family connections), historical or cultural connections or preferences, rational considerations (such as availability of specific ecosystems or technologies, markets, tax regimes, etcetera), and subjective perceptions, projections or even 'dreams' of a successful and happy future in Europe, specific European countries or locations. It is important to take this into consideration when developing the promotion campaign.

 $^{^{\}rm 68}$ Email exchange with Mr. Exter.

4. EXISTING SCHEMES

4.1. Scheme components

Support for start-ups may consist of the following three elements:

- Financial support (funding);
- Business support (non-financial);
- A start-up visa or residence permit; fast-track access to a visa or residence permit; or help to get a permit.

4.1.1. Business support (non-financial)

Business support for start-ups may comprise a variety on non-financial support elements:

- Legal advice;
- Tax advice:
- Advice on social security obligations;
- Financial advice (including access to finance);
- Administrative support;
- Mentoring and network support;
- Language courses;
- Multi-lingual financial literacy and entrepreneurship training;
- Introduction to the host-country's environment and culture;
- Entrepreneurship training;
- Support in facilitating access to visa / residence permits;
- Support in facilitating access to credit and raising (start-up) capital.

It should be noted that business support may also include support on getting a visa/permit, which is different from managing the application process or assessing the visa/permit applications, or support on getting access to funding, which is different from actually providing funding.

Business support to start-ups may be provided by incubators, accelerators, or start-up schools who are specialised in providing support to start-ups and scale-ups. Incubators may provide shared office space, which is rented under more or less favourable conditions to the users of the incubator, a pool of shared support services to reduce overhead costs, professional business support or advice ('coaching'), and network provision, which may be internal and external.⁶⁹ Incubators may also provide funding as an additional service, mostly in the form of subsistence money, in return of a percentage of the equity of the company. In Europe most public incubators do not provide financial support.

However start-ups may also be supported by a wide variety of other types of organisations, such as universities or research institutions, national or local government agencies dealing with start-ups and migration, chambers of commerce, individuals or institutions providing financial support, various other public or private entities.

⁶⁹ Anna Bergek and Charlotte Norrman, Incubator best practice: A framework, 2008, Technovation, (28), 1-2, 20-28.

With 'incubators, accelerators and other support providers' in this report we mean: incubators and accelerators, but also universities, science parks, research institutions, government agencies or any other organisation that can provide business support, knowledge of the start-up ecosystems and funding options to non-EU resident entrepreneurs.

It also should be noted that not every start-up needs or wants the support from an incubator or accelerator. This can be either because they are already too 'mature', in terms of their start-up stage or in terms of being experienced as an entrepreneur. It could also be the case that they find the fee charged by an incubator for its services is considered too high. Other intermediaries or institutions may also provide support or advice (for example. It is important that every (non-)EU entrepreneur will be able to use the web platform's functionalities and find the required information and partners on there without being forced to work with an incubator.

4.1.2. Financial support

Getting an idea off the ground and making it into a viable business is not an easy task. Most entrepreneurs require some seed money to get started, yet without a track record obtaining a loan is burdensome if not impossible. In Europe more than third of already existing start-ups, have not been able to get a bank loan financing needed according to a survey published recently by the European Commission.70

Start-ups need financing in all stages of their development. However, their financing needs differ per stage of their development. A business in the seed stage will look for a first investment including subsistence funding. As the business is in a stage where it is an idea, entrepreneurs need to develop a proof of concept, prototype their product and launch it to the first clients which requires support. Start-ups in their early stage and later stage have by now developed a product which might also already generate first revenues for the entrepreneurs. They might thus need less or no subsistence support but rather investment into tailoring their product for the market.

The challenges in obtaining funding are applicable for the three groups that the EU scheme is aimed at (aspiring migrants, legal migrants and European returnees). However, in the interviews we have learnt that those entrepreneurs that are already in the European Union (as students or researchers) or Europeans returning to the EU, have easier access to funding as they know the local systems better and are more familiar with the entrepreneurial culture of the respective Member State. The most disadvantaged are the aspiring migrants that could set up a prosperous business in Europe, yet have limited information about funding options in the Member States.

Europe is not an easy place to get start-up funding. Several interviewed start-ups mentioned that investors in Europe are more risk-averse and the business culture is more conservative in Europe than in the USA. This financing issue could be characterised as a financing gap in early stages of the business life cycle. The existence of such a gap was confirmed also by the EY report on Venture Capital and Start-ups in Germany (2015).71

In general, getting access to finance is considered to be a barrier in tapping into the growth potential of start-ups and scale-ups in Europe. 72 Europe is in this respect lagging behind the United States, as it has been calculated that, for example, in 2014 the amount of venture capital available for funding start-ups and scale-ups in the US was USD 26 billion, compared to only EUR 4 billion in the EU.73 Public funding is (widely) available, but coherence and transparency of public funding opportunities for innovative start-ups should be enhanced.

From the interviews with entrepreneurs and incubators, navigating through the possibilities of private funding poses a similar obstacle as with public funding: there are challenges to find the right source,

⁷⁰ http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=7893.

⁷¹ http://www.ey.com/Publication/vwLUAssets/ey-venture-capital-and-start-ups-in-germany-2015/%24FILE/ey-venture-capital-and-start-ups-ingermany-2015.pdf.

COM(2016) 733 Final.

⁷³ Thomson ONE in BSG Perspectives 'The State of European Venture Capital'. Retrieved from COM (2016) 733 Final, page 10.

in particular, for non-EU entrepreneurs. Note that the problem may be finding the right funding among the plethora of available lines of funding, and not the availability of funding in itself.

As start-ups typically will not qualify for traditional bank loans (according to the Startup Monitor 2015, only 5% of the start-ups in Europe received finding via bank loans), start-ups may use other financing mechanisms:

- Personal resources;
- · Public grants;
- Guarantees and equity investments;
- Crowdfunding.

Personal resources

Personal resources may for example come from money from savings or taking out a (second) mortgage on a residence to generate own capital to fund the start-up, or resources from friends and family. It seems from the European Startup Monitor 2015 (see also Chapter 2) that in Europe private financing is among the most important source of start financing, in particular own savings of the start-up founders (69%), secondly, money from friends and family (25%).

Public grants

Grants provided from public institutions are another way to support start-ups. National and local governments may have their own financial support schemes focused on start-ups. The process of acquiring a public grant often takes a long time, and only a selected number of projects are funded.

Globally, the most complete national scheme offering also grant support to foreign born start-up entrepreneurs is Start-Up Chile. The Start-up Chile (SUC) programme has raised the profile of entrepreneurship in Chile, boosted local interest in entrepreneurship and provided Chileans with a global network of business contacts.

Start-Up Chile

Start-Up Chile is a national scheme launched by the Chilean Government in 2010. The aim of the scheme is to attract early-stage, high-potential entrepreneurs worldwide. The ultimate objective of this scheme to position Chile as the innovation and entrepreneurship hub of Latin America. Since its introduction, around 500 companies and almost 900 entrepreneurs from a total of 37 countries have benefited from it.

The scheme is divided in three programs based on the stage of the start-up:

- S Factory: Pre-acceleration program for start-ups in early stage focusing in female founders. Selected companies benefit a financial support of about EUR 13,000 and three months acceleration;
- Seed: Acceleration program for start-ups with an efficient product. Selected companies receive around EUR 26,000 equity free and six months acceleration;
- Scale: Subsequent fund for start-ups that are already incorporated in Chile and proved to be performing. Selected companies receive around EUR 78,000 equity free under the condition that they incorporate and operate in Chile.

In Europe **French Tech Ticket** offers a grant of EUR 45,000 to a team of selected start-ups. Although (other) EU Member States programmes of this scale are not (yet) in place, there are various grants available for entrepreneurs in general. However, there is a large variety in the products that are on offer as well as the conditions and requirements that are associated with it. To navigate this environment of public financing and structures is complex, especially for non-EU entrepreneurs. The EU design scheme will have to address these difficulties.

Guarantees and equity investments

To help small businesses that have little collateral or are too risky to obtain loans from banks, guarantees are provided by public, private, or mutual guarantee institutions. These make a commitment to cover a part of the loss, in case the business defaults on its loan. This way the bank's risk is reduced to an acceptable level 74 and it can lend money to the company.75

Public institutions also support businesses by providing the equity investments that they need. Often they do this by investing into venture capital funds, who are experts in investing and helping high potential companies grow and succeed. These funds then seek out the businesses, close deals and exit to get not only a return on the tax-payers money, but also stimulating markets.

This public intervention stimulates small business, that are the main employer in the EU, while using private sector mechanisms and organisations.⁷⁶ At the same time it addresses a market failure, where projects with societal benefit. 77 but higher risk levels, or lower returns, or long lead-times get funded and stand a chance of succeeding.

Guarantees and equity investments in start-ups may come from incubators and accelerates, venture capital firms, angel investors (a high net worth individual who is willing to invest in exchange for an ownership stake in the start-up), mutual quarantee institutions and public institutions (either directly or indirectly via for example venture capital firms, incubators or accelerators). Both angel investors as well as venture capitalists usually invest only in companies with potential for high growth over time. They require an active role in business operations.

Crowdfunding

There are two types of crowdfunding that are closely tied to start-up investing: reward-based crowdfunding and equity crowdfunding.

- Reward-based crowdfunding is used for hardware start-ups and creative projects, where sites like Kickstarter and Indiegogo are global leaders. Users can back the projects they like and get something material in return (physical or digital products and services), receiving no equity from the teams or companies providing such goods;
- In equity crowdfunding, backers (investors) of the companies get equity in return, thus becoming shareholders of the companies and being able to participate in the future returns the start-ups might be able to provide to investors. This type of investing is often carried by platforms that serve as aggregators, choosing start-ups and inviting backers to invest in them through the platform, which get to charge a fee per deal closed. There is a variety of equity crowdfunding platforms in Europe, with the most popular being Seedrs, Companisto and FundedByMe. Equity crowdfunding regulation varies from country to country within Europe, which can be a hurdle for investors and start-ups interested in raising money this way.

As announced recently, 'the Commission will coordinate a pan-European platform where Member States' best practice on crowdfunding can be shared, together with an assessment of financing gaps in alternative sources of finance, to understand whether further public financing or other measures are needed.'78 This collection of good practices could enable entrepreneurs to learn from each other on how to best utilize this source of funding.

 $^{^{74}}$ Often set, or heavily influenced by legislation such as the Basel III (enforced in the EU by CRD IV).

⁷⁵ The process is more complicated and involves securitisation of bank's senior tranches of securities and derivatives, to increase the credit rating for sale on secondary market. However, in practice it works as mentioned above.

Minimising admin burden and cost to the taxpayer, since the brunt of the work is done by professionals paid by the private sector banks.

⁷⁷ The EIB for example puts down covenants and other requirements about the types of loans it will securitize, therefore making selection of types of projects possible.

78 COM(2016) 733 final.

In Section 4.3 loans, grants, guarantees and equity investments, will be further explored as EU funding for no-EU resident entrepreneurial innovators. Crowdfunding will not be explored further as the European Commission's latest staff document indicates that the EC decided not to step in crowfunding activities. Rather the Commission shall see how it develops and what national regulators will do. Possibility of the DG RTD in engaging with crowdfunding could be to certify existing platforms to provide a sign of quality (such as EBN certification of incubators).

4.1.3. Start-up visa/permit

More and more countries in the world (including OECD countries) have adopted or are considering to adopt start-up visa/permit or fast-track access to a visa or residence permit. These visa/permits may come in addition to other types of visa and residence permits that may be appropriate (but less targeted) for start-ups as well, such as:

- Self-employment visa/permits;
- Special talent and skills visa/permits;
- Entrepreneur (often for more mature businesses) visa/permits.

Start-up visa/permits concentrate more on early stages of the business cycle, while entrepreneur visa/permits are more appropriate for entrepreneurs in later staged of their business. The two may overlap somewhat depending on the specific requirements of the individual country that is granting the visa or permit (Table 4.1).

Table 4.1 Business stages and relevant visa/resident permits

Seed	Start-up	Scale-up	Maturity
Start-up visa/permit			
	Entrep	reneur visa/pe	rmit

The difference with self-employed visa/permits is that start-up and entrepreneur visa/permits often demand a business plan with specific requirements. Requirements may be related to the level of 'innovativeness' of the business, availability of investment capital, or expected economic contribution (jobs created, investment in specific economic sectors or regions).

The justification for countries to develop a specific start-up (and entrepreneur) visa/permits scheme may be both short-term and long-term:

- Investment into the national (and local) economy, the direct creation of jobs and the delivery of other direct economic benefits;
- Stimulating innovation, attracting international young and talented business minds, strengthening
 the start-up eco-structure that is internationally competitive and hence indirectly strengthening
 the national or local economy.

Many schemes contain a mixture of the two objectives, with for example Denmark and Chile more on the side of innovation, while Ireland and in particular Australia are more positioned towards direct economic benefits. Countries like Canada and Denmark stand somewhere in the middle.

Objectives o	f the start-up visa/permits (examples)
Canada	Build innovative businesses, create jobs, compete on a global scale
Australia	Enable successful business owners to invest
Chile	Convert Chile in an innovation and entrepreneurship hub
Singapore	Become a business hub and attract the best entrepreneurial minds
Denmark	Accelerate the development of a new market or industry
Ireland	Stimulate productive investment to business professionals with a proven success

In this design study the focus will be on visa/permits that are specifically aimed at start-ups, although there may be in some countries a limited overlap with the other types of entrepreneur visa. Conceptually, the difference mainly relates to how advanced the business plans is and what role innovation as a criterion plays in the business plan.

4.2. EU initiatives

To what extent does the EU plays a role in supporting non-EU resident entrepreneurial innovators, either by providing financial support, business support or offering opportunities for acquiring visa or resident permits? *The short answer is that – at this stage* – non-EU resident entrepreneurial innovators are not directly served by current EU provisions.

Visa and residence permits

There is no EU wide visa/permit for start-ups. The renewed EU Blue Card Directive (as of 2016, the original is form 2009) is meant to better attract highly skilled and educated employees – not entrepreneurs (albeit that they are allowed to start a business on the side – whereas a successful start-up demands full-time dedication). In order to be eligible a contract or job offer in one of the EU Member States is needed. The new Students and Researchers Directive is relevant to non-EU resident entrepreneurial innovators as students and researchers may stay at least nine months after finishing their studies or research in order to look for a job or to set up a business. This is a first step. However, as follows from for example our interviews, 6 months or even one year is too short to start-up a business. The Scientific Visa Package provided by EURAXESS (Researchers in Motion) is an information site that offers information for non-EU national researchers aspiring to enter Europe for work.⁷⁹

Table 4.2 EU visa/permit initiatives

EU visa/permit initiatives					
Source	Initiatives				
DG HOME	Access to Europe (general information)				
DG HOME	EU Blue Card				
DG HOME	EU Students and Researchers Card				

⁷⁹ https://EURAXESS.ec.europa.eu/information/#entry_conditions. The Scientific Visa package helps researchers to obtain a permission to enter, stay and work in the European Union Member States for the purpose of carrying out scientific research. It is designed to make the process of receiving a residence permit more easy for researchers wishing to carry out research for a short-term (up to 3 months) or long-term (more than 3 months) in the EU.

Financial support

From the interviews, we have learnt that one advantage of the EU has, it that it provides an abundance of grants in comparison to other places such as the US. The EU has established a number of schemes that provide grants to entrepreneurs.

Table 4.3 EU Funding initiatives

EU Funding initiatives				
Source/Implementer	Initiative			
DG GROW	Access to Finance (general information)			
DG GROW	COSME: Loan Guarantee Facility			
DG GROW	COSME: Equity Facility for Growth			
EASME	Horizon 2020: SME instrument			
EIB, EIF	Horizon 2020 (InnovFin)			
DG EMPL	EaSi			
DG RTD / EURAXESS	Horizon 2020 (Marie Curie)			
DG RTD	Horizon 2020 (other)			
DG CONNECT	ICT Innovation vouchers			

However limited funding is available in the early stage of start-up development, for both EU as well as non-EU entrepreneurs (Table 3.4). In addition, the rules for EU financial instruments are usually tied to EU legal entities (i.e. EU based SMEs), rather than individuals. However, to set up an EU entity is relatively uncomplicated, even for a non-EU citizens, but differences, time needed and requirements vary significantly across the EU in this matter.

Table 4.4 EU financing for non-EU entrepreneurial innovators

EU Finance for entrepreneurs	Focus	Products	Current Availability to non-EU Entrepreneurial innovators
COSME Loan Guarantee Facility, via intermediary credit and finance institutions	Start-ups at seed and early stage	Loans and Leases	As employee of SME established within EU Member states, EFTA, Eastern and Southern neighbourhood states.
COSME – Equity Facility for Growth	Growth-stage SMEs, especially cross-border	Venture capital and mezzanine finance	As employee of SME established within EU Member states, EFTA, Eastern and Southern neighbourhood states.
Horizon 2020 – InnovFin SME Guarantee Facility, via intermediary credit and finance institutions	Research-based and Innovative SMEs	Guarantees	As employee of SME established within EU or Horizon 2020 associated countries.
Horizon 2020 – InnovFin SME Venture Capital, via intermediary venture capital and business angels funds	Start-ups at seed and early stage	Equity	As employee of SME established within EU or Horizon 2020 associated countries.
European Fund for Strategic Investments – SME Window, via intermediary credit and finance institutions (EIF partners)	SMEs including micro- enterprises	Loans and equity	As employee of SME within EU member states.
Social Change and Innovation (EaSI), via intermediary microcredit providers	Micro-enterprises in start-up and development stages	Micro-Loans up to EUR 25,000	As employee of SME established within EU Member states, EFTI, Candidate and Potential Candidate countries.
European Investment Fund (EIF) via intermediary providers.	SMEs including micro- enterprises	Equity financing instrument, debt financial instruments and microfinance	As employee of SME established within EU Member States, in EU Candidate and Potential Candidate Countries and in the European Free Trade Association Countries.

Source: Ecorys 2017.

The European Commission has recently formulated that current financing initiatives (the new SME instrument, Horizon 2020) are 'better at supporting existing technologies and companies, than startups that are innovating in new markets or at the intersection between digital and physical technologies.' Current EU financial support schemes are seen as 'too complex, inflexible and slow' for the needs of start-ups and scale-ups.⁸⁰

A mapping of the EU funding opportunities reveals the conclusion that current EU funding schemes are not attuned to the needs of non-EU resident entrepreneurial innovators.

In general there are no real specific funding support initiatives for start-ups, in particular not in the seed and start-up phase. Most funding opportunities are designed for more established businesses, including SMEs. The majority of the funding initiatives are for EU nationals, people already residing in the EU or open to citizens of a limited number of non-EU countries (COSME programme). Funding under the Marie Skłodowska-Curie actions is open to researches looking for research grants, which is another category and does not provide funding for starting-up businesses.

Business support

For support activities at EU level similar observations apply.

Current EU support schemes do not contain tailored initiatives to the specific groups of non-EU resident entrepreneurial innovators. However the EU scheme could easily build upon EU programmes and initiatives that have been developed to date, in particular Startup Europe (DG CONNECT) and EURAXESS (DG RTD).

Table 4.5 EU Support initiatives

EU Support initia	EU Support initiatives						
Source	Initiative						
DG RTD	EURAXESS - Researchers in Motion						
DG CONNECT	Startup Europe						
EASME	Erasmus for young entrepreneurs (COSME)						
DG GROW	Enterprise Europe Network ⁸¹						
DG GROW	Access to Finance (general information)						
DG CONNECT	MY-Way in web entrepreneurship Links long list of initiatives, such as: Startup Europe Partnership (SEP); European Digital Forum; ePlus ecosystems; LIFE project; Pan-European Web Entrepreneurship; Startup Ecosystem; STARTUP SCALEUP; DIGISTART; TWIST; WeHubs.						

⁸⁰ COM (2016) 733 Final, page 8.

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⁸¹ Enterprise Europe Network non-EU locations are: ALBANIA, ARGENTINA, ARMENIA, BELARUS, BOSNIA AND HERZEGOVINA, BRAZIL, CAMEROON, CANADA, CHILE, CHINA, EGYPT, GEORGIA, ICELAND, INDIA, INDONESIA, ISRAEL, JAPAN, JORDAN, MACEDONIA THE FORMER YUGOSLAV REPUBLIC OF, MEXICO, MOLDOVA, MONTENEGRO, NEW ZEALAND, NIGERIA, NORWAY, PARAGUAY, PERU, RUSSIA, SERBIA, SINGAPORE, SOUTH KOREA, SWITZERLAND, TAIWAN, TUNISIA, TURKEY, UKRAINE, USA, VIETNAM.

Startup Europe aims to strengthen the business environment for web and ICT entrepreneurs and contributes to the Entrepreneurship 2020 Action Plan. ICT startups can access support services such as advice, networking and legal assistance, from EU funded projects on the Startup Europe Club One Stop Shop. The objectives of Startup Europe (reinforce the links between people, business and associations in the start-up ecosystem, inspire entrepreneurs and provide role models, celebrate new and innovative start-ups, help them to expand their and give them access to funding) can easily be expanded with specific objectives and activities related to attracting non-EU start-ups to Europe.

Startup Europe has emerged as a recognised brand including international outreach and there are plans to reinforce Startup Europe by giving it a wider scope beyond the ICT and web start-up sector.⁸² From a content and branding perspective the EU web platform is best placed within the Startup Europe digital platform. Startup Europe addresses the target groups of the EU scheme directly.

Information and support provided by EURAXESS - Researchers in Motion is indirectly related to the objectives of the EU scheme. Since start-up initiatives are often tech and/or design enabled, and the target groups of the EU scheme consist of highly skilled innovators, there is a natural link with research and science. Also ecosystems are often located in the vicinity of research and higher-education centres. Incubators often have strong links and are established in partnership with universities. However the services provided by EURAXESS are aimed at researchers wishing to pursue their research careers in Europe or stay connected to it. As such, in its current form, there is no direct link with setting up a business. Further links between EURAXESS and the EU scheme may be developed.

In addition, the European Commission has launched the Science4Refugees initiative to help refugee scientists and researchers find suitable jobs that both improve their own situation and put their skills and experience to good use in Europe's research system. This initiative is about finding jobs, not about support in setting-up a business.

Another initiative that is indirectly relevant to non-EU residential entrepreneurial innovators is the EASME Erasmus for Young Entrepreneurs, the business exchange programme, providing practical and financial assistance to newly established or would-be entrepreneurs wishing to spend some time abroad with a host entrepreneur. It is currently accessible to all European new and host entrepreneurs⁸³ who have their permanent residence in one of 28 European Member States, Armenia, the Former Yugoslav Republic of Macedonia, Iceland, Montenegro, Moldova, Turkey, Albania, Serbia. Erasmus for Young Entrepreneurs may be extended to start-ups, incubators and entrepreneurs in international markets.

The Enterprise Europe Network (EEN)⁸⁴ helps small and medium-sized enterprises (SMEs) in the EU and beyond. Many services are offered free of charge by 600 member organisations, including chambers of commerce and industry, technology centres, universities and development agencies.

As one of the world's largest support networks for small and medium sized businesses (SMEs) it could play a role both within the EU as a welcome desk (designated intermediaries) and / or for promoting the scheme outside Europe.

Other information sites that are worth mentioning are Access to Finance (general information) and MY-Way in web entrepreneurship. These initiatives are at this stage not directly relevant to non-EU entrepreneurs, but they might be extended or adapted as well.

Overview

In Table 4.6 an overview is presented of the main EU funding and support initiatives for entrepreneurs.

⁸² COM (2016) 733 Final.

⁸³ Erasmus for Young Entrepreneurs. Retrieved from: http://www.erasmus-entrepreneurs.eu/page.php?cid=20.

⁸⁴ A European Commission-funded initiative that functions as an online marketplace and networking platform for entrepreneurs. See http://een.ec.europa.eu/.

Table 4.6 EU funding and support initiatives for entrepreneurs

Responsible DG/Body	Name of the (sub-) programme	Initiative	Financial support provided	Beneficiaries
DG GROW	COSME	Loan Guarantee Facility (LGF) via intermediary credit and finance institutions is a window of the Single EU Debt Financial Instrument which supports European enterprises' growth and research and innovation.	Loans and leases	SMEs established and operating in one or more EU Member States and COSME Associated Countries.
DG GROW	COSME	Equity Facility for Growth (EFG) is a window of the Single EU Equity Financial Instrument which supports EU enterprises' growth and research and innovation from the early stage, including seed, up to expansion and growth stage.	Venture capital and mezzanine finance	SMEs established and operating in one or more EU Member States and COSME Associated Countries.
Executive Agency for SMEs (EASME)	Horizon 2020	SME Instrument provides funding and support for innovation projects that will help them grow and expand their activities into other countries – in Europe and beyond.		High growth, highly innovative SMEs with global ambitions that want to disrupt the established value networks and existing market in EU and Horizon 2020 associated countries.
European Investment Bank (EIB), European Investment Funds (EIF)	(EIB), European series of integrated and complementary fir		Wide range of loans, equity financing and guarantees, either provided directly or via a financial intermediary (banks).	Existing innovative businesses and other innovative entities in Europe in EU and Horizon 2020 associated countries.
DG EMPL	European Social Fund	The Employment and Social Innovation (EaSI) programme is a financing instrument at EU level to promote a high level of quality and sustainable employment, guaranteeing adequate and decent	Microcredit	Vulnerable groups and micro-enterprises in EU countries, EEA and EFTA countries, EU candidate and potential candidate countries.

Responsible DG/Body	Name of the (sub-) programme		Financial support provided	Beneficiaries
		social protection, combating social exclusion and poverty and improving working conditions.		
DG REGIO	ESIF European Regional Development Fund		Loans, guarantees, equity financing, business grants	SMEs in EU countries.
DG RTD	Horizon 2020 Marie Curie actions	Research networks (ITN): support for Innovative Training Networks.	Grants	Universities, research centres, companies and individual researchers in EU and associated countries.
DG RTD	Horizon 2020 Marie Curie actions	Individual fellowships (IF): support for experienced researchers undertaking mobility between countries, optionally to the non-academic sector.	Grants	Researchers looking to enhance their career development and prospects by working abroad in EU and associated countries.
DG RTD	Horizon 2020	European Research Council.	Grants	Researchers of any nationality and age in EU and associated countries.
DG RTD	EURAXESS	EURAXESS General (Information and links).	No	Researchers in EU and non-EU countries.
DG GROW	COSME	Erasmus for young entrepreneurs (cross-border exchange programme).	Yes (subsistence)	New entrepreneurs, planning to set up their own business or have already started one within the last three years in EU and COSME Associated Countries.

Responsible DG/Body	Name of the (sub-) programme	Initiative	Financial support provided	Beneficiaries
DG CNECT	Horizon 2020	Startup Europe One Stop Shop = Startup Europe Club (networking, information and links).	No	Start-ups and stakeholders such as accelerators, investors and universities in and outside the EU. Mainly focused at Web and ICT entrepreneurs.
DG RTD	EURAXESS	Science for Refugees (internship and jobs).	No	The entire initiative is geared towards non-EU people: refugees and research institutions in the EU.
DG RTD	EURAXESS	Scientific Visa Package.	No	The entire initiative is geared towards non-EU people: researchers.
DG GROW	COSME	Enterprise Europe Network (support offices in and outside Europe).	No	If you have a business in the EU, or intend to set-up a business in Europe, you are eligible, even as a non-EU national.

In this table Horizon 2020 countries are, as of 7 November 2016, the following countries: all EU Member States, Iceland, Norway, Albania, Bosnia and Herzegovina, FRYOM, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland (partial association), Faroe Islands, Ukraine, Tunisia, Georgia, Armenia. COSME countries cover all EU Member States plus Montenegro, Turkey, Serbia, FRYOM, Albania, Bosnia and Herzegovina (signed in 2016, not yet in force), Ukraine, Armenia, Moldova, Iceland.

4.3. National initiatives

Start-up entrepreneurs are supported at local, regional and national level across the European Union. Support is provided by the private sector, public sector and public-private initiatives who often do not distinguish between EU and non-EU entrepreneurs. An analysis of a selection business support initiatives at regional and local level in the selected EU Member States for this study is provided in Chapter 3.4.

From the business support initiatives studied in the EU Member states, we learn that there is a broad range of support schemes in the studied EU countries, prividing a wude variert of non-financial advice and support, funding (loans, grants, equity funding, etcetera) and in some cases help with the acquistion or renewal of a visa or residemce permit - in in different combinations.

Currently six European Member States have implemented national visa/permit schemes that are specifically designed to attract foreign start-up entrepreneurs: Ireland (2012),85 Spain (2013),86 Italy (2014),87 Denmark (2015, pilot),88 France (2015)89 and the Netherlands (2015).90 Four countries have announced to implement a start-up visa/permit: Estonia, 91 Lithuania, 92 Slovakia, 93 and Portugal. 94

For example the Lithuanian Parliament approved on June 30, 2016, migration law revisions which would ease procedures to allow citizens belonging to non-EU countries wanting to launch innovative ventures to apply for a permanent residency (legal right to reside without full citizenship rights) in Lithuania. The Lithuanian Start-up Visa is effective since January 2017.

The Estonian government decided to implement a start-up visa program as of January 2017. The Prime Minister and the start-ups met at a roundtable in January 2016, where start-up taxation questions and the possibility of implementing a start-up visa/permit for foreign start-up talents were discussed. As a result of the meeting the taxation questions have been looked into by the Ministry of Finance and the living visa/permit questions by the Ministry of the Interior.

Non-EU start-up schemes are provided by Chile, Singapore, Australia, Canada (pilot), New Zealand, Korea and Israel. But there is more to come. The Chinese government has launched a series of visa/permit policies to facilitate the immigration process of highly skilled foreigners. Currently the new measures are in a pilot phase (from October 2017 up until March 2017) in a series of cities and regions across China. Full implementation is expected as of April 2017.95

Recently the Obama administration's proposed start-up rule, which would allow foreign-born entrepreneurs to stay in the country and grow their businesses. The question is to what extent this plan is still valid since the presidential elections, but the Obama proposal is part of a larger trend: a worldwide competition for attracting highly mobile global start-up talent.

⁸⁵ See http://www.inis.gov.ie/en/INIS/Pages/New%20Programmes%20for%20Investors%20and%20Entrepreneurs and http://www.inis.gov.ie/en/INIS/step-applic-form-dec2016.pdf/Files/step-applic-form-dec2016.pdf.

⁸⁶ See http://prie.comercio.es/en/Pages/Emprendedores.aspx.

⁸⁷ See http://italiastartupvisa.mise.gov.it/. 88 See http://www.startupdenmark.info/. This is a pilot that will run until the end of 2017.

⁸⁹ See http://visa.lafrenchtech.com/.

⁹⁰ See https://ind.nl/en/work/Pages/Start-up.aspx.

⁹¹ See http://www.startupestonia.ee/visa.

⁹² Source: http://www.startuplithuania.lt/en/news/startup-visa-approved-by-the-lithuanian-parliament.

⁹³ A program dedicated to startups located in Slovakia was approved by the Slovak government in June 2015. There is no known implementation date for this project. The criterion for enabling startups from outside the European Union to operate in the country is to cover the costs of the team's residency in Slovakia for a period of one year (the initial draft assumes a required amount of €8,000). Source: http://startuppoland.org/wp-content/uploads/2016/06/ProgramyWizowe_v14EN_final.pdf.

See http://portugalstartups.com/2017/01/startup-visa-gateway-indian-startups-portugal/ and http://observador.pt/2017/01/09/costa-anunciavistos-startup-para-jovens-empreendedores-indianos/ [Portuguese].

95 Forum on Policy and Practical Measures to Promote Researchers' Mobility between EU and China, 8-9 September 2016, Beijing, Summary

Report.

4.3.1. Overview

In Table 3.7 an overview is presented of the visa and residence permits analysed in this study. Apart from genuine 'start-up visa/permit schemes' (such as in Denmark, the Netherlands, Ireland, and Italy), there are in the examined countries visa/permits available for more mature business, self-employed entrepreneurs, graduate entrepreneurs and visa/permits for special talents and skills. Not part of the analysis is the start-up visa/permit that is announced to be open from 1 January 2017 in Lithuania and the recent plans in the US to have a specific start-up visa/permit.

Entrepreneur Rule in the US

In August 2016 the Obama administration proposed the so-called International Entrepreneur Rule. The proposed rule would give immigrant business owners a new option for staying. To qualify, an applicant must have an "active and central role," and a significant ownership stake, in an American company founded in the last three years. Applicants must have at least a 15% ownership stake in a start-up where they have a central role in operations, and have raised either USD 345,000 from private investors, or USD100,000 from government sources. Entrepreneurs in any industry would be eligible to apply, but the new rule would be especially significant for the technology field – in particular by creating an immigration route for start-up founders of Silicon Valley's businesses. It is estimated that around 2,940 entrepreneurs a year may qualify for this new rule. The International Entrepreneur Rule cannot be labelled as a start-up visa/permit as such, but is more a way for established start-up entrepreneurs to prolong their stay. The Department of Homeland Security's 155-page proposal was open for public comment for 45 days. Since the presidential elections in the US, however, the broader visa/residence permit approach in the US has changed (see below).

Impact of change in US leadership

The impact of the election of Donald Trump as 45th President of the United States of America may well be felt in Europe as well. On the campaign trail, the President had expressed criticism of the H-1B visas that are used to attract more than 65,000 non-US tech workers annually. The new US Attorney General Jeff Sessions, whose Department is policy-owner of the visa, has also long been critical of such via programmes, arguing that they replace American workers with foreigners.⁹⁷ Importantly, the International Entrepreneur Rule introduced by former President Barack Obama which would from 17 July 2017 allow foreign entrepreneurs to start up a business in the US, ⁹⁸ seems set to be abolished before it even takes effect.⁹⁹ The exact effect of this is at this moment not measurable. However, it seems likely that the apparent animosity towards foreign workers emanating from top US leadership will dissuade at least a portion of entrepreneurs from establishing their business in the US. It is also likely that a portion of these entrepreneurs could, with the right message, be persuaded to establish themselves in the EU instead.

⁹⁶ New York Times (2016) Entrepreneur immigration. Retrieved fromhttp://www.nytimes.com/2016/08/27/business/entrepreneur-immigration.html?_r=0; US Department of Homeland Security (2016) International Entrepreneur Rule. Retrieved from: https://www.uscis.gov/sites/default/files/USCIS/Laws/Articles/FR_2016-20663_793250_OFR.pdf.

⁹⁷ See https://www.theguardian.com/technology/2016/nov/21/tech-workers-visas-h-1b-reduction-trump-administration.

⁹⁸ See https://onlinevisas.com/usa/obamas-international-entrepreneur-rule-provides-internationals-startup-visa/.

⁹⁹ See http://www.geekwire.com/2017/trump-may-kill-obamas-plan-allow-foreign-entrepreneurs-build-startups-u-s/.

In addition to these countries it is worth mentioning that the Israeli government decided to introduce in 2016 an Entrepreneur Visa for businesses that wish to start up (create or develop their idea or product) in Israel. Applications must be approved by the Ministry of Economy before a visa/permit application is submitted. The visa/permit is valid for up to 27 months and may then be converted to a B-1 Foreign Expert Visa sponsored by a qualifying employer. Israel is seen as a start-up nation that according to the economist, had in 2012more high-tech start-ups and a larger venture capital industry per capita than any other country in the world¹⁰⁰.

The analysis in this chapter builds upon own research and previous visa/permit-scheme analysis, in particular: The study by ICF on the Blue Card Directive. 101

¹⁰⁰ The Economist (2012) What next for the start-up nation? Retrieved from: http://www.economist.com/node/21543151.
101 ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016. In Volume II an extensive overview is provided of visa/permit schemes in EU and non-EU countries. Also included are: the EU 'Expert Seminar on the Attraction of Entrepreneurial Talent to the EU' on 23 June 2016 in Brussels (background paper provided for the meeting and key points circulated after the meeting); The recent study by Magdalena Beauchamp and Eliza Kruczkowska, Visa Policy for StartupsAuthors, Startup Poland 2016; Other research on this topic, in particular Migration Advisory Committee, Review of the Tier 1 Entrepreneur and Graduate Entrepreneur routes, September 2015; Migreat, Josephine Goude, Worldwide startup visa policies compared, London, 18 May 2015; and our own research. For this we have designed two templates: one for analysing visa/permit schemes and another for analysing business support schemes.

Table 4.7 Types of visa/permit schemes

	es of visa, permit schemes	Start-up	Self employed	Graduate	Talent and skills	Mature business
Austria	Red-White-Red card for self-employed workers	YES	YES			
Denmark	Start-up Denmark	YES				
Denmark	Establishment Card (for graduates)			YES		
France	Paris French Tech Ticket	YES				
France	Residence France Talent Passport				YES	
Ireland	Start-up Entrepreneur Programme (STEP)	YES				YES
Ireland	STEP second track (12 months) (for graduates)	YES		YES		
Italy	Italia Start-up Visa	YES				YES
Italy	A permit for autonomous work		YES			
Netherlands	Start-up entrepreneur visa Nederland	YES				
Netherlands	Self-employment scheme		YES			
Spain	Residence permit under Law 14/2013	YES				
Spain	General self-employment permit		YES			
UK	Tier 1 Entrepreneur Visa	YES	YES			
UK	Tier 1 Exceptional Talent Visa	YES			YES	
UK	Tier 1 Graduate Entrepreneur Visa	YES		YES		
Australia	Business Innovation and Investment (Provisional)					YES
Australia	Business Innovation and Investment (Permanent)					YES
Australia	BusinessTalent (Permanent) Visa (132)					YES
Canada	Start-up visa Programme	YES				YES
Canada	Self-employed persons Programme		YES		YES	
Chile	Start-up Chile Programme	YES				YES

		Start-up	Self employed	Graduate	Talent and skills	Mature business
New Zealand	Entrepreneur Work Visa	YES				YES
Singapore	EntrePass	YES				
USA	H-1B Specialty Occupation Visa				YES	
USA	O-1A Extraordinary Ability and Achievement				YES	
USA	EB-5 Visa (permanent)					YES
USA	E-1 and E-2 Treaty investors					YES

Source: Ecorys 2017.

The start-up visa are analysed in more detail. Table 4.8A presents an overview of the general characteristics of the visa/permit schemes, Table 4.8B an overview of the access requirements is presented and in Table 4.8C the main features of application and renewal are given.

Table 4.8A General characteristics

		Started in year	Open to start-up entrepreneurs	Open to nature business	Non- financial business support provided	Financial support (public funding)	Maximum on number of visa /permits granted	Points based system (assessme nt)	Endorsement (link to an incubator programme)
Europe									
Austria	Red-White-Red card for self-employed key workers	2011	YES	-	-	-		-	-
Denmark	Start-up Denmark	2015	YES	-	-	-	50	YES	-
France	Paris French Tech Ticket	2015	YES	-	YES	12,500 EUR	50	-	Not up front, but access provided
Ireland	Start-up Entrepreneur Programme (STEP)	2012	YES	YES	-	-	-	-	-
Ireland	STEP second track (12 month) (for graduates)	2014	YES	-	YES	-	-	-	YES (designated incubator)
Italy	Italia Start-up Visa	2013	YES	YES	-	-	-	-	OPTIONAL (for fast track)
Netherlands	Start-up entrepreneur visa Nederland	2015	YES	-	-	-	-	-	YES (designated incubator)
Spain	Residence permit under Law 14/2013	2013	YES	-	-	-	-	-	-
United Kingdom	Tier 1 Entrepreneur Visa	2008	YES	-	-	-	-	YES	OPTIONAL

		Started in year	Open to start-up entrepreneurs	Open to nature business	Non- financial business support provided	Financial support (public funding)	Maximum on number of visa /permits granted	Points based system (assessme nt)	Endorsement (link to an incubator programme)
Non-Europe									
Australia	Business Innovation and Investment (Provisional) (188)	2012	-	YES	-	-	-	YES	-
Australia	Business Innovation and Investment (Permanent) visa (888)	1976	-	YES	-	-	-	-	-
Australia	BusinessTalent (Permanent) visa (subclass 132)	1976	-	YES	-	-	-	-	-
Canada	Start-up visa Programme	2013	YES	YES	YES	-	2.750	YES	YES (designated incubator)
Chile	Start-up Chile Programme	2010	YES	YES	YES	13,000 EUR 26,000 EUR 78,000 EUR	200-250	-	Not up front, but access provided
New Zealand	Entrepreneur Work Visa	2014	YES	YES	-	-	-	YES	-
Singapore	EntrePass	2004	YES	-	-	-	-	-	OPTIONAL

Sources: Ecorys investigations; ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016.; EU 'Expert Seminar on the Attraction of Entrepreneurial Talent to the EU' on 23 June 2016 in Brussels (background paper provided for the meeting and key points circulated after the meeting); Magdalena Beauchamp and Eliza Kruczkowska, Visa Policy for StartupsAuthors, Startup Poland 2016; Migration Advisory Committee, Review of the Tier 1 Entrepreneur and Graduate Entrepreneur routes, September 2015; Migreat, Josephine Goude, Worldwide start-up visa policies compared, London, 18 May 2015.

Table 4.8B Access requirements

Country	Scheme	Investment funds required	Subsistenc e funds required	Limited to specific sectors*	Job creation required	Innovation requirement
Europe						
Austria	Red-White-Red card for self- employed key workers	-	YES	-	YES (undefined)	-
Denmark	Start-up Denmark	-	YES	YES	-	YES ("Seize an opportunity and accelerate the development of a new market or industry")
France	Paris French Tech Ticket	-	NO	YES	-	YES (must be in a growth phase)
Ireland	Start-up Entrepreneur Programme (STEP)	EUR 50,000 / 30,000	NO	-	YES (10 jobs)	YES (Must be a "high potential start-up)
Ireland	STEP second track (12 months visa) (for graduates)	-	NO	-	-	YES
Italy	Italia Start-up Visa	EUR 50,000	YES	-	-	YES (15% is R&D 1/3 workforce has PhD or 2/3 Master; 1 industrial patent licensed)
Netherland s	Start-up entrepreneur visa Nederland	-	YES	-	-	YES (3 conditions: new to NL; new technology; innovative organisation and process)
Spain	Residence permit under Law 14/2013	-	YES	YES	YES (undefined)	YES (Must be innovative and beneficial for Spanish economy)
United Kingdom	Tier 1 Entrepreneur Visa	GBP 200,000 / 50,000	YES	-	-	-

Country	Scheme	Investment funds required	Subsistenc e funds required	Limited to specific sectors*	Job creation required	Innovation requirement
Non- Europe						
Australia	Business Innovation and Investment (Provisional) visa (188)	AUD 800,000	-	-	-	YES (in points based system)
Australia	Business Innovation and Investment (Permanent) visa (888)	AUD 1,500,000	-	-	-	YES (in points based system)
Australia	BusinessTalent (Permanent) visa (subclass 132)	AUD 1,000,000	-	-	-	YES (in points based system)
Canada	Start-up Visa Programme	CAD 200,000 / 75,000	YES	-	-	YES (Build innovative businesses via acceptance by incubators)
Chile	Start-up Chile Programme	-	YES	YES	-	YES (Position Chile as innovation and entrepreneurship-hub of Latin America)
Singapore	EntrePass	SGD 50,0000	-	-	YES, undefined	YES (innovativeness requirement)
New Zealand	Entrepreneur Work Visa	NZD 100,000	-	-	YES (varies)	YES (in points based system)

Sources: Ecorys investigations; ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016.; EU 'Expert Seminar on the Attraction of Entrepreneurial Talent to the EU' on 23 June 2016 in Brussels (background paper provided for the meeting and key points circulated after the meeting); Magdalena Beauchamp and Eliza Kruczkowska, Visa Policy for StartupsAuthors, Startup Poland 2016; Migration Advisory Committee, Review of the Tier 1 Entrepreneur and Graduate Entrepreneur routes, September 2015; Migreat, Josephine Goude, Worldwide start-up visa policies compared, London, 18 May 2015.

*Sectors	
Denmark	Life science, ICT, design and clean-tech and sustainable energy
Ireland	Tech industry (ICT).
Spain	ICT/Engineering
Chile	High-tech industries

Table 4.8C Application and renewal

Table 4.00 Ap	Dilication and renewal					
		Application procedure	Application costs	Duration of permit	Renewal conditions	Permit to family members
Europe						
Austria	Red-White-Red card for self-employed key workers	Within 8 weeks		1 year	YES (to a settlement permit)	YES
Denmark	Start-up Denmark	8 weeks	EUR 235	2 years	YES (3 years)	YES
France	Paris French Tech Ticket	1/2 year application process	Free	1 year	YES (6 months)	-
Ireland	Start-up Entrepreneur Programme (STEP)	Within 8 weeks	EUR 750	2 years	YES (3 years + 5 years)	YES
Ireland	STEP second track (12 months visa) (for graduates)	Within 8 weeks	EUR 750	1 year	YES (apply for STEP)	-
Italy	Italia Start-up Visa	Within 30 days	EUR 73,50	1 year	YES (1 year, same procedure)	YES
Netherlands	Start-up entrepreneur visa Nederland	49 (average) to 60 days	EUR 307	1 year	YES (as self-employed entrepreneur)	YES
Spain	Residence permit under Law 14/2013	Within 30 days	EUR 60	1 year	YES (1 year)	YES
United Kingdom	Tier 1 Entrepreneur Visa	Varies	GBP 944	3 years and 4 months	YES (2 or 3 years)	YES

Sources: Ecorys investigations; ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016.; EU 'Expert Seminar on the Attraction of Entrepreneurial Talent to the EU' on 23 June 2016 in Brussels (background paper provided for the meeting and key points circulated after the meeting); Magdalena Beauchamp and Eliza Kruczkowska, Visa Policy for StartupsAuthors, Startup Poland 2016; Migration Advisory Committee, Review of the Tier 1 Entrepreneur and Graduate Entrepreneur routes, September 2015; Migreat, Josephine Goude, Worldwide start-up visa policies compared, London, 18 May 2015.

4.3.2. Visa/permit characteristics

Stage in the business life cycle (start-ups and/or mature business)

The analysed visa/permits are open to businesses in early stages of their life cycle ('genuine start-ups'), namely businesses in seed and start-up phases, and more mature entrepreneurs with successful start-ups or businesses in non-EU countries, namely businesses in their scale-up phase.

Examples of the first category are Denmark, France, Ireland (second strand, the 12-month immigration permission), and the Netherlands. The schemes of Ireland (STEP) and Italy, Canada, New Zealand and Singapore are open to both start-ups and established businesses. The schemes of Spain and Chile have specific strands for start-ups and established entrepreneurs. In Table 4.9 the stage in the business life cycle (darker rows for genuine start-ups) is related to the requirement of investment money. It reveals that in general schemes open to established businesses often - but not always - require money available for investment.

Table 4.9 Target groups of the visa/permit (dark rows is early business phases)

Country	Target group	Funding required
Denmark	Start-ups	-
Ireland 2nd	Early stage potential start-ups	-
Netherlands	Start-ups in all stages of the life-cycle (but not 'mature')	-
Spain	Genuine start-ups	-
Chile	Pre-acceleration program for early start-ups (women in particular)	-
Austria	High-potential start-ups and investors	-
France	Gifted and ambitious entrepreneurs	-
Ireland STEP	High-potential innovative start-ups and established businesses	YES
Italy	Innovative start-ups and established businesses	YES
Spain	Established businesses	-
UK	Entrepreneurs investing in the UK	YES
Australia	Entrepreneurs with business experience	YES
Canada	Genuine start-ups and established businesses	YES
Chile	Acceleration program for start-ups with a functional product	-
Chile	Follow-on fund for top performing start-ups (scale up)	-
New Zealand	Genuine start-ups, established businesses	YES
Singapore	Genuine start-ups, established businesses	YES

Source: Ecorys 2017.

Financial support

In two countries government funding is provided to start-ups: France and Chile. In France, 70^{102} selected start-ups receive EUR 45,000 per team in 2017. In Chile start-up Chile programme is divided in three strands where 200 to 250 applicants per annum receive an equivalent of about EUR 13.000, EUR 26.000 and EUR 78,000.

French Tech Ticket

The French Tech Ticket was launched in May 2015. The 23 awarded start-ups from around the world were officially received at the French president's Elysée Palace in March 2016 and hosted by 10 incubators in Paris.

Out of 722 applications, 23 start-up projects were awarded the French Tech Ticket. Therefore, the welcome package has been expanded in the second edition. The number of awarded start-ups will more than triple in 2016 and the number of host incubators (partnering in this programme) increased from 10 in Paris to 41 in major French cities.

Currently, its second edition takes place. It will host 70 start-ups, which is more than triple the number hosted in the first edition. Half of them will be hosted in Paris and the other half in other major French cities (Lyon, Bordeaux, Aix, Toulouse, etc.). The 70 French Tech Ticket awarded projects will be revealed in December 2016 for the new class to arrive in France in January 2017.

The welcome package offers:

- Funding: EUR 45,000 per team with no loss of equity (EUR 20,000 to cover personal costs and EUR 25,000 to cover professional services);
- Resident Permit: Fast-track procedure to obtain a French resident permit;
- 12 months incubation: Dedicated office space in one of France's 41 partner incubators;
- Acceleration program: Tailored program of Masterclasses, Networking Events, Mentoring sessions;
- Soft Landing Pack: "Welcome Guide" and special offers from our partners to help winners relocate easily to France;
- Help Desk: A dedicated contact to help foreign entrepreneurs through administrative procedures.

Restrictions on number of visa/permits issued

The two visa/permit that provide funding 'naturally' have restrictions on the number of applications granted (Chile, France). Denmark and Canada also have limited the number of visa/permit issued in their start-up visa/permit programmes, which demonstrates a focus on a selected number of high quality applicants, instead of volume. The Canadian maximum is relatively high (2,700), however the number of visa/permits granted to date is limited. It must be noted that in countries without limit, the number of successful applicants is low, with the exception of the UK Tier 1 Entrepreneur visa.

 $^{^{102}}$ This is more than triple the number awarded in 2016 (23 awards), the first edition of the French Tech Ticket.

Assessment of the business plans

In most countries third parties are being tasked with evaluating the innovativeness and growth potential of business ideas. This may be through a Ministries of Economic Affairs, independent panel of experts, venture capitalists and angel investors, or incubator programmes. ¹⁰³ Some schemes are evaluated on the basis of points based system (Denmark, United Kingdom, Australia, New Zealand) in which applicants can score points across different criteria, which ensures a great level of flexibility (a low score on one aspect can be compensated by high scores elsewhere). In other countries, business plans are generally assessed per relevant category. ¹⁰⁴

Third party endorsement

A few schemes require third party endorsement (mandatory). Some stimulate third party endorsement (optional), which enables the applicant to gain access to the visa/permit on more favourable terms. An overview is given in Table 4.10.

Table 4.10 Third party endorsement

Endorsement is mandatory	Endorsement is optional	No endorsement required
Netherlands Ireland 2 nd track Canada	Italy Australia United Kingdom Singapore***	Austria Denmark Ireland STEP France* Spain Australia Chile* New Zealand

^{*} Not up-front, but admission to the programme gives access to an incubator (community).

In the Netherlands the system is fully facilitator driven. In order to be accepted, backing by a certified business mentor or 'facilitator' is required (currently six in the Netherlands). Unlike STEP, the Irish STEP 12 month immigration scheme is an incubator driven system as well. Applicants shall be accepted to an accelerator programme before being eligible for a visa/permit application. Accelerators usually provide also some funding. In Canada visa applicants for the Start-up Visa programme must be admitted into one of the 14 designated Canadian business incubators/accelerators. In Italy incubator support is optional and will help with the application, which can then be done through a certified incubator. This gives access to a fast track procedure.

4.3.3. Access requirements and benefits

Subsistence money required

Most schemes require applicants a proof of subsistence, which is in general about EUR 1,000 per month or equivalent to this (with the exception of Denmark, where it is about EUR 1,500 per month). Apart from this, no other specific funds for investment are required in: Austria, Denmark, France, Ireland (second track), Netherlands, Spain and Chile.

^{**} For the fast track procedure.

^{***} One of the optional criteria is that the company is endorsed by a Singapore Government-supported incubator.

¹⁰³ Migration Advisory Committee, Review of the Tier 1 Entrepreneur and Graduate Entrepreneur routes, September 2015.

¹⁰⁴ ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016.

¹⁰⁵ See https://www.nyidanmark.dk/en-us/coming_to_dk/work/Start-up-denmark/Financial-requirements.htm.

Investment funds required

In less than half of the schemes, applicants shall have investment funding available for starting their business. Some counties have a threshold of having (access to) investment capital is around (an equivalent to) EUR 50,000. In Ireland for example, applicants must have secured funding of a minimum of EUR 50,000 from one or a combination of the following sources: Their own resource; a business loan; business angel/venture capital funding; grant from an Irish State Agency.

More money is required in Australia, the United Kingdom and Canada. In Australia the asset threshold varies between AUD 800,000 (EUR 540,000) for the Business Innovation Stream, AUD 1.5 million (EUR 1,000,000) for the Significant Business Stream. The assets should be personal or within the business. The threshold is lowered to AUD 1.0 million (EUR 675,000) if funding is received from an approved venture capital firm.

Table 4.11 Investment funds required

Country	Investment funds required (local currency)	Investment funds required (EUR)	
Ireland STEP	EUR 50,000 / 30,000	EUR 50,000 / 30,000	
Italy	EUR 50,000	EUR 50,000	
UK	GBP 200,000 / 50,000	EUR 232,000 / 58,000	
Australia	AUD 800,000 / 1,000,000 / 1,500,000	EUR 541,000 / 676,000 / 1,014,000	
Canada ¹⁰⁶	CAD 200,000 / 75,000	EUR 135,000 / 51,000	
Singapore	SGD 50,0000	EUR 33,000	
New Zealand	NZD 100,000	EUR 65,000	

Limited to specific sectors

Four schemes are limited to specific sectors: Denmark (life science, ICT, design and clean-tech, sustainable energy), Ireland (ICT), Spain (ICT and engineering) and Chile (high-tech industries)

Job creation requirement

Five schemes have a job-creation requirement (Austria, Ireland, Spain, Singapore, New Zealand). Only one of them provides a specific target: in order to be allowed to the Irish Start-up Entrepreneur Programme (STEP) a company must introduce a new or innovative product or service to international markets and be capable of creating 10 jobs in Ireland and realising EUR 1 million in sales within three to four years of starting up.

Innovation

Most schemes have formulated requirements on the innovative nature of the entrepreneur's business. However schemes differ in their definition of 'innovation' and the way in which this is being assessed. Italy and the Netherlands apply for example well-defined definitions of innovation. In other schemes there is more flexibility in the assessment of the innovative nature of the business.

¹⁰⁶ No investment is required if the entrepreneur is endorsed by a designated incubator/accelerator. The 75,000 and 200,000 CAD thresholds apply in the case, respectively, of endorsement by a designated Canadian angel investor group or a designated Canadian venture capital fund. This money is not the entrepreneur's own money but is made available by the venture capital fund or the angel investor group.

Innovativeness may be assessed via a points-based system (for example Singapore, Denmark, Australia), or by a panel evaluating the business plan (for example Chile and Austria). In Canada and the Netherlands, mandatory endorsement by a business incubator, should to a certain extent automatically assure that the applicant's business is innovative. The innovation requirement may also be linked to particular industries (ICT per example) to which the visa/permit is restricted (such as Denmark, Ireland, France and Chile).

In Table 4.12 an overview is provided of the innovation requirements. It also shows that some countries focus also on direct economic benefits, rather than primarily attracting innovation.

Table 4.12 Focus of the visa/permit: direct economic benefits and/or innovation

Country	Focus	Innovation requirement
Austria	Economy	Create macroeconomic benefits.
Denmark	Mixed	Accelerate the development of a new market or industry; Points-based system, with points for innovation.
France	Mixed	The company should be in a growth phase.
Ireland STEP	Mixed	High potential start-ups with a new or innovative product or service Creating10 jobs and realising EUR 1 million in sales.
Ireland 2nd	Mixed	Entrepreneurs attending incubators or innovation bootcamps in Ireland to allow them to prepare a STEP application.
Italy	Innovation	There is an 'innovativeness' test, which consists of clearly defined criteria.
Netherlands	Innovation	The product or service should be innovative, which is clearly defined.
Spain	Mixed	The business must be innovative and beneficial for Spanish economy.
UK	Economy	It is for those investing in the UK.
Australia	Mixed	Score on 'business innovation and investment', in the points-based system (registered patents, designs and trademarks).
Canada	Mixed	Build innovative businesses, via acceptance by one of the 14 designated business incubators/accelerators.
Chile	Innovation	Position Chile as innovation and entrepreneurship-hub of Latin America.
Singapore	Mixed	The business must also satisfy the 'innovativeness' requirement (introduced in September 2013).
New Zealand	Mixed	Innovation is part of the points-based system.

Italy has a strict definition of what is 'innovative':

Innovativeness test in the Italia Start-up Visa requirements:

- At least 15 per cent of the company's expenses can be attributed to R&D activities;
- At least 1/3 of the total workforce are PhD students, the holders of a PhD or researchers; alternatively, 2/3 of the total workforce must hold a Master's degree;
- The enterprise is the holder, depositary or licensee of a registered patent (industrial property) or the owner of a program for original registered computers.

The Netherlands for example has also a focus on 'innovativeness':

Innovativeness in the Start-up Entrepreneur Visa Nederland:

The product or service is innovative, determined as meeting at least one of the following conditions:

- The product or service is new to the Netherlands;
- A new technology for production, distribution or marketing is involved;
- There is a new innovative organisational and process approach.

However, this would, as an example, have excluded Facebook, since at the time the Netherlands already has similar initiatives called Hyves. Facebook would not have passed the innovativeness criteria if Mark Zuckerberg would want to establish his idea in the Netherlands.

Other admission criteria

Other admission criteria may be language skills, health test, health insurance and security clearance (no criminal record), or history (no previous bankruptcies or business failures).

General conditions for the Start-up Entrepreneur visa Nederland

- The 'start-up' entrepreneur holds a valid passport;
- The 'start-up' entrepreneur does not pose a danger to public order or national security;
- The 'start-up' entrepreneur is obliged to take out a health insurance policy;
- The 'start-up' entrepreneur must undergo a tuberculosis (TB) test in the Netherlands.

Application procedures and renewal

Application procedures are mostly one to two months. Start-up visa/permits are eligible for duration of one year and in some programmes longer (for example Ireland and Denmark two years). All start-up visa in Europe have the possibility of renewal. In most start-up visa (except French Tech Ticket and STEP second track) immediate families will be granted residence permission.

4.3.4. Lessons learned

Since most visa/permit only started over the past few years, it is too early now to do a full evaluation of the various schemes, their success factors, weak elements and lessons learned for an EU visa/permit scheme. A full evaluation should be planned for in a few years, however a number of lessons can already be drawn on the basis of evidence gathered during the course of this study. Indeed, it is crucial that these first lessons are learnt as soon as possible, because the network effects of entrepreneur ecosystems (the more entrepreneurs there are, the more attractive the ecosystem becomes) mean the EU cannot fall too far behind its competitors.

In most countries, only a limited number of start-up visa/permit have been issued (Table 4.13). It seems that the visa/permit requirements may be overly restrictive. One restriction lies, for instance, in the capital that entrepreneurs have to bring. For this reason Ireland lowered its threshold from 70,000 EUR to 50,000 EUR and Lithuania's adoption of the Start-up Visa effectively abolished the so-called 'rule of three' requiring that a company has at least three Lithuanian employees or foreigners who permanently reside in Lithuania. Another restriction is the definition of innovative business. In Italy, the definition of innovativeness is narrowly defined providing limitation to the type of business that qualifies for the visa/permit.

One can also argue that there is a general focus on quality over quantity in granting these visa/permits. The relatively low number of applications may be may also be due to the relative newness of the start-up visa/permit.

¹⁰⁷ See http://www.investlithuania.com/news/lithuania-to-boost-talent-attraction-through-start-up-visa/.

Table 4.13 Numbers of visa/permit applications (various years)

		Number	
Country	Scheme	ofapplicants	Number granted
Austria	Red-White-Red Card	No data	28 (2015)
Denmark	Start-up Denmark	238	52
France	Paris French Tech Ticket	1,372	50 (first round)
Ireland	Start-up Entrepreneur Programme (STEP)	52 (2012-2015, 3 years)	30
Italy	Italia Start-up Visa	132 (in 1,5 years)	94
Netherlands	Start-up visa Nederland	95 (2015)	21*
Spain	Residence permit under Law 14/2013	no data	82 (end 2014)
UK	Tier 1 Entrepreneur Visa	4,472 (2015)	2,928 (2015)±
UK	Tier 1 Graduate Entrepreneur Visa	179 (2015)	163 (2015)
UK	Tier 1 Exceptional Talent Visa	184 (2015)	179 (2015)
Australia	Business visa (subclass 188)	429 (2012-13), 739 (2013-14)	46 (2012-13), 342 (2013-14)
Canada	Start-up visa Programme	no data	16 approved, 60 in process
Chile	Start-up Chile	2,448 (2015)	90 (2015), 500 (since start)
Singapore	EntrePass	1,300 (2012), 1,000 (2013)	50% of applications

^{*21} granted, 26 in process, 28 denied, 20 retracted.

Source: Ecorys 2017.

In Ireland the STEP programme received only 52 applications during its first three years of existence, and only 30 visa/permits were actually granted. While Ireland is recognised as attractive for its low tax rates, the level of interest for the STEP programme is relatively low.

Two support schemes that come as all-in-one support, Start-Up Chile and French Tech Ticket, offer access to visa/permits, financial support and support in kind in one 'package'. Both schemes have attracted significant interest. In the first edition (2015) of the French Tech Ticket 722 start-up projects had been submitted for a total of 1,372 applicants. Out of these 23 start-up projects were awarded. The number of awarded start-ups will more than triple in the second edition (2016). Also interest in Start-Up Chile is high. From 2,448 applicants 90 start-ups were chosen to take part in the Start-up Chile in 2015. Both French Tech Ticket and Start-Up Chile schemes offer also financial support to awarded applicants. Availability of such support might be an important factor in decision-making of applicants about the location of their activities.

The successful launch of the French Tech Ticket is the result of, among others, a mix and complementarity of various elements composing the welcome package for start-ups. An important element is the funding of EUR 45.000 per team of 2 or 3 co-founders over the course of a year, of which EUR 20.000 to cover personal costs and EUR 25,000 to cover professional services. It also appears form our interviews that combining more than one support element in a scheme (in particular visa/permits with financial support) will improve access to the European market.

Marketing might also play a role in the number of applications. Out of all the analysed visa/permit schemes there is only a handful of countries have a coherent and strong marketing approach. Italy stands out as a good example of a smooth (online) visa/permit application, a user-friendly website and a widespread and state-of-the art marketing campaign (making use of IT channels and social media).

At the same time the Italian programme is highly selective in its definition of 'innovative start-ups'. This is seen as beneficial by the implementing authorities in the sense that start-ups are more likely to be successful. It is also the only genuine start-up visa/permits that requires funds for investment (EUR 50,000). This could indicate that state-of-the-art marketing is of key importance. This marketing approach, in combination with the user-friendly nature of the website (which is one-to-one related to the marketing campaign) could be relevant as example for an EU visa/permits. The Italian visa scheme also seems to be flexible enough to accept various sources of funding, and if the application is lodged through an incubator, the investment threshold becomes lower.

It seems that there is institutional fragmentation in some countries and a lack of policy coherence regarding strategies to attract innovative entrepreneurs from non-EU Member States. The interplay between various visa/permits is sometimes unclear. For example the Start-up Denmark scheme has a focus on innovative businesses, whereas the focus of the Establishment card is broader. It is unclear whether the Establishment card is seen as an entrance permit for the Start-up Denmark scheme or more broadly as an entrepreneurship or talent retention scheme. An open issue is also how entrepreneurs under the Establishment Card can switch to the Start-up Denmark scheme. Spain on the other hand, offers an umbrella scheme, which offers flexibility and the ability to switch between the different strands, for example from student to entrepreneurs.

Support for connecting to an innovation and entrepreneurial ecosystem seems to be essential as well. The tech start-up scene in Denmark for example strives to be a global one, which also means that the successful applicants for the Start-up Denmark can access co-working spaces, accelerators and networks. However, this does not come as a 'package' and there is no specific support from the government for doing this. Hence, it remains unclear how the connection to the existing ecosystems is supposed to happen in practice.

A few countries have a points-based system for assessing the applications. The advantage is that this offer a degree of flexibility in meeting the requirements, On the other hand, an evaluation of the points based system in Australia, contested the system as cumbersome and not suitable to grasp the entrepreneurial skills of potential migrants. Moreover, the fact that no technical experts but rather bureaucrats assessed the application was contested, as they may not formulate informed judgements.

In most countries, business plans are being assessed via an expert panel evaluation. The submission of business plan to a panel of experts with representatives from the national business community or (semi-)government contributes to quality assurance. However, some key aspects of the selection process are unclear: how the different selection criteria are weighted, how the innovative sectors are identified, and how the decisions made by the experts are justified. For example with Start-Up Denmark, two years after the initial permit under the scheme the measurement of the criteria is still unclear. Also in Spain, a lack of clarity on what constitutes a viable business plan and added value for economy is an issue.

Some countries take the role of third parties a step further. A few require third party endorsement (mandatory). They are fully facilitator driven. Some countries stimulate third party endorsement (optional), which enables the applicant to gain access to the visa/permit on more favourable terms. A strong element in the Netherlands Start-Up visa scheme is that the test of economic viability of start-ups and potential success of the entrepreneur is 'outsourced' through the use of certified incubators. Start-ups are required to find a facilitator who vouches for their business plan, with the government only playing a minimal role in oversight through the *Rijksdienst voor Ondernemen* (RVO). This leaves economic decisions, to a large extent, to the market. This can be a model for an EU-wide scheme, where it is not feasible or recommended to have the economic test done by an existing or new EU agency.

The United Kingdom introduced a genuine entrepreneur test in 2013 in order to safeguard the appropriate use of the scheme. However it appears that this measure has overstepped its initial intentions, by limiting the flow of possibly successful entrepreneurs by implementing a subjective test. Innovative activity and start-up success is driven by trial-and-error and the genuine entrepreneur test limits this opportunity. On the other hand, a certain degree of control has to be exercised to limit misuse of the visa/permit scheme.

Most schemes have formulated requirements on the innovative nature of the entrepreneur's business. However schemes differ in their definition of 'innovation' and the way in which this is being assessed. Italy and the Netherlands apply for example well-defined definitions of innovation. In other schemes there is more flexibility in the assessment of the innovative nature of the business.

In general we have observed a trade-off between the required level of 'innovativeness' and the requirement of having funds for investment (Table 4.14).

Table 4.14 Innovation r	requirements a	and asset	thresholds
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	No assets required	Low to medium asset threshold	High asset threshold
Clear link to innovation: demonstrate innovativeness	Netherlands France Chile	Italy	
Both innovation and direct economic benefits are important	Denmark Ireland 2 nd Spain Austria	Ireland STEP Singapore Canada New Zealand United Kingdom	Australia

The two most comprehensive non-EU initiatives are from Canada and Chile, in which the visa/permit scheme is embedded in a specific support programme. These schemes also specifically target new types of migrant entrepreneurs who have the potential to build innovative companies that can compete on a global scale and create jobs.

In Canada, the government partnership with private sector organisations that have experience working with and supporting start-ups is a new immigration policy approach. One of the original industry lobbyists, Boris Wertz, praised the government for taking an approach that actually resembles how start-ups get going: having an idea (or minimum viable product), measuring performance in the market, and revising. In short, it's a loop of build-measure-learn.

However, the number of visa/permits that have been issued is still limited. It seems that the biggest barrier faced by applying immigrant entrepreneurs in Canada is the approval of angel investor group, venture capital fund or business incubators/accelerators who will assist in identifying a suitable qualifying business. An applicant needs to convince a designated organisation on a business idea. After agreement with a designated organisation, this organisation will send the applicant a Letter of Support. In the Canadian start-up scheme no investment is required if the entrepreneur is endorsed by a designated incubator/accelerator¹⁰⁸.

Another problem is that the incubator and accelerator programmes designated in Canada focus on recruiting individual applicants. They are not mandated to recruit foreign teams, while that latter might be important for attracting highly skilled migrant entrepreneurial talent.

Start-up Chile has attracted a lot of global high-tech companies, the influx of start-ups is boosting local interest in entrepreneurship, and the the introduction of the Start-Up Chile seems also to have changed Chileans' attitudes and provided them with a global network of business contacts. However, five years after adoption of the scheme, the results are mixed. Despite Start-Up Chile's success, the scheme has faced a shortage of local venture capitalists and has struggled to retain the program's participants in Santiago. Around 80 per cent of Start-Up Chile participants leave Santiago after the six-month program and move on to the US. In addition, approximately 85 per cent of the funding for Start-Up Chile came from abroad, mainly from the US.

4.4. Business support initiatives

From the 28 business support initiatives studied in the EU member states, we learn that there is a broad range of active support schemes in the studied EU countries (See Table 4.15 for an overview). All but one of these support schemes provides business support in one way or another. Fifteen of the initiatives provide financial support. Financial support is mostly provided in the form of grants (such as in Austria at the Austrian Research Promotion Agency) or as prize of a competition (such as in the Estonian Ajujaht initiative). Alternatively, initiatives support the entrepreneur with loans from the government or venture capital (such as the case of Italy's Smart & Start initiative).

Table 4.15 Overview of support initiatives and the support they provide

Country	Name of the support initiative	Business support	Financial support	Support with visa/permit	Visa/permit created
Austria	Austria Wirtschaftsservice GmbH (AWS)	YES	YES	NO	NO
Austria	Austrian Research Promotion Agency	YES	YES	NO	
Austria	Vienna Business Agency	YES	YES	NO	
Austria	Academia Plus Business	YES	YES	NO	
Austria	Impact Hub Global	YES	YES	NO	

¹⁰⁸ The 75,000 and 200,000 CAD thresholds apply in the case, respectively, of endorsement by a designated Canadian angel investor group or a designated Canadian venture capital fund. This money is not the entrepreneur's own money but it is made available by the venture capital fund or the angel investor group.

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Country	Name of the support initiative	Business support	Financial support	Support with visa/permit	Visa/permit created
Austria	Sektor 5	YES	YES	YES	
Czech Republic	xPORT	YES	NO	NO	NO
Czech Republic	Prague Startup Centre	YES	NO	NO	
Czech Republic	Jihomoravské inkubační centrum	YES	YES	NO	
Czech Republic	Startup Yard	YES	YES	NO	
Denmark	The Capital's Entrepreneurship Program (HIP)	YES	NO	NO	YES
Denmark	Ethnic Business Promotion	YES	NO	NO	
Estonia	E-residency	NO	NO	NO	NO
Estonia	Ajujaht (Brainhunt) YES YES		YES	NO	
France	French Tech Ticket	YES	YES	YES	YES
France	Paris Landing Pack	YES	NO	NO	
Ireland	New Frontiers Programme	YES	YES	YES	YES
Italy	Smart&Start Italia	YES	YES	NO	YES
Netherlands	Startup Delta	YES	NO	NO	YES
Netherlands	YES! Delft	YES	YES	YES	
Portugal	Project promoting Immigrant Entrepreneurship	YES	NO	NO	NO
Portugal	StartUP Lisboa	YES	NO	NO	
Spain	Madrid Emprende	YES	NO	NO	YES
Spain	Barcelona Activa	YES	NO	NO	
UK	Ignite - Warwick Science Park's business incubation programme	YES	NO	NO	NO

Country	Name of the support initiative	Business support	Financial support	Support with visa/permit	Visa/permit created
UK	Global Entrepreneurs Programme	YES	NO	NO	
UK	LAUNCH.ed	YES	YES	YES	
UK	Tech City UK	YES	YES	YES	

These schemes may be linked to visa/permits (such as in the Netherland YES!Delft with the Dutch start-up visa scheme) but this is not a necessary condition. Six of the schemes provide active support with visa arrangements. For instance, the TechCity UK initiative acts as an endorsement agency for the UK Tier 1 Exceptional Talent Visa. Similarly, the Irish New Frontiers Programme offers guidance for the obtainment of the STEP 12 month immigration permission scheme. As a general trend, supplementary financial and visa/permit support differs per specific initiative.

At the same time, these 28 business support schemes are attuned to national context and local ecosystem. This is their strength. An EU scheme for entrepreneurs should therefore give national intermediaries who know the local ecosystem best (such as incubators, regional development agencies, Chambers of Commerce) an important role.

5. DESIGN OF THE EU SCHEME

The specific objective of the study is to design an EU-wide scheme to attract highly skilled non-EU resident entrepreneurial innovators, to facilitate the creation and development of high-tech companies in Europe, as well as smooth integration in the European economic ecosystem, for legal migrants and European returnees. 109

In this chapter, we build the components of the EU scheme for non-EU entrepreneurs (Section 5.1) and report on the process of examining how the EU scheme could be implemented. We highlight the key function of designated intermediaries to navigate the entrepreneurs to the right ecosystems (Section 5.2). In Section 5.3, we highlight EU and national financial support for entrepreneurs. As there are currently limited possibilities for non-EU entrepreneurs, we design options for EU financial support for non-EU entrepreneurs. Potential outlines of the EU start-up visa/permit are discussed in Section 5.4. Indications on how and where the scheme should be launched are presented in Section 5.5. In the latter section, we also focus on the access requirements for non-EU entrepreneurial innovators and long-term sustainability of the scheme. We portray the relevance, effectiveness and EU added value of developing and managing this scheme in Section 5.6, the potential number of beneficiaries in Section 4.7 and the economic effects of the scheme in Section 5.8.

5.1. EU scheme components

The EU support scheme should adopt a holistic approach, including access to incubators and accelerators, coaching, and financial help for setting up a business. It should also include a solution to address the visa/permit issue for international innovators. 110

The EU scheme may consist of the following five components (Table 5.1):

- Business support;
- EU financial support;
- EU start-up visa/permit (including possibility for a fast track; or help to get a visa/residence permit);
- A web based service platform;
- A publicity campaign.

Table 5.1 Components of the EU scheme

	EU scheme components	
A	Business support	A network of EU 28 designated intermediaries provides landing of the entrepreneurs to the local ecosystems. Local incubators, accelerators and other support providers can provide business support, knowledge of the ecosystems and funding options to entrepreneurs.
В	EU financial support	The financial support addresses subsistence of potential entrepreneurs for their first year of stay or the first period until they have set up their company and have been able to find investors.
С	Web based service platform	Information and hosting function that should build bridges between the existing ecosystems and relevant initiatives at

¹⁰⁹ Discussion paper for the expert meeting on a possible scheme at European level to attract, retain and support non-EU highly skilled entrepreneurial innovators, Brussels, 20 May 2015.

110 Discussion paper, Brussels, 20 May 2015 (ToR, page 31).

	EU scheme components	
		EU level. A one-stop shop for the three target groups of the EU scheme.
D	EU start-up visa/permit	The start-up visa/permit is the most crucial aspect to attract highly skilled entrepreneurs to Europe. Without the visa/permit the success of the scheme for non-EU entrepreneurs will be limited.
Е	Publicity campaign	Publicity campaign marketing Europe as a good place to start a business. The campaign will focus on the three target groups of the EU scheme. The campaign will have an international outreach as well as an intra-EU outreach towards third-country nationals already in Europe as students or researchers.

Not every scheme component or element is equally relevant to all three of the respective target groups. However the intention is to design one scheme that connects all relevant information and needs for all target groups. A detailed design of the components will be discussed in the next chapters: EU start-up visa/permit (Section 5.4) and EU financial support (Section 5.3), web based service platform (Chapter 6) and the communication campaign (Chapter 67). Central to the scheme are designated intermediaries that support the entrepreneurs in navigating through the detailed information and abundance of ecosystems in Europe in order to find the best lending in starting their business. This will be discussed Section 5.2.

5.2. Business support

In this section, we examine how the scheme will be implemented through existing structure at EU national, regional and local ecosystems together with the role accelerators, incubators and other support providers could play in the EU scheme.

5.2.1. Designated intermediaries and other support providers

One of the functions of the EU scheme is to steer non-EU resident entrepreneurial innovators to the right ecosystem and to link them with national or local intermediaries that are best placed to serve their needs for making their business a success.

As discussed in Chapter 3, one of the needs of the non-EU resident entrepreneurial innovators wishing to start-up or scale-up a business in the EU is having access to local support (financial and non-financial) and information about national and local circumstances. It follows from the interviews conducted for this study with entrepreneurs and incubators, that language barrier and difficulties in navigating the bureaucracy of the host country are an important obstacle for non-EU entrepreneurs to start-up a business in one of the EU Member States. Two central questions in the design of the EU scheme are: (a) how to link national and local incubators, accelerators and other support providers present in the 28 EU Member States to the EU scheme, and (b) how connect potential beneficiaries to the national and local incubators, accelerators and other support providers that are best placed to provide the specific support they need?

Incubators and accelerators are specialised in providing support to start-ups and scale-ups. However not every start-up or scale-up needs support, or needs support from a specialist incubator or accelerator. Financial and non-financial support may also be provided by other types of organisations. With 'incubators, accelerators and other support providers' we mean incubators and accelerators, but also universities, science parks, research institutions, government agencies or any other organisation that can provide business support, knowledge of the start-up ecosystems and funding options to non-EU resident entrepreneurs.

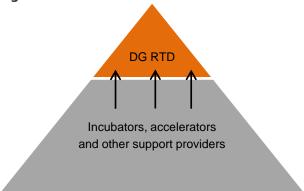
Involving incubators, accelerators and other support providers in the EU scheme and connecting the intermediaries with the scheme beneficiaries may be organised in three ways:

- Model A: Bottom-up development of a EU-wide pool of incubators, accelerators and other support providers in 28 EU Member States;
- Model B: Top-down appointment of 'designated intermediaries' in 28 EU Member States;
- Model C: A combination of the two (designated intermediaries and bottom-up development).

Model A: Bottom-up development

Model A is a relatively open model in which in principle every incubator, accelerator and other support provider that is interested in supporting non-EU start-ups can participate on in the EU scheme by developing their profile on the web platform. Figure 5.1 visualises this model.

Figure 5.1 Visualisation of model A



In Model A, The EU scheme serves in act as an open market place in which demand for and supply of support will be matched (compare with Airbnb). Every potential support provider will have the possibility to make a profile on the platform based on their expertise in terms of domain and the support mechanisms which they provide to entrepreneurs. Non-EU entrepreneurs select the support provider to which they want to apply to or work with, based on the lists of support providers available per domain and country on the web platform.

DG RTD shall develop a system of checks and quality standards to audit every support provider that creates a profile on the platform to ensure quality of these scheme participants. There are various ways to organise this (see section on Ensuring Quality of Intermediaries). For this model, we foresee Option 1 as being the most feasible. DG RTD would also need to provide an extensive campaign to reach to possible incubators, accelerators and other support providers in all Member States and inform them about this opportunity.

Model A has the following benefits and downsides (Table 5.2).

Table 5.2 Benefits and downsides of model A

Pro's	Con's
 Every potential support provider can participate on the platform without any selection from external parties (e.g. Commission, other intermediaries); Market driven, flexible and potentially (!) all-inclusive; Open to all incubators, accelerators and other support providers in Europe; Fully centralised support and management of the web platform. 	 High-scale promotion campaign (who are beneficiaries of secondary important after entrepreneurs) needs to reach all relevant incubators, accelerators and other support providers in all EU Member States to register on the platform; No/limited additional value for the support providers to register (depends on costs of arranging legal residence versus benefits of additional participants); Success of the scheme and platform is dependant on the promotion campaign to the incubators, accelerators and other support providers; Possibility of having non-representational spread of support providers across the EU Member States; Information asymmetry (entrepreneur has to select a support provider that can post information); EU has less control and overview; No security and quality checks on the support providers are in place.

Model B: Designated intermediaries

In Model B DG RTD selects a limited number of 'designated intermediaries' for every Member State. This could be one or several designated intermediaries per Member State (for example based on the size of the country and sectorial diversity). We will return to this issue later. The designated intermediaries' primary function is to enable the non-EU entrepreneurs to have a landing in the European ecosystems to start their business. The designated intermediaries shall by contracted for their services by DG RTD.

Figure 5.2 visualises this model.

Designated Intermediaries

Incubators, accelerators and other support providers

Non-EU resident entrepreneurial innovators may select one or more ecosystems in one or more EU Member States. This selection process will be highly individual and follow many different paths. Entrepreneurs may have connections in one or more EU Member States or have specific countries ecosystems in mind. They may also be guided to specific Member States or local ecosystem via the online platform which has a search and matching function (see next chapters).

The designated intermediary will primarily function as local guide or welcome desk to the entrepreneurs. They will provide landing to the ecosystem for the entrepreneurs and will answer their initial queries. The designated intermediaries will also assess the potential of the entrepreneurs from a business perspective: how likely is it that the idea or start-up is going to thrive, based on for example the business plan? Upon validation and the needs of the entrepreneurs, the designated intermediaries will connect the entrepreneurs with local support providers (if needed) or appointed intermediaries in another EU Member State. Hence, the designated intermediary serves as a match maker and adviser to the entrepreneurs. However when the platform is in a more mature stage, local support providers (such as incubators and accelerators) will present themselves directly on the platform (via the Ecosystem map) and entrepreneurs also have to opportunity to contact support providers directly.

The quality of the designated intermediaries shall be monitored and checked based on procedures established by DG RTD.

Model B has the following benefits and downsides (Table 5.3).

Table 5.3 Benefits and downsides of model B

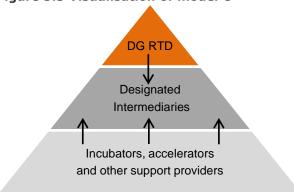
Pro's Con's Simplicity for entrepreneur; Limited number of intermediaries can be Decentralised support and management of directly contacted by an entrepreneurs; the web platform, gatekeepers function (per Intermediaries should be motivated or EU Member State); rewarded for their service to act on behalf of There are designated intermediaries that can the EU scheme; help and assess the entrepreneurs; Requires investment from DG RTD to appoint, EC keeps overview of the intermediary motivate and reward the appointed network; beneficiaries, as well as to audit their performance; EC keeps overview of interested entrepreneurs (monitoring possible via Responsibility on designated intermediaries to designated intermediaries); keep an overview; Designated intermediary guides entrepreneur Financial reward of the designated to local intermediaries; intermediaries needed. Personal and tailored service.

Model C: Designated intermediaries and bottom-up development

Model C is a combination of both model A and model B. The web platform constitutes of designated intermediaries (as discussed under model B) and is open to registration of all incubators, accelerators and other support providers that are active in start-up ecosystems all over Europe and are interested in supporting non-EU entrepreneurial innovators. In this model, the designated intermediaries will perform a gatekeepers function with regards to the quality of the interested support providers that are willing to register on the platform.

Model C may organically develop from a well implemented model B. Model C combines, on the one hand, designated intermediaries that serve as a welcome desk and local guide to the non-EU entrepreneurial innovators with, on the other hand, bottom up filling of the web platform with in principle all relevant incubators, accelerators and other support providers. Figure 5.3 visualises this model.

Figure 5.3 Visualisation of model C



Which model?

As we analyse the benefits and downsides of each of the three models, it seems that Model A might seem to enable the most flexible, inclusive and market-driven approach. However, a heavy pre-investment in promoting the scheme to incubators, accelerators and other support providers across Europe's start-up ecosystems in 28 EU Member States would be required in order to have a functioning web platform. This would require heavy resources for management of the platform to be employed first before the non-EU entrepreneurs could make use of the scheme.

The advantage of model B is that it provides simplicity for the non-EU entrepreneur, who is immediately guided via the web platform to a personal contact. As it appears from the interviews, such direct personal contact is important. Another advantage is that it will enable decentralised support and management of the EU scheme (organised per EU Member State). In this model, the designated intermediaries fulfil an important gatekeeper function.

Model C is needed for long term sustainability of the scheme. Having an open system where incubators, accelerators and other support initiatives can present themselves, enables the EU scheme to naturally adapt to future expansion and changes of the European ecosystems.

The designated intermediaries have a function to channel potential non-EU entrepreneurs to the most suitable local support providers. Designated intermediaries will also have an important role as a decentralised information provider and gatekeeper of the web platform. When the EU scheme has taken off and been well promoted, a gradual move to model C will naturally take place. The ultimate objective of the EU scheme is that it will be flexible, open and self-sustaining.

Designated intermediaries and support providers are presented at the web platform as follows:

Figure 5.4 Presentation of designated intermediaries



Figure 5.5 Presentation of incubators, accelerators and other support providers



5.2.2. Functions and costs of the designated intermediaries

In model B and C the designated intermediaries provide landing to non-EU entrepreneurial innovators (if required). They also play a substantial role in the practical day-to-day decentralised content management of the web platform (organised per EU member State), by posting country-specific news and events on the website and by moderating discussion groups relevant to 'their' country (see Section 5.2 on the next page). They also play an active role in the 'owned' promotion activities (Chapter 6).

This can be broken down into the following functions (Table 5.4):

- Map the ecosystem actors within their country;
- Map the (public) funding opportunities within their country;
- Place country-specific news and events;
- Act as gatekeeper of the web platform (including moderation of discussion groups and screening of support providers);
- Play an active role in promotion of the scheme (for example via social media).

Table 5.4 Roles of the designated intermediaries

Function	Purpose
Welcome desk for entrepreneurs (local guide).	Help entrepreneurs find their way to the best local ecosystem and funding opportunities for them, as well as linking to an organisation that can provide visa support when asked by entrepreneurs.
Map the ecosystem actors within their Member State.	Ensure that all (major) relevant actors are on web platform.
Map the (public) funding opportunities within their Member State.	Ensure that all (major) relevant funding opportunities are on the web platform.
Place Member State specific news and events.	Ensure that all relevant news and events are on the web platform.
Quality control of bottom-up registrations of intermediaries (in Model C), funding opportunities, events and forum discussion groups (gatekeeper of the web platform).	Ensure that all information that appears on the web platform is correct and reliable.
Perform an active role in promotion of the scheme (for example via social media).	Ensure maximum visibility of the scheme and provide up-to-date and real world content to the promotion activities.

Costs of designated intermediary support

In order to fulfil the central function in the EU scheme (as described before: provide landing, web platform quality control and content management, regular content provision to the owned communication channels) 0.5 to 1 FTE per Member State is needed. The involvement of the designated intermediary will depend on the entrepreneurial attractiveness, size of the local economy and maturity of the local ecosystem. For bigger Member States more than 1 FTE might be needed.

If we assume one designated intermediary per EU Member State and average staff costs of EUR 50,000 per FTE per year, the total costs for maintaining the network of designated intermediaries will be EUR 0.8 million to EUR 1.4 million. If we include the management of the EU scheme and intermediary network (1 FTE) and some overhead costs, the total costs will be between EUR 0.9 million and EUR 1.5 million (Table 5.5). These calculations should be considered as an indication and are based on averages.

 $^{^{111}}$ Based on interviews with European Startup Network, European Business Network and Ecorys estimation.

Table 5.5 Costs of the EU scheme's designated intermediary network, annually

Assumption	Value
FTE per EU Member State	0.5 (minimum) – 1 (maximum)
Staff costs per 1 FTE (salary)	EUR 50,000
Total staff costs per country	EUR 30,000 to EUR 50,000
Number of designated intermediaries	28
Total staff costs of network of designated intermediaries	EUR 840,000 - EUR 1.4 million
Management of EU network (DG RTD) = 1 FTE	EUR 80,000
Overhead (meetings, travel, etcetera)	EUR 20,000
TOTAL	EUR 940,000 - EUR 1.5 million

Source: Ecorys calculations.

We recommend at least one designated intermediary per Member State. This should be the case also in the Member States where no start-up visa/permit is currently available in order to provide support to legal migrants (students and researchers) and returnees. The presence of designated intermediaries in all EU Member States will also enable greater support when national and EU start-up visa/permit become available.

5.2.3. Selection of designated intermediaries

To enable this system, DG RTD shall set out a request for services to contract the designated intermediaries. The EU scheme should be implemented, if possible, through existing structures at EU, national, regional and local level to build on existing infrastructure. We have thus mapped the existing network and based on selection criteria recommend European Startup Network as the most suitable. In the following paragraphs we elaborate on the selection process.

Mapping of existing networks

We have mapped existing cross-border networks and initiatives that are active in promoting and support start-ups in Europe. These are:

- Startup Nations (SN);
- European Startup Network (ESN);
- European Business and Innovation Centre Network (EBN);
- Enterprise Europe Network (EEN).

Startup Nations (SN) is global network and platform made up of policy advisers dedicated to on exploring different regulatory changes and other policy and public sector programs to help accelerate start-up entrepreneurship in their country. Startup Nations is part of the Global Entrepreneurship Network (GEN), a platform of programs and initiatives engaging more than 160 countries while creating one global entrepreneurial ecosystem. The majority of the SN national initiatives are set-up to support national start-ups, however an increasing number of schemes also intend to attract foreign talent by offering tailored support to non-national start-ups, a start-up visa/permit, or fast-track visa/permit as part of the start-up support scheme, and even funding.¹¹²

¹¹² SN is a non-profit organization. The source of funding is unclear. The organization has been contacted for clarification however no response has been provided prior to the submission of the Final Report.

European Startup Network (ESN) was officially launched on September 7th, 2016 as European nonprofit organisation based in Brussels. ESN is unifying national start-up associations to create a common voice for European startups so that more can start, scale and succeed in the EU. Currently, ESN has 21 members each from one European Member State. By the end of 2017, ESN want to have full EU Member State coverage.

ESN is currently funded through sponsorships. In the future ESN aims for a mix of: membership fees from the national associations; sponsorships; services for startups and ecosystem stakeholders (such as providing analyses and reports, soft landing and go-t-market programmes); and subsidies for pan-European ecosystem building and projects. The national associations run on a combination of sponsorships and memberships. Next to that some of the associations receive private investments, some run acceleration programme and get paid from that while others contribute to EU project and receive European subsidies.

The European Business and Innovation Centre Network (EBN) is a non-profit organisation funded by membership fees and EU project. EBN is an umbrella organisation bringing together over 200 Business and Innovation Centres (BICs), incubators, accelerators and other support organisations, and 100 Associate Members that support the development and growth of innovative entrepreneurs, start-ups and SMEs. EBN was created in 1984 to coordinate the activities of EC Business & Innovation Centres (BICs). Over the last three decades, EBN has become active in supporting the development and growth of innovative entrepreneurs, start-ups and SMEs in Europe. EBN has signed strategic partnerships and alliances with several recognised European and international bodies. 113

The Enterprise Europe Network (EEN) is a European Commission-funded initiative that functions as an online marketplace and networking platform for entrepreneurs. It helps small and medium-sized enterprises (SMEs) in the EU and beyond. Many services are offered free of charge by 600 member organisations, including chambers of commerce and industry, technology centres, universities and development agencies.

Selection criteria applied with the existing networks

Each of the networks has its unique aspect with a common denominator of providing business support. To select the most appropriate network for this EU scheme, we have established the following criteria:

- Geographical presence;
- Expertise with supporting entrepreneurs;
- Outreach to investors and other business support (such as universities).

We analysed the existing networks based on these selection criteria.

Geographical presence

In Table 5.6 an overview is provided of the national and local contact points of these three networks within the EU. From this coverage we can draft the following conclusions:

- SN and ESN have at present no full EU MS coverage. ESN aims to be pan-European with presence in each of the EU Member States by the end of 2017¹¹⁴;
- EBN has no full EU MS coverage either, and if present, EBN coverage per EU MS is unbalanced (many in some countries, few in others) and rather ad hoc (for example in Bulgaria a local chamber of commerce is member of EBN);
- There is no overlap between EBN and SN partners, with one exception: Startups.be is a member of both EBN and SN.

¹¹³ European Commission (30 years ago and today EBN operates the EU|BIC trademark under license from DG Enterprise & Industry); European Space Agency (ESA); EUREKA (intergovernmental organisation for market-driven industrial R&D); European Patent Office; European Investment Bank; United Nations Development Programme (UNDP) (via an MoU); Enterprise Europe Network (EEN).

¹¹⁴ Interview with Karen Boers, CEO of ESN.

Table 5.6 EU networks

2010 210	EU networks				
	Startup Nations (SN)	European Startup Network (ESN)	European Business and Innovation Centre Network (EBN), intermediaries*	Enterprise Europe Network (EEN) local contact points	
Austria	-	Austrian Startups	-	Several cities	
Belgium	Startups.be	Startups.be		Several cities	
Bulgaria	-	-	1	Several cities	
Croatia	Ministry for Entrepreneurship & Crafts	-	-	Several cities	
Cyprus	Industry Disruptors – Game Changers	Startup Cyprus	-	Several cities	
Czech Republic	-	-	8	Several cities	
Denmark	(1) Startup Denmark (2) Creative Business Cup	-	-	Several cities	
Estonia	Startup Estonia	Startup Estonia	-	Several cities	
Finland	-	-	4	Several cities	
France	-	-	74	Several cities	
Germany	German Startups Association	German Startups Association	6	Several cities	
Greece	(1) Academy of Entrepreneurship; (2) Federation of Hellenic Associations of Young Entrepreneurs (OESYNE)	-	4	Several cities	
Hungary	-	-	2	Several cities	
Ireland	Startup Ireland	Startup Ireland	5	Several cities	
Italy	-	Italia Start up	19	Several cities	
Latvia	Latvian Startup Association	Startin Go Global		Several cities	
Lithuania	Startup Lithuania	-		Several cities	
Luxembourg	-	-	1	Several cities	
Malta	-	-		Several cities	

	Startup Nations (SN)	European Startup Network (ESN)	European Business and Innovation Centre Network (EBN), intermediaries*	Enterprise Europe Network (EEN) local contact points
Netherlands	Startup Delta	Startup Delta	4	Several cities
Poland	Startup Poland	Startup Poland	3	Several cities
Portugal	-	Beta-i	14	Several cities
Romania	(1) Akcees (2) Techsylvania	-	-	Several cities
Slovakia	-	Sapie	1	Several cities
Slovenia	-	Initiative Startup Slovenia	1	Several cities
Spain	(1) Mobile World Capital (2) Associación Española de Startups	Asociación Española de Startups	33	Several cities
Sweden	-	Swedish Startups	2	Several cities
United Kingdom	StartUp Britain	StartUp Britain	14	Several cities

Sources: http://startupnations.co/startupnations/members, ad http://ebn.be,

http://www.europeanstartups.org/members/.

In Annex VIII (Intermediary networks) a comparison is made between the 41 designated partner incubators of the French Tech Ticket Programme and the 74 EBN members and associates active in France. There is only one overlapping intermediary, which indicates that these networks hardly overlap. This means that both networks are quite complementary – but also that promoting interchange and cooperation between these networks can help establish the EU as a whole as an attractive entrepreneurial ecosystem.

An interesting aspect of the ESN in particular is that the network unifies national start-up associations. In other words, the members of ESN are network organisations combining expertise of many incubators in each of the Member State where they are present. This nature of ESN allows for a large outreach.

Expertise with supporting entrepreneurs

Providing business support specifically to entrepreneurs in all stages of their start-up is a key function of the designated intermediaries.

The Enterprise Europe Network (EEN) will have a pronounced role in the future in 'expanding the advisory with dedicated Scale-up Advisors on relevant national and European rules, funding opportunities, partnering'¹¹⁵. For this EU scheme, EEN could play a role for aspiring migrants or returnees moving their already established business from elsewhere to EU Member States.

^{*}EU|BICS and satellites in France for all sectors and EBN associate members in France for all sectors.

 $^{^{\}mbox{\tiny 115}}$ COM (2016) 733 final, p.5.

However, considering the main focus of the scheme, the entrepreneurs in the seed phase are not the main target group of this network.

EBN supports the development and growth of innovative entrepreneurs, start-ups and SMEs. Being a wide network in itself the services provided by the various BIC are encompassing. This also means that the network does not have a clear focus on entrepreneurs and start-ups in early stages only but also on existing SMEs.

The Startup Nations and /or European Startup Network (ESN) comes the closest in potentially supporting non-EU entrepreneurs as designated intermediaries. Unlike, for instance, EBN the members of ESN and SN are exclusively supporting entrepreneurs in all stages of their business rather than focusing on mature businesses.

Ensuring quality of incubators, accelerators and other support providers

Special task of the designated intermediaries under model C is to ensure quality control of the bottom up registration of the incubators, accelerators and other support providers.

There are three options:

- Option 1: Commission new system. Development of a list of key performance indicators (KPIs). Issues to be considered include economic health of the incubators, accelerators and other support providers (solvency, debt issues), quality of services provided (business, mentoring, networking, finance support);
- Option 2: EBN system. Work with the European Business Innovation Centres Network (EBN), which already certifies incubators. Their quality criteria could be taken as a base line and then expanded upon;
- Option 3: External system. Certification could be partly 'outsourced' by looking at existing rankings for incubators and support initiatives, such as UBI ranking (University Business Incubators)¹¹⁶ or COMPASS (which looks at the whole ecosystem),¹¹⁷ and using these as proxies to determine good incubators.

The most practical and feasible approach is for the DG RTD to develop its own system for quality insurance (Option 1) inspired by good practices from elsewhere (such as EBN).

Outreach to investors and other business support

From the desk research and conducted interviews, the density of networks and outreach of all four existing network organisations seem to be comparable. As indicated in the previous section, those networks that have starting entrepreneurs less in their focus (EEN and EBN) seem to have networks that cater to existing businesses.

We recommend DG RTD to commission the task of providing a network of designated intermediaries to European Startup Network (ESN). The main advantage of ESN is the networks nature – the members are national associations of start-ups and incubators. This provides an immediate access to incubators and other start-ups throughout Europe that can provide tailored support to the business propositions of the non-EU entrepreneurs. By the end of this year (2017), the network shall be present in each of the EU Member States providing links with the existing ecosystems, knowledge of other European ecosystems and expertise with supporting entrepreneurs in all stages.

In regard to the certification of incubators and development of further guidance for incubators and entrepreneurs, EBN could be an interesting partner due to their experience with the EU|BICS and their network of local partners abroad.

117 See http://blog.compass.co/the-2015-global-startup-ecosystem-ranking-is-live/.

¹¹⁶ See http://ubi-global.com/research/.

5.3. EU financial support

The evidence reviewed so far (and presented in Chapter 3) suggests that non-EU entrepreneurial innovators want an enabling environment that supports the development of their enterprise, rather than necessarily requiring direct funding. Entrepreneurs want to be free from bureaucracy and be able to move around and expect to 'pitch' their ideas to predominantly private investors, for which the EU has a large and well developed market of investment finance.

However, there is a case for offering relatively small scale financial support at the very earliest stages to allow newly-arrived entrepreneurs to become established within the EU, or adapting existing EU instruments supporting the start-up market where required, as shows the success of the Chilean and French schemes.

5.3.1. Options of EU funding

We have explored three options for financial support to non-EU entrepreneurial innovators and present them in this section:

- Option I: Adapt or extent current EU grant scheme(s);
- Option II: Provide loans and investment (equity funding);
- Option III: Support competitions in the EU Member States (national or local).

Option I: Adapt or extent current EU grant scheme(s)

As identified in earlier sections, the existing EU funding schemes are currently not open to the three target groups of the prospective the EU scheme. Either one has to be located in the EU already / be EU national or the funding is provided to researcher rather than entrepreneurs.

We have investigated possibilities for extending existing programmes to expand them with entrepreneurial activities for non-EU entrepreneurial innovators. The instruments that are the most suitable to be extended for non-EU start-up entrepreneurs are: Marie Skłodowska-Curie actions (MSCA) and SME Instrument. The former is specifically targeted to researchers with innovative component, it is open to non-EU researchers as well. The SME Instruments focuses on small business and might be extended to start-ups specifically as well as non-EU entrepreneurs. It is clear that fundamental adjustments to these instruments cannot be implemented in the short-term, however based on our analysis we advise that the possibilities for adjustments in the medium to long term are investigated.

Marie Skłodowska-Curie actions (MSCA).

MSCA provide grants for all stages of researchers' careers - be they doctoral candidates or highly experienced researchers - and encourage transnational, intersectoral and interdisciplinary mobility.

The Marie Skłodowska-Curie actions (MSCA)

The MSCA enable research-focused organisations (universities, research centres, and companies) to host talented foreign researchers and to create strategic partnerships with leading institutions worldwide.

Research networks (ITN): ITNs support competitively selected joint research training and/or doctoral programmes, implemented by European partnerships of universities, research institutions, and non-academic organisations. Non-European organisations can participate as additional partners in ITNs, enabling doctoral-level candidates to gain experience outside Europe during their training.

Individual fellowships (IF): support for experienced researchers undertaking mobility between countries, optionally to the non-academic sector.

International and inter-sectoral cooperation through the Research and Innovation Staff Exchanges (RISE): RISE supports short-term mobility of research and innovation staff at all career levels.

Co-funding of regional, national and international programmes that finance fellowships involving mobility to or from another country.

The European Researchers' Night (NIGHT). It is a Europe-wide public event to stimulate interest in research careers, especially among young people.

Research, innovation and entrepreneurship (high tech, start-up) are strongly related. Yet, research, although at times combined with innovation, is a different type of activity requiring a dissimilar mind-set compared to entrepreneurship (risk-taking) and start up activities (scalable business development). In order to enable non-EU entrepreneurial innovators to participate in Marie Skłodowska-Curie actions (MSCA), fundamental adjustments to its design are required. This includes:

- Component that is tailored to the specific financial needs of entrepreneurs, taking into account risk taking nature of entrepreneurial activities;
- Delivering business support that fast growing, innovative entrepreneurs require;
- Separate promotion activities to the new target group of (non-EU) entrepreneurs.

SME Instrument

Another possibility in extending an existing EU funding scheme is the SME Instrument. The SME instrument targets small and medium-sized enterprises that are EU-based or established in a country associated to Horizon 2020. These SMEs can now get EU funding and support for innovation projects that will help them grow and expand their activities into other countries – in Europe and beyond. See Textbox below on the details of the Instrument.

SME instrument Phase 1 and 2

The SME instrument provides phased support, of which phase 1 and 2 are relevant for this study for migrant entrepreneurs who are already in the EU.

Phase 1: EUR50k for 6 months funding is available for: exploring and assessing the technical feasibility and commercial potential of a breakthrough innovation that a company wants to exploit and commercialize.

Phase 2: EUR0.5-2 million for 12-24 months funding is available for: innovation projects process or service that is ready to face market competition underpinned by a sound and strategic business plan (potentially elaborated and partially funded through phase 1 of the SME Instrument).

In order to enable non-EU entrepreneurial innovators to participate in this instrument, adjustments to its design are required, such as:

- Extend the support to applicants from countries beyond Horizon2020;
- Enable private persons or recently established start-up to participate in the SME Instrument;
- Provide business support during the period of financing.

Option II: Provide loans and investment (equity funding)

Another option is to support financial institutions and fund investment into businesses of a riskier nature, such as start-ups with non-EU entrepreneurial innovators that are in seed phase. A financial support mechanism that works particularly well and could be well suited for non-EU entrepreneurial innovators is EIB's special investment fund (EIF) that partly invests directly into intermediaries. Contribution from the EIF for non-EU entrepreneurial innovators could also be sound given the recent communication from the European Commission which highlights that:

"The 'European Investment Fund will make the cornerstone investments in 2017 in the new, independently managed Pan European Venture Capital Fund of Funds alongside major private investors to increase the size of Venture Capital Funds in Europe and overcome current fragmentation.' 118

The way in which EIF invests now is that they receive applications from venture capital funds to invest into their funds (in the ranges of several million euros). EIF evaluates the fund and makes an extensive due-diligence before deciding on the investment decision based on its internal criteria. The EIF will then write several covenants into the contracts, such as the prohibition of the fund investing into arms or polluting industries. On a regular basis the venture capital funds are evaluated on their performance, the projects that they invest into and their impact. Such analysis is used for reporting and future strategic decisions.

Given the experience and impact of such activities a financial support option would be to expand the scope of EIF's equity products to also include investment into the designated intermediaries of the EU scheme. The careful vetting process before any investment is made and the ability to insert covenants into contract make it possible to include a requirement for the accelerators/incubators to include subsistence support for entrepreneurs.

This approach allows the intermediary the flexibility to design their subsistence support in a way befitting their strategy and local realities. It also allows the selection of the appropriate entrepreneurs to be made by the experts in these accelerators/incubators, whose daily job it is to make these judgments.

At the same time the EIF is able to leverage its extensive experience to also ensure that the subsistence support programs proposed by the accelerators/incubators are appropriate, substantial and non-discriminatory (available to also non-EU entrepreneurs). Given that EIF takes an equity position (rather than grants, or other means of channelling funding), the investment is repaid with profit. Thus the public body (and the taxpayer) stimulates the market, achieves its policy aim, but recuperates (and profits) the initial investment, which can then be re-invested.

An additional advantage of this option is that, because the EIF is a subsidiary of the EIB, it is possible to use EIB's technical assistance and trainings programs for designated intermediaries. The EIB already provides TA, trainings and other financial assistance to organisation engaged in some of its other activities. For example with the aim to improve the performance and functioning of the Microfinance environment, the EIB pays for a rating of the organisation and then trainings and finance for capital investments to improving operations and addressing problems. This way the EIB transfers best practices across the EU, levels the playing field and supports the industry. Similar activities could be made available to the accelerators/incubators where the EIF has an equity position.

¹¹⁸ COM(2016) 733 final.

Option III: Supporting competitions

As there are competitions for non-EU entrepreneurs organised nationally (such as French Tech Ticket), the EU involvement should endorse the principle of subsidiarity and enable Member States or intermediaries to organise a competition. Member State, local public institutions or intermediaries can apply to DG RTD for support in organizing the competition. The objective of the competition would be to promote entrepreneurship in countries of lower start up attractiveness, creating of level playing field among Member States.

The competitions supported by the EU are organised at the intermediaries or Member State level and lead to the selection of the most promising non-EU entrepreneurs and businesses. The selection criteria differ per stage of the business development (see Table 5.7).

Table 5.7 EU-wide competition

Phase	Selection criterion	How it will be assessed
Seed	 Availability of a innovative business idea; High motivation and commitment; Active knowledge of an EU language (e.g. English). 	 Motivation letter and Curriculum Vitae in the mastered EU language; Two reference letters; A short video of 3 minutes pitching the business idea (in the mastered EU language).
Start-up	 A basic business plan available; High motivation and commitment; Active knowledge of an EU language (e.g. English). 	 Motivation letter and Curriculum Vitae in the mastered EU language; Two reference letters; A short video of 3 minutes pitching the business development (in the mastered EU language).
Scale-up	 Business available for scaling-up; High motivation and commitment; Active knowledge of an EU language. 	 Motivation letter and Curriculum Vitae in the mastered EU language; Proof of the existing business (e.g. from Chamber of Commerce/Business Register); A short video of 3 minutes pitching the scaling-up of the business in the EU (in the mastered EU language).

The organisation, funding as well as the set up of each competition shall be left to the organising intermediaries or Member States. Elements of the French Tech Ticket could be a considered as possible design of the competition. Member States, local government or intermediaries could apply to the DG RTD for financial support and promotion of such competition.

Before analysing which option would be favoured, we will first analyse the costs of an EU funding scheme.

5.3.2. Costs of EU funding

The type of funding that needs to be covered by each of the three options described above includes various aspects. The EU funding may consist of the following costs:

- Costs of subsistence funding (grant);
- Costs of investment and business development support (grant or loan or equity financing);
- Costs of managing the funding facility (such as assessing the applications).

As a benchmark for the level of subsistence and business support costs we may look into the two visa/permit schemes that provide such a funding: French Tech Ticket and Start-Up Chile.

In French Tech Ticket teams up to three team members may apply. If accepted the team receives a work visa/permit and funding of EUR 45,000 per team over the course of a year, with no loss of equity (EUR 20,000 to cover personal costs and EUR 25,000 to cover professional services).

In Start-Up Chile selected companies receive USD 10 million CLP (S factory strand) (around EUR 13,000), USD 20 million CLP (Seed strand) (around EUR 26,000) and USD 60 million CLP (Scale strand) (around EUR 78,000) equity free. To what extent a subsistence contribution of EUR 10,000 EUR per person is reasonable, depends also on where the start-up will be located. Table 5.8 provides an overview of minimum income levels across the majority of the EU Member States as of 2016. It reveals that minimum wages varied widely across the EU (calculated over the course of twelve months: from EUR 2,577 in Bulgaria to EUR 23,070 in Luxembourg). The average (calculated over de 21 Member States for which Eurostat data are available) stand at EUR 828 per month and EUR 9,930 over twelve months.

Table 5.8 Average monthly minimum wages in Europe, 2016 (EUR)

	Average monthly minimum wage (EUR)	Average monthly minimum wage (EUR) x 12 months
Belgium	1,532	18,383
Bulgaria	215	2,577
Czech Republic	365	4,379
Denmark	-	-
Germany	1,440	17,280
Estonia	430	5,160
Ireland	1,546	18,556
Greece	684	8,205
Spain	764	9,173
France	1,467	17,599
Croatia	414	4,973
Italy	-	-
Cyprus	-	-
Latvia	370	4,440
Lithuania	380	4,560
Luxembourg	1,923	23,076
Hungary	350	4,201
Malta	728	8,736
Netherlands	1,537	18,446
Austria	-	-
Poland	417	5,004
Portugal	-	-

	Average monthly minimum wage (EUR)	Average monthly minimum wage (EUR) x 12 months
Romania	276	3,316
Slovenia	791	9,489
Slovakia	405	4,860
Finland	-	-
Sweden	-	-
United Kingdom	1,343	16,116
Average (21 countries)	828	9,930

Source: Eurostat, Monthly minimum wages - bi-annual data [earn_mw_cur].

Since the most popular start-up destinations are in the more expensive EU countries (Table 5.9, London, Paris, Berlin, etcetera), with higher minimum wages a subsistence level of EUR 10,000 should be considered as minimum contribution to the subsistence. Furthermore, for highly skilled entrepreneurs it would be more likely average wage rather than minimum wage that is attractive to establish a business.

Table 5.9 Ranking of most popular start-up ecosystems in Europe

Rank	City
1	London
2	Paris
3	Berlin
4	Amsterdam
5	Barcelona
6	Madrid
7	Dublin
8	Manchester
9	Milan
10	Copenhagen

Source: Startup Heatmap Europe, page 15.

Our calculations for the costs of substance funding of the EU funding facility are therefore based on two scenarios: a low scenario and a high scenario. For each scenario we differentiate between an opportunity of funding one single person and funding a team consisting of 2 to 3 people. As appears from the ESM 2015 monitor, most start-ups in Europe consist of teams of at average 2.7 founders.

Table 5.10 an overview of the overall subsidence costs under the different scenarios. The total costs will depend on the number of start-ups supported. If the ambition is to attract 20,000 non-EU entrepreneurial innovators (individual persons, or for example 10,000 teams of 2 start-up founders), and if all entrepreneurs receive subsistence funding, the total costs will be about 200 to 300 million EUR depending on the level of subsidence funding. However if for example a cap will be set to maximum of 500 start-ups, the total costs for subsistence funding will be between EUR 5 and 10 million EUR.

Table 5.10 Subsistence funding (grant) under different scenario's

	Low scenario	High scenario
1 founder	10,000 EUR	15,000 EUR
2 – 3 founders	20,000 EUR	30,000 EUR

	1 founder	2 - 3 founders	1 founder	2 - 3 founders
Subsistence amount (EUR)	10,000	20,000	15,000	30,000
Number of start-ups funded:				
100	1,000,000	2,000,000	1,500,000	3,000,000
500	5,000,000	10,000,000	7,500,000	15,000,000
1.000	10,000,000	20,000,000	15,000,000	30,000,000
2.000	20,000,000	40,000,000	30,000,000	60,000,000
5.000	50,000,000	100,000,000	75,000,000	150,000,000
10.000	100,000,000	200,000,000	150,000,000	300,000,000
20.000	200,000,000	400,000,000	300,000,000	600,000,000

Source: Ecorys calculations.

If in addition to subsistence funding, funding will be given to start the business (feasibility studies, prototyping, etcetera), the costs might be higher. How much higher will depend on the levels of additional funding and on the question whether the additional funding will take the form of a grant of a loan. An overview of potential additional costs, depending on the choices level of funding and the number of start-up funded, is presented in Table 5.11. If the additional funding will be granted as a loan, costs will be much lower. The outcome will depend on the conditions of the provided loans.

Table 5.11 Investment support (loans or grants) under different scenario's

Investment support (EUR)	10,000	15,000	20,000	25,000	30,000
Number of start-ups funded:					
100	1,000,000	1,500,000	2,000,000	2,500,000	3,000,000
500	5,000,000	7,500,000	10,000,000	12,500,000	15,000,000
1.000	10,000,000	15,000,000	20,000,000	25,000,000	30,000,000
2.000	20,000,000	30,000,000	40,000,000	50,000,000	60,000,000
5.000	50,000,000	75,000,000	100,000,000	125,000,000	150,000000
10.000	100,000,000	150,000,000	200,000,000	250,000,000	300,000,000
20.000	200,000,000	300,000,000	400,000,000	500,000,000	600,000,000

Source: Ecorys calculations.

For example, the total costs for the funding scheme – under the assumption that 500 start-ups consisting of 2 to 3 founders, intermediary costs are set at 12,000 per start up, subsistence costs will be EUR 20.000 and investment support of EUR 25,000 in the form of a grant - will be EUR 22.5 million (Table 5.12). If more start-ups are funded the costs will be higher. If the amounts available are higher or lower, the costs will also change.

Table 5.12 Costs example

Example of total costs of the EU start-up funding scheme (500 start-ups, 2-3 founders)			
Subsistence costs (20,000 EUR)	10,000,000		
Investment support (grant) (25,000 EUR)	12,500,000		
Organisation and assessment of requests	PM		
TOTAL costs	22,500,000		

Source: Ecorys calculations.

One additional option could be that the levels of subsistence funding will not be uniform but will depend on the differences between costs of living in European countries or cities. For example, the price index in EU cities varies between 78 in Lasi, Romania between 249 for London. 119

¹¹⁹ To calculate each cities' Cost of Living Index value, a value of 100 to a central reference city is assigned (that happens to be Prague). Once the reference point has been established, the Price Index value of every other city in the database is calculated by comparing their cost of living to the cost of living in Prague. Therefore, if a city has a Price Index of 134, that means that living there, is 34% more expensive than living in Prague.

5.3.3. Which type of funding

Although Option I (adapt or extend current grant schemes) and Option III (supporting competitions) are might be effective in providing financial support, they are subject to political discussion, budget negotiations and longer preparatory process. In addition providing grants to start-up entrepreneurs will be very expensive, given the scale and ambitions of the EU scheme. The most suitable type of funding for the EU scheme will be option II: Provide loans and investment (equity funding).

In comparison, Option II (provide loans and equity funding) is an adaptation of EIF's existing activities and budgets, while addressing entrepreneurs' main issue: access to funds to make projects a reality. It is therefore this option that is recommended to put into practice to realise tangible impacts in short time as well as long term.

As mentioned Section 4.3 the EIF could expand its equity products to include accelerators and incubators that are approved and certified (such as by EBN). EIF's equity product would aim to invest into such accelerators/incubators and thus directly channel funding to start-ups through professionals on the ground.

Such activity will aid all entrepreneurs across the EU and therefore provide an equal playing ground. In order to ensure that also non-EU entrepreneurs are eligible, the certification process of the accelerators/incubators should include criteria to ensure that non-EU entrepreneurs also have access to such funding. While EIF's evaluation would later check the amount of the funding that has really reached the non-EU entrepreneurs.

Once a decision on this option has been taken by DG RTD, the standard communication and decision making processes should be taken up with EIB that is managing the EIF. EIF will then conduct its own due diligence, risk and financial analysis of the incubators/accelerators. Based on the output of this analysis, the feasibility and operationalisation of this option will be determined, or will have to be further tailored.

5.4. EU start-up visa/permit

When this study started, another study had just been finalised regarding the admission of migrant entrepreneurs, focusing on dedicated start-up visa/residence permits and giving some insights into the contours of a possible EU start-up visa/permit. This is (briefly) summarised below, before proceeding to our own (somewhat more detailed) analysis of what an EU visa/permit for start-up entrepreneurs should offer and how this could be implemented in practice.

ICF, Study for an Evaluation and an Impact Assessment on a proposal for a revision of the Council Directive 2009/50/EC ('EU Blue Card Directive'), Volume II: Admission of migrant entrepreneurs, 29 July 2016

The EU-wide visa/permit could predominantly focus on **'innovative start-ups'** with a potential to include graduate entrepreneurs in its scope. This would make more sense for the EU economy (boosting the knowledge economy, technological hubs and clusters) and be prone to greater political feasibility and acceptance of the Member States.

Inclusion of **graduates** and potentially, **minorities** should be considered. The scheme should **not be open to all self-employed workers**, as it will open a potentially 'very wide' migration channel.

Formal educational qualifications and diplomas are seen as less important. The background of the entrepreneur can be set out in the **business plan**.

An EU-wide scheme could include both **start-up businesses** (with no or little track record) and **scale-up businesses** (with existing operations and track record) as long as these are defined in terms of activities of the business, number of employees and revenue to prevent abuse of this channel.

Many successful entrepreneurs have started their business while still in university, thus it could be potentially beneficial to **allow for foreign students to engage in start-ups.** Universities are increasingly establishing entrepreneurial hubs and accelerator programmes.

Access should **not be limited to certain sectors,** such as ICT (as is the case in Denmark and Ireland). Industries can be dynamic or innovation can occur in traditional industries not regarded as innovative in combination with an innovative technology (for example taxi transportation transformed by Uber taxis through innovative mobile phone systems). Also sectors and industries differ significantly by countries and spelling out certain sectors might limit some EU countries in terms of their industries (for example fashion in Italy, food production in some countries).

The EU-wide **should not be based on a minimum investment requirement**. This would be more of an investor type of visa/permit and deter potential start-ups which would not have secured the required capital yet.

Requirement for funds should be rather framed as third party endorsement, who provides the funding. Endorsement bodies that can be private (accelerators NL, IT) and public (DK).

Due to the fact that residence permits are in the national competences (including their criteria for admission), **business plans could only be assessed at national level**. This would require common EU guidelines to ensure consistency.

Schemes that have **public or private partnerships** (with accelerators, such as France and the Netherlands, angel investors or venture capital firms) are perceived as positive.

Experts and third parties should be involved in the **evaluation of the business plan** during the selection process. These third parties are assessing the proposals and in some cases choosing to invest their own funds in the applicants they endorse. The selection process could be carried out by incubators and accelerators, the final decision could be left to the government, which should be able to reject the application only under specific circumstances.

Third parties involved should be available in lists **approved by the EU governments**, similarly to the current approaches in Canada or the Netherlands.

If the aim in the EU is to attract the top-potential entrepreneurs, then the focus of the policy should be on **incubators and accelerators**.

Cooperation with universities is a major point to be considered in light of an EU wide scheme, also taking into consideration that a large number of students from third countries is present in the EU.

An **online welcome desk or platform** at EU level explaining the possibilities in different countries could be a possible element.

Cooperation should be established with already existing networks through **Startup Europe**, which is already making efforts in connecting the various existing networks and ecosystems.

Support schemes/structures should ensure **equal access for non-EU and EU entrepreneurs**, and take into account considerations of displacement effects of EU populations.

Any EU-wide scheme could utilise the existing schemes and leave **freedom to Member States** how to best adapt the pan-European scheme to their needs.

Setting up quotas could be left optional to Member States.

This scenario outlines an EU start-up visa/permit that will eliminate the obtainment of visa/permit as a regulatory obstacle for start-up entrepreneurs. First and foremost, it makes the visa application for entrepreneurial innovators easier by streamlining it across the EU and by simplifying it.

Positioning of key players within the entrepreneurial landscape

Applications for the visa are done through certified incubators. Their role is to assess the business plan of an entrepreneur and assess the innovation potential. If they approve of this and accept the entrepreneur into their support programme, the entrepreneur can apply for the EU Ambitious Entrepreneur Visa in the Member State where the incubator is located. The incubator thus acts as a 'facilitator' for the entrepreneur and the innovativeness test is done by the player best attuned to doing so.

The Ministry of the Interior of the Member State assesses the applicant on security, public health and other 'regular' visa requirements (e.g. mandatory health insurance), as well as making sure that the applicants has enough money for subsistence for at least the first 12 months of the visa/residence permit. Actual awarding of the visa/permit will be a national process, so that national authorities still have an idea about who enters their country 'through the front door'.

Certification of incubators is done by the Ministry of Economic Affairs of the Member States, in coordination with the European Commission's DG GROW and DG RTD as the European players most attuned to fostering innovation and the European economies. A requirement to certification could be that incubators complete a short course on how the EU start-up visa/permit scheme works.

An important question is *how* to certify incubators and intermediaries. Various approaches are feasible:

- Option 1: Development of a list of key performance indicators (KPIs). Issues to be considered
 include economic health of the incubators (solvency, debt issues), quality of services provided
 (business, mentoring, networking, finance support). Actual certification is done by the Member
 States themselves;
- Option 2: Work with the designated intermediaries to determine quality criteria that could be taken as a base line and then expanded upon;
- Option 3: Certification could be partly 'outsourced' by looking at existing rankings for incubators and support initiatives, such as UBI ranking (University Business Incubators)121 or COMPASS (which looks at the whole ecosystem),122 and using these as proxies to determine good incubators.

Access requirements

In contrast to some European (such as Irish STEPS programme) and non-European (for instance as in Canada) visa/permit schemes we would not advise to have a minimum investment requirement in the EU scheme. This requirement would be more of an investor type of entrepreneurs and deter potential start-ups, which would not have secured the required capital yet. The EU scheme should target in particular entrepreneurs in the seed and early start-up phase: phases where market failures are observed (due to an over-supply of start-up in relation to the private investment capital, investors tend to prefer latter and more secure start-up phases).

Innovativeness should be judged by private parties who make it their business to assess whether a business plan has a possibility of becoming profitable and/or boosting innovation, with a review by the Ministry of Economic Affairs. Access requirements should therefore be set in a way that empowers those in the best position to make the assessment.

¹²⁰ This will also depend on whether financial support is given.

¹²¹ See http://ubi-global.com/research/

See http://blog.compass.co/the-2015-global-startup-ecosystem-ranking-is-live/.

Access requirements are therefore quite simple: first and foremost entrepreneurs with a business plan need to be accepted into a programme of a certified incubator. Applicants also need to pass the regular screening by the Ministry of the Interior of the country they are applying to.

These criteria should be made uniform throughout the EU, but as it stands differences across countries in this respect are quite limited. Most importantly, applicants would need to show they have the means for subsistence for the duration of the visa (or at least the first 12 months) and should not pose a threat to public order or public health. 123

Prevention of abuse

Abuse will be prevented by setting the right criteria for accessing the visa at the front door – both in terms of the assessment by national Ministries of the Interior, which safeguards that applicants bring enough funds for their own subsistence and pose no threat to public health, and through having a selective certification process for incubators, so that they uphold the necessary quality criteria for business plans. Furthermore, central registration of applications for visa/permits should be explored, 124 so that there is also an overview of the pool of migrant entrepreneurs potentially coming 'through the backdoor' from another Member State. Such an overview would make it possible to more easily detect and detain people who stay in the Member States after their visa/residence permits have expired. 125

Quota

In the scheme envisaged here, no costs are foreseen for the Member State they will reside in, as there will be a minimum requirement of subsistence funds that an applicant must have available. Combined with the strict selection criteria that ensure only the people that can actually bring added value will be granted residency rights, no quota would be needed or even desirable. The only exception is when it is determined EU financial subsistence support is given, in which case quota should be set – much like in the cases of StartUp Chile and for the French Tech Ticket.

Duration

In view of the time it takes to get a start-up business from the ground and to build up the necessary connections within a local ecosystem, the residence permit scheme could have a duration of 24 months, with an assessment moment halfway through (after 12 months) to see if the business is still developing. Many incubators already implement such a check for participants in their incubation programmes, where the adage is "you need to either progress or leave". If an entrepreneurial innovator does not make sufficient progress with his start-up, the visa becomes invalid and the holder needs to leave. This also acts as a further check on abuse. For strands 2 and 3 (the Highly Skilled Individuals), the 24 months duration of the visa is conditional on not being fired by the start-up and the incubator.

Renewal

Renewal should be possible, with the same 24-months periods, conditional on continued backing by an incubator for the first years or on minimum requirements for turnover, profit and jobs created. These requirements should be further developed in consultation with the incubators and financial intermediaries, and be aimed at maximising innovation and growth potential for the European economies. Renewal under the conditions mentioned should be possible until an entrepreneur is eligible to apply for permanent residence status in the host Member State.

Access to Single Market

Under this scheme, entrepreneurs should be allowed to travel outside of the first Member State they have settled in after a period of either 6 or 12 months. This is needed to ensure the first host country sees some economic benefits from the start-up. After this period, the entrepreneur should be free to travel and move to another host country, if he wants to.

investment requirements. The scheme has already been adapted to prevent such abuse in the future.

¹²³ The requirement for means for subsistence can be waived in case an EU financial support scheme for subsistence support is adopted.

 ¹²⁴ As citizens from certain countries do not need a visa to come to the EU, the Visa Information System (VIS) is not suitable for this *purpose*.
 125 It should be noted that stakeholders say the risk for abuse is quite low, and so far no substantial abuse has been detected in the tailored national start-up visa schemes. One exception to this is the UK scheme, where the access criteria did not include innovation but revolved around

Family members

Under the majority of visa schemes researched, family reunification is possible. The EU start-up visa should allow for such reunification as well, possibly with a delay of 6 to 12 months before family members are allowed to be brought in. The exact duration should be set with an eye to when a start-up has reached a certain level of maturity which gives a reasonable expectation that it will not fail in the near future. It should be noted that the majority of the applicants for an entrepreneurial visa are young people that do not have a family yet.

5.5. Implementation of the scheme

In addition to the role of intermediaries in implementing the scheme, we have explored how the EU scheme will be implemented by extending existing schemes or, if needed, establishing new ones. We propose to extend the Startup Europe initiative of DG CNECT with this scheme of DG RTD for non-EU entrepreneurs. The main argument for Startup Europe is that this platform is built with target group of this scheme in mind namely, the entrepreneurs. The EU scheme for non-EU entrepreneurial innovators extends to components beyond the web platform. In the next section, we provide an indicative implementation plan for implementing the scheme.

5.5.1. Which scheme scenario

As discussed before, the EU scheme might contain different elements. In the minimum variant it will be a web based service platform, a promotion campaign and a network of (designated) intermediates. Additional options could be an EU funding facility and/or an EU start-up visa/permit. Different scenarios have different impacts.

Table 5.13 provides an overview as to what extent the different scenarios will meet the needs of non-EU entrepreneurial innovators. Under scenario 1 and 2 (without EU visa/permit) there is no access to the entire European ecosystem for the non-EU entrepreneurs themselves. As follows from research among start-ups, access to ecosystems is generally valued over having access to capital. For example, the Startup Heatmap Europe 2016 study concludes that: 'It is apparent that access to talent and a good network (ecosystem) are decisive factors for start-up founders in their decision to move. Quite strikingly, access to capital is ranked the lowest among all four factors (ecosystem, burnrate, capital, talent), showing that founders are not following the money but vice versa: investments will follow the founders.'126

Table 5.13 Scenarios in relation to the migrant entrepreneur needs?

	Access to ecosystem locations	Access to Europe	Access to Capital	Support and information
Scenario 1 Web platform + intermediary support	+	Single	+/-	+
Scenario 2 Web platform + intermediary support + EU funding	+	Single	+	+
Scenario 3 Web platform + intermediary support + EU funding	+	Multiple	+/-	+
Scenario 4 Web platform + intermediary support + EU funding + EU start-up visa/permit	+	Multiple	+	+

¹²⁶ Startup Heatmap Europe 2016, p.14.

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From the perspective of the non-EU entrepreneurial innovators, the most inclusive scheme (scenario 4) might be favoured. However different scenario's have different financial, organisational and policy implications.

From a branding and marketing perspective, the scenario without 'add-ons' (EU funding or EU start-up permit) will be the weakest. In this case, the promotion campaign will come close to a generic nation branding campaign. Support for designated intermediaries is the only 'real' proposition that is in offer. In addition, the availability of EU funding could provide an excellent angle for marketing and conversion of the target group into action, as is the case with the availability of an EU visa/permit. An all-inclusive package will offer the best marketing opportunities (as with French tech Ticket and Start-Up Chile).

An important question is to what extent the EU scheme might compete with national schemes. For scenario 1, this is highly unlikely. Instead the EU scheme will create greater transparency and might assist start-ups to find the right ecosystems. As discussed earlier, there are indications that start-ups tend to spread all over Europe, instead of gravitating towards the well-known centres.

The same argument can be made with respect to an EU visa/permit. An EU visa/permit might have an effect of attracting more start-ups and creating greater intra-EU mobility, of which all ecosystems might benefit. As noted earlier, EU funding could take various forms, including direct support of national or regional start-up competitions. Finally an all-inclusive scheme could have as a drawback that it competes – or could be considered as competing – with national initiatives (such as French Tech Ticket).

Table 5.14 Implications of four scenarios: marketing, costs, EU management, conflict with national schemes

	Marketing proposition	Costs	EU manage- ment impact	Conflict with national schemes?
Scenario 1 Web platform + intermediary support	Low	Low	Medium	NA
Scenario 2 Web platform + intermediary support + EU funding	Good	High	High	NA
Scenario 3 Web platform + intermediary support + EU funding	Good	Medium	Medium	NA
Scenario 4 Web platform + intermediary support + EU funding + EU start-up visa/permit	Best	Highest	High	Potentially

The pros and cons of different scheme scenario's (Table 5.13 and 5.14) should be weighted in the decision to implement an EU scheme and which elements (scenarios) this EU scheme should include. We recommend that:

Scenario 3 is favoured, as access to Europe and intra-EU mobility is key to answer the needs of non-EU start-ups and scale-ups and retain non-EU students and researchers (to become entrepreneurs). Access to capital is ranked lowest among start-up attracting factors. In the case of scenario 3, integration in Startup Europe will be a good avenue to move forward as well.

We realise that, in the short term, Scenario 1 is most likely to be implemented. In this context we therefore note that:

Scenario 1 is only cost-effective when the EU scheme is integrated in the overall Startup Europe platform. In this case efforts will be integrated (and costs may be shared) which will offset the relatively 'weak' proposal of just a stand-alone information platform plus networks of designated intermediaries.

5.5.2. Phased approach

An ambitious scheme to attract non-EU entrepreneurs requires adequate implementation with preparation phase, piloting options, evaluation of the steps taken and further fine-tuning and rolling out. We propose a phased approach in implementing the EU scheme. In Table 5.15 we indicate for each of the components the respective activities which should take place in each of the phases.

In the six months of the preparation phase, the main components of the EU scheme are put in place. This means that the platform is established, the contract to platform managers is launched and the managers start pulling content from other platforms. Designated intermediaries shall be contracted in this phase and implementation of model B of designated intermediaries shall start. For the EU start-up visa/permit no actions are foreseen. The phase will end with a fully prepared web platform, campaign and designated intermediaries in place.

During Phase I, the EU scheme should be running as designed with the central role of the designated intermediaries in providing the help desk functions. Based on our market research for the promotion campaign – which is further elaborated in Chapter 6 and the Annex Market Research, ¹²⁷ we recommend the campaign to start in five out of six pilot countries Brazil, Israel, India, Russia, South Africa and US (for returnees) and the universities Technische Universität München, Germany; University of Bologna, Italy; Delft University of Technology, Netherlands; Aalborg University, Denmark; École Polytechnique, France while gradually picking up in intensity. During this phase, DG RTD, Member States and DG HOME should jointly assess the opportunity costs incurred due to not having an EU start-up visa/permit. Proposal for an EU financial support facility is discussed with EIF managers. During the last two months of this phase, independent evaluation of the scheme shall take place to assess the effectiveness of the campaign, the support that designated intermediaries provide as well as the usefulness of the information and functions on the platform.

Thereafter, the scheme will naturally evolve into Phase II. The role of designated intermediaries will be as depicted under Model C. The campaign may be enhanced further with other countries and universities. If part of the scheme adopted, the EU start-up visa/permit would be in place by the end of this phase.

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 $^{^{\}rm 127}$ This was sent separately.

Table 5.15 Implementation of the scheme

Phase	Web based service platform	Publicity campaign	Intermediaries	EU financial support	EU start-up visa/permit
Preparation (month 1-6)	 Establish the platform in the cloud; Contract platform managers; Pull content from other platforms; Setup and test interfaces to external platforms to facilitate data exchange; Start build of platform; Graphic Design for all web elements; Stylesheet specifications. 	 Profiles for online target group, reach, and conversion; Developing user kit for EU Delegations to launch the campaign in pilot countries; Developing social media campaign. 	 Start implementing model B; Contract designated intermediaries to inspire non-EU entrepreneurs to come to Europe. 	Explore possibilities to establish an EU scheme for non-EU entrepreneurs by means of the presented scenarios.	 Assessment of the results of national start-up permits in place (depending on information availability); No concrete development foreseen at this stage.
Phase I (month 7 -18)	 Contract platform management; Platform is gradually made known within Commission services, to enhance synergies; Launch of platform with initial set of features (registration, visa/permit and funding search, etc.); Initial 'top-down' content; Online community features developed and launched later in this phase. 	 For aspiring migrants the campaign shall pilot five countries 128; For legal migrants, pilot campaign in the five best high tech universities in Europe129; For the returnees, campaign launch in the USA; Launch social media campaign. 	Management of the ecosystem by intermediaries.	 Direct entrepreneurs to national and EU funding currently available (via designated intermediaries); Proposals for EU financial support discussed with the European Parliament. 	 Assessment of the results of national start-up permits in place (depending on information availability); Further discussions with Member States on assessing opportunity costs of not having an EU start-up visa/permit.

Evaluation (month 16-18)

¹²⁸ Brazil, Israel, India, Russia and South Africa. Possibly the US for returnees. ¹²⁹ Technische Universität München, Germany; University of Bologna, Italy; Delft University of Technology, Netherlands; Aalborg University, Denmark; École Polytechnique, France.

Phase	Web based service platform	Publicity campaign	Intermediaries	EU financial support	EU start-up visa/permit
Phase II	 Contract platform management; Platform will move from top-down model to more bottom-up, and content becomes more self-sustainable; Expand or amend functionalities depending on interim evaluation. 	Enhance the campaign to further countries.	Start moving to model C.	DG RTD instrument for non-EU entrepreneurs in place.	 Assessment of the results of national start-up permits in place (depending on information availability); EU start-up visa/permit.

5.5.3. Access requirements and sustainability

One of the specific research question for this design study is to assess possible requirements (if any) for non-EU resident highly skilled entrepreneurial innovators to access the scheme, taking account the need to prevent discrimination on grounds of nationality (Task 1.4).

A point of attention is the principle and political need that start-up support facilities should be non-discriminatory: meaning that they should be open for EU entrepreneurs as well. If not, this could induce (small) displacement effects of the EU Member State population. Even if these are small, this is a politically sensitive issue in relation to the current migration crisis. This is an argument in favour of integrating the EU scheme in the current Startup Europe platform and activities.

A selection of specific access requirements depends on which EU scheme scenario and which EU scheme elements we are looking at.

Scenario 1. Web platform + intermediary support

If the EU scheme consists of a service platform + intermediary support only, the scheme will be accessible to every non-EU resident entrepreneurial innovator. The scheme is an information hub and intermediary linker (market place) for start-ups to be connected with support providers. Scenario 1 implies that EU resident entrepreneurial innovators will NOT be excluded as ESN (the proposed designated intermediary) already aims to provide support to EU start-ups. Also incubators, accelerators and other support providers will be equally interested in EU start-ups with a good idea. Hence discrimination on grounds of nationality is prevented.

Scenario 2. Web platform + intermediary support + EU funding

Access criteria for funding will first depend on the type of funding that is provided. As indicated in Section 4.4.3 indirect funding via EIF is recommended. This will incur loans or equity. In order be eligible for loans or equity from EIF, via incubators, the start-up will have to provide an enhanced business plan and be selected for funding. One of the main criteria of the business plan is the innovative nature of the start-up proposal; for example as defined in the start-up visa schemes in the Netherland and Italy. In order to prevent discrimination on ground of nationality, EU start-up funding shall be open to both non-EU and EU citizens.

Scenario 3 Web platform + intermediary support + EU start-up visa/permit

Central in providing access to the EU scheme (visa/permit, funding) will be the business plan of the start-up or a video pitch. This will be assessed by public as well as private experts in the start-up scene. How this will be exactly done, is part of the design of EU start-up visa/permit. Initial thoughts are provided in Section 4.4.

A general notion on setting up access criteria, is that access requirements should strike a balance between attractiveness of Europe as a start-up destination and selectivity for attracting only the most promising start-ups. At the same time, access criteria should not be too strict, as innovation comes with risks – and start-ups may fail.

Scenario 4. Web platform + intermediary support + EU start-up visa/permit + EU funding

Scenario 4 will be very much similar to scenario 3, as funding is attached to the provision of an EU start-up visa.

Long term sustainability of the EU scheme can only be achieved by: a) building the scheme on existing initiatives (such as Startup Europe, EURAXESS, European Startup Network as well as national initiatives), b) dedicated management of the web portal, c) a gradual move a from top-down model (model B) to more bottom-up (model C), and content becomes more self-sustainable, d) political support for EU-wide start up visa/permit and e) eventually EU funding stimulating the capital market for start-ups in Europe.

5.6. EU added value

In this section we reflect upon the following basic questions that should be clarified when implementing an EU policy intervention:

- What is the problem and why is it a problem?
- Why should the EU act?
- What are the likely impacts of the different policy options?
- What should be achieved?

5.6.1. What is the problem

The argumentation in favour of an EU-scheme is often formulated as the general narrative on the need for enhancing the start-up climate in Europe, as innovative start-ups are generally considered as one of the avenues for future economic prosperity. Start-ups may be the driving force behind innovations because their entrepreneurs 'dare to think in new models for business and society'. Start-ups create jobs and the digital revolution that start-ups have brought about will affect and benefit every European. 131

Global competition

However, Europe is lagging behind in the global competition for start-up talent, and hosts fewer highly-skilled migrants than other main OECD countries. ¹³² In order to attract and retain highly-skilled entrepreneurial innovators, the European Union has a need for a strategic support system that will allow prospective entrepreneurs to set up their business here. ¹³³

One of the interviewees in our research for this study pointed at the fact that European governments should act more adequately in the global fight for start-up talent:

'There is really a lack of understanding on the part of the government of how start-ups work. For start-ups, competition is harsh: you go up against Silicon Valley, South Korea, Singapore. In Canada and the US it is easier to change visa status (H1B in US for example) and it is also easier to get funding.'134

It must be noted that Europe is on the rise in terms of being seen as a fertile ecosystem for high-tech firms and start-ups. The number of start-ups is growing and increasingly more of them reach 'unicorn'-status with a net worth of over 1 billion EUR. However, when investors are being asked which cities offer the best chance of producing the 'next Google', Asian and North American cities are still favoured over Europe (see Figure 5.6).

¹³⁰ See Keynote by Sigrid Johannisse on 23 June 2016, to be found online at https://www.startupdelta.org/about/press/213.

¹³¹ https://www.startupdelta.org/about/press/213 Keynote by Sigrid Johannisse on 23 June 2016.

¹³² A. Damas de Matos, '*Immigrant skills, their measurement, use and return: A review of literature*', in Matching Economic Migration with Labour Market Needs, OECD, September 2014. Retrieved form the tender specifications for this study, page 2.

¹³³ Term of reference for his study, page 19.

¹³⁴ Interview D.

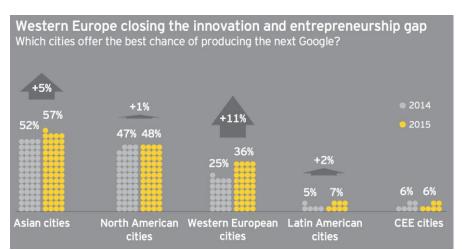


Figure 5.6 Cities that offer the best chance of producing the next Google

Source: EY's attractiveness survey, Europa 2015, Comeback time. Based on interviews with 808 international decision makers form Europa, North America, Asia, Oceania and Latin America.

New players are emerging in the battle for start-up talent. Countries all over the world have started to develop start-up policies, including strategies aimed at attracting foreign entrepreneurial innovators (including China).

Limited intra-EU mobility

Figure 5.7 visualises the European start-up ecosystem, derived from the Startup Heatmap Europe 2016 study. The interconnections between the locations represent the country of origin of start-up founders (mostly EU but also some non-EU, presented by the blue lines to locations outside Europe) and their most favoured start-up ecosystem. This is how Europe is being perceived by EU and non-EU innovative entrepreneurs and start-ups: as a network of interconnected ecosystems instead of a collection of 28 Member States.

The Startup Heatmap study shows that start-ups in Europe are highly mobile: While in 2015 only about 4% of the general EU population moved to another country within the EU, 23% of the Heatmap survey participants founded their business in a country that is not their origin. Among this group, most have even left their home region (85%), meaning a regional group of countries in Europe, such as the Baltics. The interviews fort his study confirmed in our interviews that limited mobility – understood as the right to establish a company – is an important obstacle for non-EU entrepreneurs.

¹³⁵ See Startup Heatmap Europe.

¹³⁶ Startup Heatmap 2016, p.4.

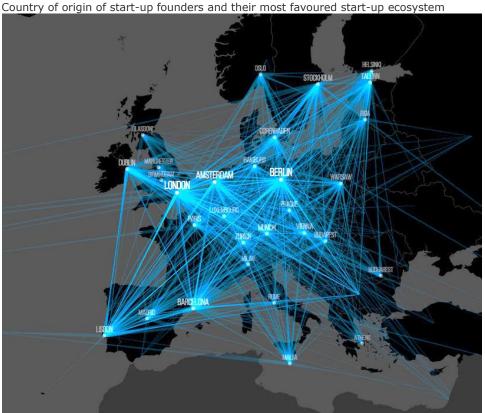


Figure 5.7 Europe's network of start-up ecosystems

Source: Startup Heatmap Europe 2016, p.6.

Low retention of highly-skilled migrants

Enhanced mobility will also increase retention of highly-skilled non-EU migrants (entrepreneurs but also students and researchers). European countries are less successful at retaining highly-skilled migrants than the United States, Canada and New Zealand. 137 In this context the OECD and EU conclude that:

'It has been shown that, individually, EU Member States are at a disadvantage in retaining skilled migrants, as non-European destinations exert a strong pull, even on secondary migration. 138

5.6.2. Why should the EU act

The central question here is the subsidiarity question: if start-ups should be attracted to or retained within Europe, what would be the role for the EU? The European Union does not have the means or right to definitively 'open' any single Member State to non-EU start-ups. 139 The justification for an EU scheme to attract non-EU resident entrepreneurial innovators should be that EU could add value to the activities and interests of the individual Member States.

¹³⁷ OECD, 2008b, retrieved from: OECD and EU 2016, p.128.

¹³⁸ OECD and EU, 2016, p.128. ¹³⁹ OECD and EU, 2016, p.119.

In the analysis of the added value of the EU scheme, we will build upon the report of the OECD and EU on recruiting immigrant workers to the EU.¹⁴⁰ This report provides an overall analytical framework on the potential role of the EU in attracting immigrant workers *in general*. Some of these elements may be applied to the specific target groups of this study. In addition, we will refer to the recent ICF impact assessment on a proposal for a revision of Council Directive 2009/50/EC on the EU Blue Card.¹⁴¹ These elements are substantiated with our own findings and research on start-ups in Europe.

The added value of an EU scheme to attract – and retain – non-EU resident entrepreneurial innovators could be summarised as follows:

Providing scale. The EU scheme provides scale to non-EU resident highly skilled entrepreneurial innovators. Given the fact that Europe may be considered as a large interconnected network of EU-wide eco-systems, Europe as a whole is more attractive, than the sum of its individual Member States.

Allowing mobility. An EU scheme that includes an EU start-up visa/permit will allow the non-EU start-ups to access the European-wide ecosystems without the need for several national visa/permits. This is highly relevant as start-up founders are more likely to move to another country (and region) than normal citizens.

Supporting EU 'eco-system equality'. The EU scheme could provide the opportunity for not only attracting and retaining more start-ups, but also guiding them to lesser-known ecosystems (that have less power to brand and market themselves). Non-EU start-ups tend to settle all over Europe.

Increasing retention. The EU scheme that includes an EU start-up visa/permit will enhance retention of migrants that are already in Europe (such as students and researchers). These groups are more likely to stay within in the EU if they are free to set-up their business and settle in another Member State.

Joint promotion of Europe as the destination for start-ups. Joint actions of EU Member States under the umbrella of the European Commission could support in branding Europe as one network of interconnected ecosystems (as an alternative to the US). Pooling promotion efforts will also be more cost-efficient and will enable the use of European networks and services in third countries (EU Delegations, EU information points, Enterprise Europe Networks, etc.).

Convergence in national policies. The EU scheme will stimulate harmonisation in Member State policies, standards and processes in attracting non-EU start-ups.

Coherence with other EU policies. The development of an EU scheme is coherent with President Juncker's Commission objective of the new European Agenda on Migration. It also fits into the European Single Market strategy and into policies to transform the EU into a 'knowledge economy'. It will also strengthen the Startup Europe initiative, which connects European ecosystems and creates transparency in the European ecosystem landscape.

Providing scale

The EU scheme provides scale to non-EU resident highly skilled entrepreneurial innovators. Given the fact that Europe may be considered as a large interconnected network of EU-wide eco-systems, Europe as a whole is more attractive than the sum of its individual Member States. This line of argumentation is in parallel with the arguments in favour of the EU Blue Card Directive:

¹⁴⁰ OECD and EU, 2016.

¹⁴¹ OECD and EU, 2016.

'Although each Member State could continue to have its own national system for highly skilled workers, this would not increase the attractiveness of the EU as a whole. Especially when comparing the EU to other major destinations with a more uniform approach, Member States acting alone, particularly smaller ones, are not adequately equipped to compete in the international competition for highly skilled workers.' 142

However, the large interconnected network of EU-wide eco-systems is only attractive if non-EU entrepreneurial innovators have the opportunity to start-up or scale-up their business in another EU Member State. 143

Allowing mobility

If the scheme would include a start-up visa/permit, this would allow non-EU start-ups to access the European-wide ecosystems without the need for several national visa/permits. As discussed before, this is highly beneficial as start-up founders are more likely to move to another country than normal citizens. In other words: start-ups need mobility (more than the population in general). National start-up visa/permits cannot offer, by their own nature, this possibility to move easily from one Member State to another. The idea of having start-up teams that have to consist of at least one EU team-member, which would have full access to the entire EU market, could be a solution (compromise) to this issue, but will also limit the potential of attracting non-EU entrepreneurs.

'A European start-up visa will be a powerful measure to spread their [start-up entrepreneurs] bright ideas across our European single market and create jobs. Not hindered by borders of our Member States. Growing, from one Member State to the next.'

Supporting EU 'ecosystem equality'

If the EU scheme has the effect of directing start-ups to a restricted number of internationally renowned start-up hubs such as London and Berlin, the overall positive effect of adding scale could be offset by the creation of greater ecosystem inequality across Europe.

The opposite could also be true. Research from the Startup Heatmap Europe study carried out in 2016 (based on a questionnaire among European start-ups) contradicts the idea that start-ups gravitate towards a limited number well-known ecosystems. Competitive ecosystems are currently emerging all over Europe. For example several cities within the Nordic countries, in particular Stockholm, Tallinn, Riga and Helsinki are popular start-up destinations. In Western Europe, Munich, Hamburg, Vienna and Paris are gaining popularity. In the east, Warsaw and Prague are emerging as strong start-up destinations (Budapest and Krakow are also upcoming Eastern European start-up hubs), ¹⁴⁵ while in the south Lisbon and Barcelona have strong international appeal. According to the Startup Heatmap study, 'there is definitely room for specialisation' and 'smaller hubs can achieve a strong position on the Startup Heatmap.'

An interesting finding from the study is that migration from third countries into Europe is particularly important for regions that experience a negative intra-Europe net migration flow of start-up founders (Table 5.16). In general, EU start-up founders move from Southern and Eastern European countries to Western and Northern European countries ('When dividing Europe into two halves according to GDP per capita, the economically stronger group of countries shows an 8% growth, while the poorer half of Europe shrinks by 3%).¹⁴⁷

¹⁴² COM(2016) 378 final, p.5.

¹⁴³ Inspired by OECD/EU analysis on labour market mobility: "The larger EU-wide labour market may be more attractive, but its attractiveness is bound up with the effectiveness of mobility provisions. Without prospects of mobility for third-country nationals, the greater attractiveness – and the enhanced ability to respond to shocks – cannot be brought to fruition" (OECD/ EU 2016, p.120).

¹⁴⁴ Keynote at the seminar on the attracting entrepreneurs to the EU by Sigrid Johannisse on 23 June 2016.

¹⁴⁵ EY's attractiveness survey, Europa 2015, p.32.

¹⁴⁶ Startup Heatmap Europe 2016, p.19.

¹⁴⁷ Startup Heatmap Europe 2016, p.6.

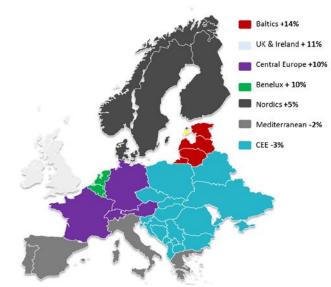
Table 5.16 Intra-EU movement of start-up founders

	Net inflow	Net outflow
Western Europe	+ 10%	
Northern Europe	+ 10%	
Southern Europe		- 4%
Eastern Europe		- 3%

Source: Startup Heatmap Europe 2016, p.6.

These data do not take into account the positive impact of migration into Europe from third countries, which leads to an overall surplus for the whole of Europe and a more positive (or less negative) result for the majority of the regions (Figure 5.8).

Figure 5.8 In- and outflows of start-up founders (including from third countries)



Source: Startup Heatmap Europe 2016, p.7.

This leads to the conclusion that attracting non-EU entrepreneurial innovators will result in greater equality (in terms of numbers of start-up) between the European start-up landscape. Hence EU added value will not only be in scale (more start-ups) but also in terms of fostering a geographically more equal EU start-up development.

This finding from the 2016 Startup Heatmap Europa study, is substantiated by the Financial Times article and our interview with Lars Felsjoe-Nielsen, who explicitly indicates that Silicon Valley returnees have settled all over Europe, including smaller and more 'remote' ecosystems (see Section 2.3).

Increasing retention

As discussed in Section 2.4, retention of highly-skilled entrepreneurial migrants that already reside in Europe is one of the pillars under the EU scheme ('two-step migration'). It is known that migrants are more mobile early on in their stays than later, when they become long-term residents and that a high share of migrants do not remain in the country of initial destination.¹⁴⁸

The added value of an EU scheme (in particular, an EU start-up visa/permit) is that by creating intra-EU mobility, retention to Europe as a whole will be enhanced. The OECD/EU also argues that:

'One of the key means of improving retention is by opening up mobility pathways and allowing the experience and qualifications earned in one EU Member State to more easily transfer to another Member State through mobility than to a third country.' 149

Co-operation in promoting Europe as the destination for start-ups

Joint actions of EU Member States under the umbrella of the European Commission could support in branding Europe as one network of interconnected ecosystems (as an alternative to for example the US). Pooling promotion efforts will also be more cost-efficient and will enable the use of European networks and services in third countries (such as EU Delegations, EU information points, Enterprise Europe Networks). For example, Europe as a whole has a diplomatic presence in more than 140 countries, more than many of its smaller Member States. Even if individual Member States have a diplomatic presence, the EU Delegation can strengthen their efforts by promoting the EU scheme on behalf of the Union. 150

Convergence in national policies

The EU scheme will stimulate harmonisation in Member State policies, standards and processes in attracting non-EU start-ups. As discussed before the introduction of an EU scheme might result in harmonisation of visa/permit application procedures, access criteria and benefits. This would create major added value as it would substantially decrease the administrative burden for entrepreneurs, lower the barriers for moving to the EU and would make the EU a more attractive start-up destination.

Cooperation instead of competition¹⁵¹

The high mobility of start-up founders and high-tech talent has created `a fierce competition among regions and start-up hubs' within Europe. More cooperation between European countries (though Startup Europe and, for example, the European Startup Network (ESN), that was officially launched in Brussels on September 7th, 2016) will eventually benefit all. In this the EU could play a natural coordinating role.

'If the network of Start-Up Visa coordinators had a hub, it would make everything so much easier. Imagine a network of all the partners of the different local start-up visa working together. Only thinking of it in terms of data collection: taking this together you could predict new industries, trends etcetera. It would be so much easier for start-ups to find out where they need to go, for cities / governments to know what to invest in etc.' 153

¹⁴⁸ OECD and EU 2016, p.128.

¹⁴⁹ OECD and EU 2016, p.128.

¹⁵⁰ OECD and EU 2016, p.38.

¹⁵¹ OECD and EU 2016, p.142-3.

¹⁵² Startup Heatmap Europe 2016, p.10.

¹⁵³ Interview B.

Coherence with other EU policies

The development of an EU scheme is coherent with President Juncker's Commission objective of the new European Agenda on Migration, in which shortages of specific skills are addressed and talents will be attracted to better cope with the demographic challenges of the European Union. The objective is to make Europe at least as attractive as the favourite migration destinations such as Australia, Canada and the US. Is has also been set-out that, Europe needs a new, dynamic and proactive approach to global talent with policies that link immigration to labour markets, and a business climate that rewards skills and entrepreneurship. 154

The EU scheme would also fit into the European Single Market strategy, the policies to transform Europe into a 'knowledge economy', and for example the Entrepreneurship 2020 Action Plan which is a blueprint for action to unleash Europe's entrepreneurial potential, remove existing obstacles and revolutionise the culture of entrepreneurship in the EU. The EU scheme will also strengthen the Startup Europe initiative, which connects European ecosystems and creates transparency in the European ecosystem landscape.

Introducing an EU start-up visa/permit may have several effects:

- More countries > more start-up visa applications. More start-up visa/permit applications as more
 countries are open for non-EU start-ups (calculations in Tables 4.19 4.21), applications in EU
 Member States that currently have a start-up visa increases slowly;
- More start-up visa applications per Member State. More start-up visa/permit applications as Europe as a total more attractive for foreign start-ups due to increased intra-EU mobility, more visa applications (application in EU Member States that currently have a start-up visa increase);
- Less 'double' start-up visa applications (in more than one Member State). Less start-up visa/permit applications as there is no need to apply for a start-up visa in more than one EU country at the same time;
- Higher or lower success rate of the visa/permit applications. Depending on the access criteria to the EU start-up visa the success rate (visa/permits awarded as % of applications) may increase or decrease. Here the EU should strike the balance between quantity and quality. The stricter the access criteria, the less visa/permits will be awarded, the higher the overall quality of the start-ups may be, which might result in a non-EU start-up lower failure ratio).

5.7. Expected number of EU scheme beneficiaries

One way to measure the success of the EU scheme will be to monitor the change in the number of applications for start-up visa/residence permits in the coming years, as well as, to some extent, the number of awarded start-up visa/residence permits. This misses the group of entrepreneurs that come legally to the EU on visa/residence permits other than those dedicated to start-ups specifically, but it is the most concrete and objective measure available at the moment.

Assumptions and baseline

In this section, we will first establish a baseline of applications and visa/permits granted for the EU7 that have dedicated start-up visa/permits. We then proceed to estimate the effects of having 28/27 EU start-up visa/permits, by extrapolating the EU7 results to the EU28/27, and lay out a scenario of natural growth. These calculations represent a conservative baseline and rest on a number of assumptions.

¹⁵⁴ Terms of reference for his study, page 19.

¹⁵⁵ On the one hand, as applications go up, it is to be expected that awarded visa/residence permits also go up. Moreover, through the web platform applicants should be able to better find the information required to prepare high quality applications, increasing their success rate. On the other hand, some states impose formal quota on the number of awarded visa/residence permits (for example when financial support is linked to acceptance, such as with the French Tech Ticket).

First, it assumes that the market for non-EU entrepreneurs is supply-driven, meaning that non-EU entrepreneurs (the customers) will respond to a change in the supply of start-up visa/residence permits (the product). In other words, there is a shortage of the required product, and an increase in its availability will lead to more uptake of the product and thus increase the number of non-EU entrepreneurs coming to the EU.¹⁵⁶

Secondly, it assumes the EU economy will see a stable growth path over the next few years. If the EU economy enters a crisis due to (internal or external) shocks, it is reasonable to assume that less entrepreneurs would be interested in moving to the EU.

Thirdly, it does not take into account external factors. Developments in other countries could have a major effect on the attractiveness of the EU as a destination for entrepreneurs, either negative or positive. For example, the incoming President of the United States may act to reverse President Barack Obama's executive order opening up a legal route for entrepreneurs to come to the US. It is also imaginable that the People's Republic of China may implement new policies specifically aimed to attract entrepreneurial talent from abroad. These examples are, however, speculative and not been taken aboard for our calculation purposes.

Fourth, it does not take into account the endogenous effect of the EU start-up visa. The unified face to the outside world and the possibility to establish oneself (after a certain grace period) in other EU Member States are likely to increase the attractiveness of the EU. The size of this effect is hard to estimate, as it will depend on the access criteria and benefits associated with the visa, as well as on the promotion campaign and success of the web platform.

The latest available data on applications and awarded visa/permits is shown in Table 3.13 (Chapter 3). Table 5.17 shows the numbers for 2015, adapted to duration of one year where necessary. In 2015, based on the limited available data, there have been at least 1,800 applications for a start-up visa/permit (excluding Austria and Spain, for which application data was not available), and little over 306 start-up visa/ permits have been awarded to non-EU entrepreneurs. As these programmes are fairly new and becoming better known, the trend is towards increasing numbers. An extreme example is the French Tech Ticket, which saw increased applications and has tripled its number of accepted applications over 2016.

¹⁵⁶ This is opposed to a demand-driven market, where products respond to a change in customer-demand. If this were the case for non-EU entrepreneurs and start-up visa/residence permits, increasing the supply of start-up permits would not increase the number of non-EU entrepreneurs coming to the EU, as the issue is a lack of non-EU entrepreneurs interested in coming to the EU in the first place.
¹⁵⁷ The UK is excluded as its visa/residence permits were not dedicated to start-up entrepreneurs.

Table 5.17 Start-up visa / residence permits in 2015

	Applications	Awarded
Austria	n/a	28
Denmark	238	52
France	1,372	50
Ireland	17	10
Italy	88	63
Netherlands	95	21
Spain	n/a	82
Total	1,810	306
	Success rate EU5	10,8%
	Success rate EU4	33,3%

Source: Table 5.16.

As can be seen, application data for Austria and Spain is missing. To estimate these numbers, one can use the success rate of the existing schemes to extrapolate the applications from the awarded visa/residence permits, which are known. We have used the averaged success rate of the EU4 (a third of the applications succeed), excluding France as its French Tech Ticket is not representative for other start-up visa/permits by virtue of its inclusion of a financial grant. The numbers are shown in the table below.

Table 5.18 Start-up visa/permits in 2015 including estimates for Austria and Spain applications

	Applications	Awarded
Austria	84	28
Denmark	238	52
France	1,372	50
Ireland	17	10
Italy	88	63
Netherlands	95	21
Spain	246	82
Total	2,140	306
	Success rate	14%

Source: Ecorys calculations based on Table 5.17.

Based on this and the experience over 2015, the baseline for the attraction of non-EU entrepreneurs, as measured in dedicated start-up visa/residence permit applications and awards, can be set to 2,140 applications and about 306 awarded start-up visa/residence permits per year, with a success rate of 14%.

The EU design scheme aims to increase these numbers, per the ToR preferably to 20,000 non-EU entrepreneurs per year. Based on the current baseline, that seems unrealistic even if the scheme is very ambitious in its design and elements.

The main question is which elements of the proposed EU scheme will be implemented: the minimum scenario of a promotion campaign plus the platform, or, more ambitiously, including an EU start-up visa/ permit and/or an EU funding (loan) facility? Each element will have an effect on the number of applications and, to a greater or lesser extent, also on the number of visa/residence permits granted.

Potential increase due to an EU start-up visa/permit

The crucial element is the EU start-up visa/permit, which we recommend to be introduced (see Section 4.4), both to fully materialise the benefits of the Single Market and because it is the most important element missing in making Europe more attractive to non-EU entrepreneurs.

To estimate the potential effect of an EU start-up visa/ permit, the numbers for the EU7 can be adjusted based on the GDP ratio of these countries vis-à-vis the EU total. The rationale behind this assumption is a rough estimate that larger economies attract more non-EU start-ups than smaller economies. The GDP of the Member States with a start-up visa/ permit amounts to about 44% (including the UK) or 53% of the EU total GDP (see Excel sheet in the Annex for full calculations). The resulting estimates are for the total number of visa applications awards if start-up visa/permits are open to all EU Member States is given Table 4.19. In this table the success rate (visa/permits awarded as % of visa/permit applications) is kept at 14%.

Table 5.19 Estimate of start-up visa/ permits applications and awards, EU28

	Applications	Awarded
EU7	2,140	306
EU28	4,885	699
EU27 (excluding UK)	4,029	576

Source: Ecorys calculations.

As a next step, the team has calculated the numbers for the coming five years, based on an assumed 'natural' annual growth in applications of 10%, which seems reasonable in light of the developments over recent years, albeit perhaps somewhat generous. This has been done for a scenario with the EU28 and with the EU27 (excluding the UK, as it is expected to no longer be a member of the European Union in five years time). Success rates are kept at 14%.

Table 5.20 Five year growth scenario, EU28

	Applications	Awarded
2017	5,373	768
2018	5,911	845
2019	6,502	930
2020	7,152	1,023
2021	7,867	1,125

Source: Ecorys calculations.

Table 5.21 Five year growth scenario, EU27 (excluding UK)

	Applications	Awarded
2017	4,432	634
2018	4,875	697
2019	5,363	767
2020	5,899	843
2021	6,489	928

Source: Ecorys calculations

The overall effect of the introduction of an EU start-up visa/permit cannot be quantified as there are too many assumptions to be made. However if we assume that every EU Member State will receive start-up visa/permit applications to the ratio of the relative size of its economy instead of only seven Member States now, and if we assume an annual growth rate of the EU start-up visa/permit applications, the total number of applications will be 7,867 in five years time, with (assuming a success rate of 14%) 1,125 EU start-up visa/permits awarded. This is much lower than the ambition of 20,000 as presented in the tender specifications for this study.

Additional action needed

What these rudimentary calculations however do show is that 'just' introducing an EU start-up visa/residence permit along the lines of the current national start-up via/residence permit will, by itself, not suffice if the EU is to attract 20,000 non-EU entrepreneurs. It will therefore have to be ambitious in its design as well. Not only should it offer full mobility rights within the Single Market, it should have appropriately defined access criteria and benefits. Some reflection on this is provided in Section 4.4.

Other elements of the scheme will have an effect on these numbers, their impact depending on the full package of the scheme. In regard to the promotion campaign, in the minimum scenario (without an EU visa/permit), expectations should be limited as the promotion campaign will give visibility to the EU, but cannot overcome the limited options for legal residency available to non-EU entrepreneurs in their early seed and start-up phases. If an EU visa/permit is adopted, the promotion campaign would have a strong branding tool to underline the message that the EU is open for entrepreneurial talent. Its impact will thus be magnified – although the magnification will depend on the exact access criteria and benefits on offer.

The same rationale holds for the web platform, both in regard to the start-up visa/permit and to the promotion campaign: the web platform will be more useful to entrepreneurs if it offers a streamlined procedure for applying for start-up visa/permits (see also section 4.4), and it will strengthen the promotion campaign's key message if it offers the full package (access to entrepreneurs and incubators, possibility to apply for visa/residence permits, information about Member States and an overview of funding possibilities).

An alternative option to increase the numbers would be to investigate whether the access criteria of the current national schemes are too restrictive – deterring potential applicants and bringing down the number of awarded visa/permits too far. This would however face the same (political) obstacles as the introduction of an EU start-up visa/permit and is outside the scope of this study.

The introduction of an EU start-up visa/permit will have several effects on the number of start-up visa applications and awards, amongst which: (i) More start-up visa as more countries are open to non-EU start-ups; (ii) More start-up visa as Europe as a whole is more attractive (mobility).

The introduction of an EU start-up visa/permit will be an important, even if not sufficient, condition to make the EU scheme a success, as access to the EU and intra-EU mobility are main barriers for non-EU entrepreneurs. The design of the scheme should be ambitious, with full mobility rights within the Single Market, and appropriate defined access criteria and benefits. The promotion campaign and web platform will be much more valuable – and contain a tangible proposition – to entrepreneurs if it offers a streamlined procedure for applying for start-up visa/permits.

5.8. Economic benefits of the EU scheme

The objective of the scheme is to attract 20.000 non-EU start-up entrepreneurs on an annual basis. The scheme should also – indirectly – strengthen Europe's web of start-up ecosystems and it should brand Europe as *the* destination for start-ups.

With regards to the direct impact, it should be noted that 20,000 is very ambitious – not to say overly ambitious. If we compare this with the actual numbers of beneficiaries of the exiting national start-up schemes, with only tens of beneficiaries on an annual basis, 20.000 is very optimistic. At least, in the short term. A figure of 20,000 can easily be achieved if access criteria are less restrictive. The number of additional start-ups will depend on the question as to where to find the right balance between attractiveness and selectivity in the EU scheme.

However, most national schemes are relatively young, as is the 'start-up revolution'. In addition to direct economic effects (innovation, job creation), stimulating (foreign) start-ups might have an impact on local ecosystems - as is the case with Start-Up Chile that has indirectly given a positive impulse to the national tech-scene. These 'start-up multiplier effects' cannot be quantified, but should be taken into account when assessing the potential impacts of an EU scheme.

We will finally present an estimated calculation of the potential direct economic impacts. The ambition of the scheme is to attract (or retain) 20,000 migrants per year to establish a start-up in Europe. We assume an average of 2.7 founders per start-up and we also assume that every start-up creates an average of 10.3 jobs after 3 years. 158 According to the European Startup Monitor, start-ups create 2.5 jobs in their seed phase, 7.6 jobs in the start-up phase, 26.3 in the growth phase and 83.5 jobs when maturity is reached. 159

One of the difficulties with calculating the effects is that many start-ups do not survive. It is calculated that over 90% of the start-ups fail, even in thriving ecosystems. 160 In other calculations, a survival rate of 50 to 66% is mentioned. 161 If we assume a survival rate of 50%, this will imply that in a scenario of 20,000 additional foreign start-up founders, after 3 years over 38 thousand jobs are created on an annual basis. This is an average of 1,362 per EU Member State.

Table 5.22 Number of jobs created by the EU scheme (speculative calculation)

Assumptions and calculations	
Number of foreign start-up founders (target)	20,000
Number of founders per start up*	2.7
Number of start-ups created	7,407
Survival rate in 3 years of time (assumption)	50%
Number of start-ups surviving**	3,704
Average number of jobs created per start-up, after 3 years*	10.3
Total jobs created after 3 years time	38,148
Average number of jobs per EU Member State	1,362

Source: Ecorys calculations based on assumptions from (*) European Start-up Monitor 2015; (**) J. Goube. Why a European Start-up Visa makes sense, March 22, 2014.

On the basis of the - more realistic - numbers, the calculations of the economic impact of attracting can be adapted as follows.

¹⁵⁸ European Startup Monitor 2015, see also Chapter 2.

European Startup Monitor 2015, p.44.

150 An often-cited statistic is that 90% of businesses fail within the first 12-18 months.

 $^{^{\}rm 161}$ J. Goube. Why a EUropean Start-up Visa makes sense, March 22, 2014.

Table 5.23 Number of jobs created by the EU scheme (speculative calculation)

Assumptions and calculations	
Number of foreign start-up founders (target) (Based on the 2021 estimate in Table 4.20)	7,867
Number of founders per start up*	2.7
Number of start-ups created	2,743
Survival rate in 3 years of time (assumption)	50%
Number of start-ups surviving**	1,372
Average number of jobs created per start-up, after 3 years*	10,3
Total jobs created after 3 years time	13,720
Average number of jobs per EU Member State	490

Source: Ecorys calculations based on assumptions from: (*) European Start-up Monitor 2015; (**) J. Goube. Why a EUropean Start-up Visa makes sense, March 22, 2014.

However, the dynamics of the start-up scene does not allow for calculating with averages. One may argue that the disappearance of a certain percentage of start-ups will be compensated by the growth of jobs and wealth generated by the ones that survive. 162 The surviving start-ups create more jobs than the ones that have disappeared. Also, start-ups typically undertake more than one attempt to found a business. Up to 41% of the founders in the SME 2015 study had started at least one other business, and even more than one.

Finally, it may be argued that the start-up dynamics may be characterised with what in economic theory is being labelled as a 'superstar economy' in which the winner takes it all. The Economist recently argued that:

'Apple, Google, Amazon and their peers dominate the US economy just as surely as US Steel, Standard Oil, and Sears dominated the economy of Roosevelt's day. (...) There are good reasons for thinking that the superstar effect will gather strength. (...) One reason is that digitalisation reinforces the trend because digital companies can exploit networks effects and operate across borders. '163

One of the rationales behind policies to promote start-up activities is exactly the promise of scalable businesses – up to the level of Unicorns with over EUR 1 billion (or USD) net worth. To date, Europe has given rise to 47 billion-dollar tech companies, with an average valuation of USD 2.8 billion USD (EUR 2.6 billion), with Spotify, Skype and Zalando as number one, two and three. 164

¹⁶² J. Goube. Why a EUropean Start-up Visa makes sense, March 22, 2014.

¹⁶³ The Economist, The rise of the Superstars, 16 September 2016.

¹⁶⁴ GP. Bullhound, EUROPEAN UNICORNS 2016.

In a calculation by TechCrunch the chance of becoming a Unicorn in the US was over the past decade 0.14%: "Despite the doubling, building one of these companies is still ridiculously difficult and rare. If 60,000 software and Internet companies were funded in the past decade, that means only 0.14% have become unicorns— or one in every 714. The odds of building, working for or backing one are worse than catching a ball at a major league game; but, better than the chance of dying by shark attack— so we've got that going for us, which is nice."

In other words, the development of a Unicorn is typically a 'high-impact, low-probability' event. Calculations about the chance of a start-up to become a Unicorn vary and cannot be used a basis for calculating the potential effects of the EU scheme.

The justification for pursuing start-up policies is beyond the direct benefits in terms of jobs creation and the development of short-term profitable innovations. The rationale behind setting up an EU scheme should be found in long-term EU policies aimed at making the EU an attractive highly-skilled migration destination, fostering the European Single Market, transforming Europe in a cutting-edge 'knowledge economy', with a dynamic, innovative and open culture of entrepreneurship.

¹⁶⁵ TechCrunch, Aileen Lee, Welcome To The Unicorn Club, 2015: Learning From Billion-Dollar Companies, Jul 18, 2015.

6. SERVICE PLATFORM

6.1. Basic outline of the web platform

In this chapter, we present the (detailed) outline of the web platform. Thought of from the viewpoint of the entrepreneur, the web platform could be modelled in different ways: 166

- Model 1: Information hub, sends you to other sites;
- Model 2: Information matching, collects relevant info and allows for smart searching and matching;
- Model 3: Intermediary linker, collects relevant info and links to intermediaries that help you navigate local and EU-wide ecosystems.

Model 1 is simply a referral site: links are aggregated in one central place, but the actual content and functionalities are not there, users are sent to outside platforms. Model 2 actually integrates outside information with 'own' information, and allows a user to get what he or she needs within the web platform itself. Model 3 provides very summary information but refers to contact persons for more detailed information. As will be explained in the remainder of the chapter, given that we have the needs and added value for the entrepreneur in mind, Model 2 is the most suited for our purposes and we have therefore designed a web platform that goes beyond simply signposting to other websites: it actually helps (non-)EU entrepreneurs satisfy their needs.

6.1.1. Web platform philosophy and model

There are a few 'maxims' that have been central to the development of the blueprint of the web platform found below. These maxims are adhered to in an effort to maximise the added value of the web platform, and are a result of the input received through the interviews with stakeholders as well as interviews that were conducted with representatives from other platforms (see Section 1.2).

The web platform:

- Presents Europe as one (attractive) ecosystem, with complementary local ecosystems: The
 platform will have one European look and feel, with a clear connection to the promotion campaign.
 We should present Europe as an ('the most') attractive overall ecosystem; wealthy and diverse;
- Is demand driven: It will be designed from the perspective (needs) of entrepreneurial innovators (in particular, 'legal migrants', 'returnees', 'aspiring migrants') and their needs.
- Table Table 6.1 below provides some thoughts.

Table 6.1 Potential needs of non-EU entrepreneurs

Need	Component in the web based service platform
Ecosystems	Information about Europe in general as destination to start a business.
Ecosystems	Information about specific local ecosystems (with search function).
Support	Access to local support and information (via direct links to intermediaries) and (networks of) a wide variety of local support partners (accelerators, incubators, investors, other) who will give financial support (access to finance) and non-financial support.
Visa/permit	Information on national visa/permit (direct link to application procedure).
Visa/permit	Information on relevant EU visa/permit (direct link to application procedure).

¹⁶⁶ This is more fully detailed in Annex VI.

Need	Component in the web based service platform	
Visa/permit	Possibly in the long term: EU start-up visa/permit (direct application procedure).	
MS information	 General information; National support schemes, if available (direct link); Visa and residence permits (direct link); Designated national intermediaries (direct link); Tax information, eventual fiscal incentives, banking information; Guidelines for international entrepreneurs, in particular start-ups. 	
Funding	Existing relevant EU funding opportunities (information and direct link).	
Funding	Possibly: Targeted EU financial support facility (direct application).	
Funding	Funding at national and local level will be provided via links MS information and links with local support partners.	
Networking	Community of practice: Secure are for entrepreneurs to exchange experiences.	
Networking	Community of practice: Secure area for incubators, accelerators, business partners and schemes across Europe to exchange.	
Networking	Community of practice: Secure area for EC / EU MS officials in charge of SMEs / non-EU MS to exchange best practices.	

With these maxims in mind, research has been undertaken on the kind of web platform model that would be most suited to serve the needs of the target group. 167 This has highlighted one model as particularly suitable.

The web platform will be an 'intermediary linker', which collects relevant info and links to intermediaries that help you navigate the local and EU-wide entrepreneurial ecosystem(s). The intention is to bring prospective entrepreneurs in (one-on-one) contact with intermediaries that can assist them with country-specific, regional and local knowledge as quickly as possible.

It is important to note that we want to make the web platform as accessible as possible to everybody. This means it is important to provide entrepreneurs with the option to conduct their own search for the most fitting ecosystem and contact these directly, without creating a profile on the website and without invoking assistance from a third intermediary.

Finally, the name of the web platform should be both inviting and challenging non-EU entrepreneurs to come here. In line with the promotion campaign as detailed in Chapter 5 and the merger with the Startup Europe Club, the web platform's name is 'STARTUPEUROPE.EU'.

Positioning of the platform

In line with the strategic positioning of the Startup Europe initiative as central to the European ecosystems, this web platform will be developed as an extension of the Startup Europe Club One Stop Shop (http://startupeuropeclub.eu/), in effect it will therefore add functionalities to the existing platform. These impacts certain functionalities of the platform as described in the remainder of the chapter.

¹⁶⁷ We have reviewed other web platform models, our analysis of these and their applicability for this assignment are presented in the Annex.

6.1.2. Main functionalities

The web based service platform shall build bridges between existing ecosystems and will have the following information and hosting functions related to the (potential) needs of the three target groups:

To ensure these needs are served, the platform will have the following functionalities, which are accessible in the main header:

- 1. Register (create a profile) and Log-in (both for entrepreneurs and intermediaries);
- 2. Find your destination;
- 3. Ecosystem map;
- 4. EU and country-specific information (key facts, visa/permit information, intermediaries);
- 5. Access to funding (public and private);
- 6. Visa/permits;
- 7. Community of Practice (including forum function).

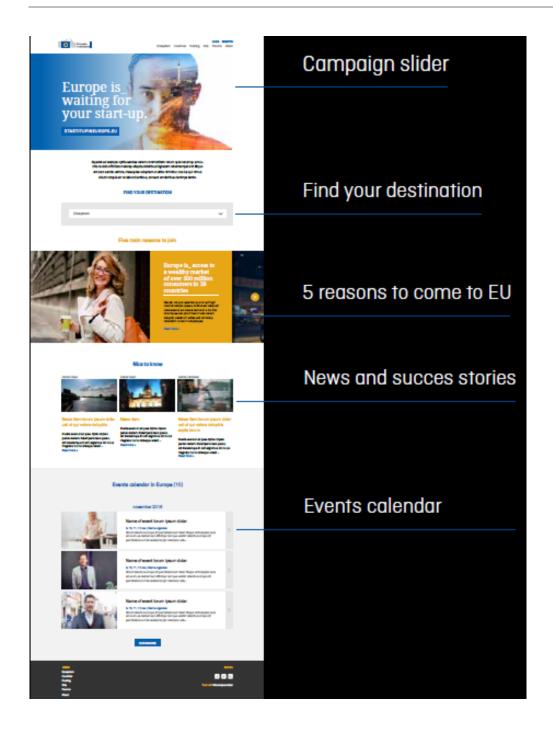
These represent the main points of entry on the homepage. These functionalities are further detailed in the following sections, and accompanied by the user journeys that visualize the steps per point of entry at the end of each section. 168

Additionally, the web platform homepage will have the following features:

- a promotional banner (featuring promotion campaign materials);
- slider that depicts 'Five Reasons to Come to the EU';
- testimonials ('success stories');
- news and events calendar;
- footer section with a sitemap (including an 'About us' page).

The homepage is visualised on the next page.

 $^{^{168}}$ These visualizations have also been sent as a separate file, to enable them to be viewed in better quality.



6.1.3. Connections to relevant European Commission platforms

It is essential that the web platform connects with pre-existing (EU) platforms with relevant information for (prospective) non-EU entrepreneurs, in particular: 169

- DG RTD's EURAXESS;
- DG EAC and DG RTD's Marie Skłodowska-Curie actions under Horizon 2020;
- DG CNECT's Startup Europe Club (with which it will be merged);
- DG GROW's Access to Finance;
- DG HOME's EU Immigration Portal.

However, after detailed analysis of these websites, it appears that:

- Much of the information and services about funding and support are not directly relevant for the target group of this study. Some are relevant for the returnees (which is a small subset), some are open for non-EU nationals but are focused on research (research grants) or jobs;
- Alignment of these websites and the information and services offered by these five DGs requires another, separate study, as it falls outside of the scope of this study. The current study will focus on elements relevant for the target audience;
- The scheme we will design should be demand driven. The needs of the target groups are central. This requires a slightly different approach than supply-driven, i.e. 'just' showing what is on offer by the EU.

In the detailed description of the various functionalities present on the web platform, we will detail how relevant information from the European Commission's platforms is linked to or integrated within the web platform.

6.1.4. Main stakeholders of the platform

There are different stakeholders involved in the functioning and sustainability of the platform, each with their own particular focus.

Table 6.2 Platform roles and stakeholders

Role	Stakeholder	Focus
(Co-)Owner of the platform	DG RTD / DG CNECT	Use platform to stimulate innovation and job growth.
Technical manager	External contractor	Ensure proper working of the platform.
Content manager	External contractor	Ensure proper content management.
Decentralised contact points	Designated intermediaries	Ensure functioning of local ecosystem.
Bottom-up content creation	Entrepreneurs	Find the right support.
Bottom-up content creation	Intermediaries	Attract/support the right entrepreneurs.

¹⁶⁹ For this, reference has been made to the annex in the ToR on pages 20 and 21. See also https://EURAXESS.ec.europa.eu/, http://ec.europa.eu/research/mariecurieactions/, http://startupeuropeclub.eu/, http://europa.eu/youreurope/business/funding-grants/access-to-finance/index_en.htm, and http://ec.europa.eu/immigration/.

The management of the platform is further detailed below, particularly in regard to the technical and content management and the role of the designated intermediaries in ensuring the information on the platform is complete and up to date.

6.1.5. Phased development of the web platform

After the web platform has been developed (both technical and content-wise) and following the first evaluation of the platform based on stakeholder feedback, we suggest developing a "recommendations" functionality for the platform.

Recommendations

The recommendation functionality would be featured alongside search results. It would operate in a similar way to Amazon (and other online retailers) where the site would automatically make recommendations based on:

- your profile;
- your searches;
- your activity on the site (what information you have viewed, etc.);
- the profile of similar entrepreneurs;
- the searches performed by similar entrepreneurs.

This type of functionality is now becoming common-place on platforms where users are performing searching/matching functionality. The inclusion of a recommendation feature on the platform will potentially increase the use of the platform and enable many more matches to take place. Drupal's Recommender API^{170} could be potentially utilised to build this functionality.

6.2. Practical tasks of the intermediaries

As explained in section 4.2, the designated intermediaries are crucial to the proper functioning of the entrepreneurial ecosystem(s). Therefore, it is strongly recommended they will play a big role in the practical day-to-day content management of the web platform. Their responsibilities will be to:

- function as a local guide;
- be a welcome-desk for entrepreneurs;
- map the national ecosystems;
- · map national public funding opportunities;
- place country-specific news and events;
- be the gatekeeper of the platform's discussion groups.

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 $^{^{}m 170}$ https://www.drupal.org/project/recommender.

6.3. Creating your profile: entrepreneurs and intermediaries

The platform can be used without creating a profile, in order to ensure it is easily accessible for (non-EU) entrepreneurs. This means that the various functionalities described can be utilised by both non-EU and European entrepreneurs.

There will, however, be an opportunity for entrepreneurs to create their own profile, so that they can share their own story, be found by others (entrepreneurs and intermediaries), and clearly indicate the specific types of opportunities in which they would be interested.

By creating a profile, an entrepreneur will be able to use the platform as effectively as possible: with a profile, only information that is relevant to him/her will be shown; intelligent matching can take place; and updates about relevant events, news and opportunities can be shared. Moreover, after creating a profile it will be possible to utilise the forum function of the web platform and join or create discussion groups as part of the 'Community of Practice'.

A further consideration would be to institute the role that when an entrepreneur wants to be put in touch with a designated intermediary, they will be prompted to create a profile. This would allow a designated intermediary to help the entrepreneur more effectively.

Sections of entrepreneur profile

Name

Email

Nationality

Current country of residence

Current city of residence

Industry of your start up (dropdown list with options as listed in Annex X)

Growth stage of your start up (dropdown list)

- Seed
- Early growth
- Late growth
- Mature
- Story of your start up (500 words)

What are you looking for: (dropdown list)

- Funding opportunities
- Events

Additionally, it will be possible for all other actors in the entrepreneurial ecosystem ('intermediaries') to create a profile as well. Doing so will enable these actors to be found through the 'Find your destination' functionality (see section 5.4) as well as on the ecosystem map (Section 4.5). As the Startup Europe ecosystem map will be used for this platform, we recommend that the profile function is tightly integrated with the Startup Europe registration process.

Sections of intermediary profile

What type of intermediary are you?

- Incubator
- Accelerator
- Science park
- University
- Other

Your country (dropdown list of EU28)

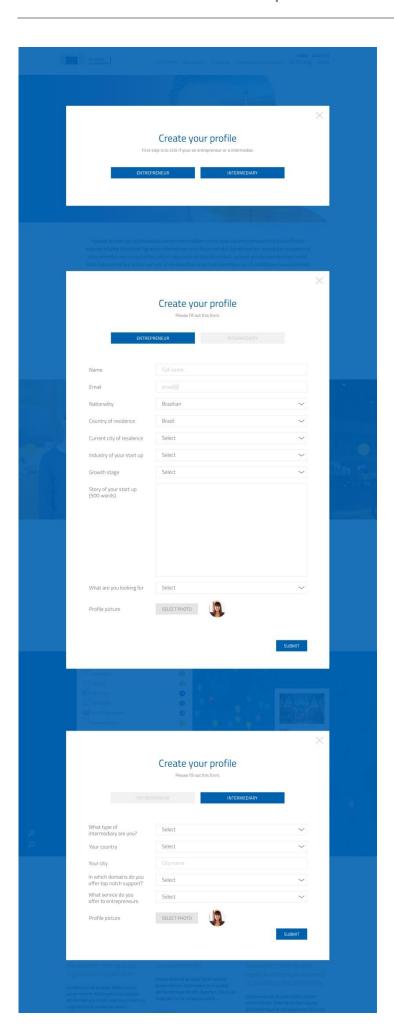
Your city (dropdown list)

In which domains do you offer top notch support? (dropdown list)

What services do you offer to entrepreneurs? (dropdown list)

- Support to attain a visa/permit
- Business training (business development, mentoring, networking, pitching)
- Legal advice
- Tax advice
- Funding
- Contacts to ecosystem partners (Chambers of Commerce, incubators, accelerators, universities, investors etc.)
- Other (please specify)

Both options are visualised on the next page.



6.4. Find your destination

The 'Find your destination' functionality is the main tool of the web platform and it is expected that this will be the most-used functionality. Through a search bar on the homepage, entrepreneurs are able guide themselves towards the relevant local ecosystems throughout the EU that are focused on their sector(s). They will also have the possibility to interact with a designated intermediary who has the local knowledge needed to guide the (prospective) start-up entrepreneur to and through the local ecosystem, the local funding opportunities and the local bureaucracy.

6.4.1. Filtering options

When using the search functionality on the homepage, the entrepreneur is directed to a page that gives the possibility to filter on specific aspects, as shown in the visualization on the next pages. These filters are optional and can be stacked, meaning that an entrepreneur has the option to utilize more than one filtering criteria if he so desires.

The filter opportunities that will be included in the platform are:

- Sector: what types of ecosystems are you interested in? (sectoral focus)¹⁷¹;
- Country: which countries are you interested in?
- Visa/permit options: are you interested in visa/permit options for the indicated countries?
 - If this box is ticked, these options will be included in the search results for the countries chosen;
 - If this box is ticked, the search results will also indicate which intermediaries can provide support for getting a visa/residence permit.
- Funding: are you interested in funding opportunities?
 - If this box is ticket, the entrepreneur can indicate for which stage of start-up he wants to see funding opportunities: seed, start-up, scale-up, mature, or all.

Depending on what is selected, the entrepreneur will be guided to the options that are most relevant to him. From the results overview-page, it is directly possible to contact the designated intermediary for assistance. This page will feature:

- Key facts about the country/ies chosen;
- Designated intermediary/ies for the country including contact details;
- List of intermediaries located in that country that focus on the (filtered) sectors indicated;
- Possible: Relevant visa/permit options;
- Possible: Relevant funding opportunities.

6.4.2. Links within the platform

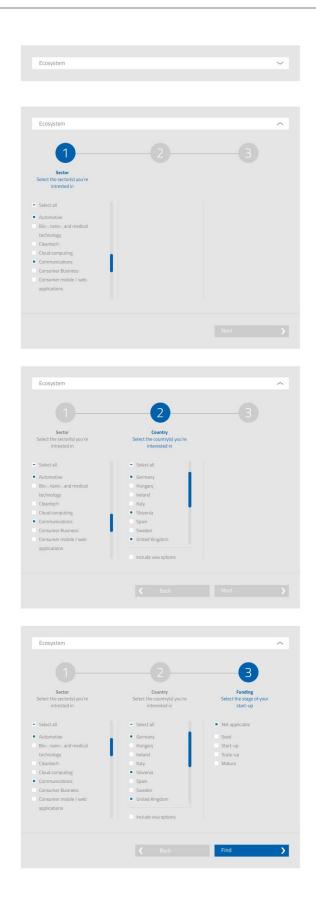
The 'Find your destination' functionality is the main functionality of the platform, integrating all the data that is available for the different sub-domains. It integrates the databases that can be found on the sub-domains for each functionality.

 $^{^{\}rm 171}$ Based on the list of entrepreneurial domains as listed in the annex.

6.4.3. External sources

As the 'Find your destination' functionality sources its data from what is gathered under the subdomains of the other functionalities, there is (mostly) no direct link to an external source. The relevant geographical of the ecosystem map will directly utilise the ecosystem map already available on the Startup Europe platform. The steps from search – relevant results – results page is visualized on the following page, with an example of a results page with and a results page without funding indicated as being relevant.

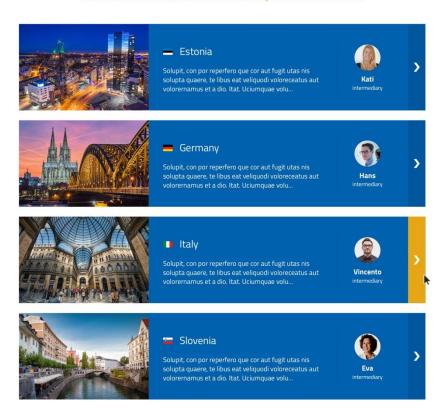
Step 1: Search on sector, country, visa (if wanted), and funding options (if wanted)



Step 2: Overview of countries with relevant results

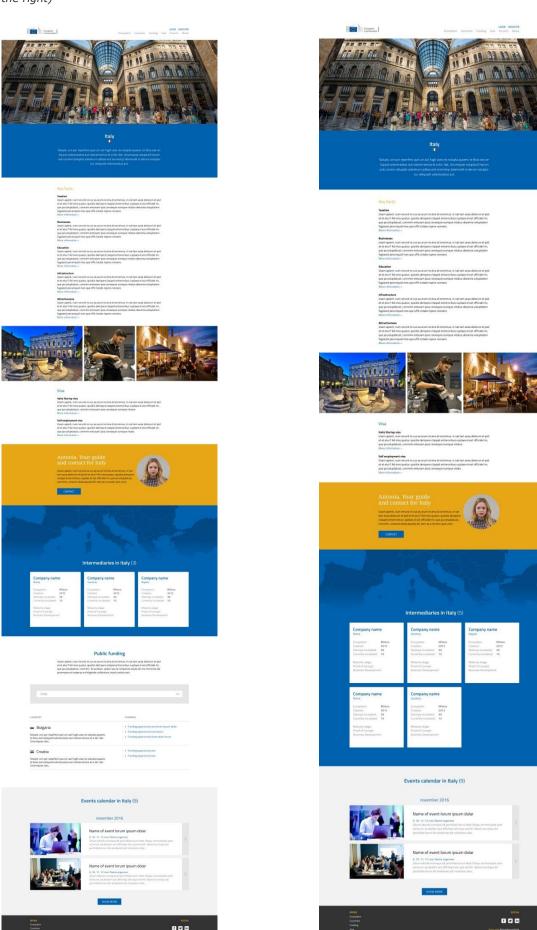


You have 4 results for Automotive, Communications





Step 3: Overview of relevant results within selected country (with funding on the left, without funding on the right)



6.5. Ecosystem map

6.5.1. Functionalities of ecosystem map

The ecosystem map will allow entrepreneurs to visualise where the regional ecosystems in the European Union are located. This can be used in two main ways:

- Indirectly it will be possible to use a search function bar to search on:
 - country and/or;
 - region and/or;
 - thematic/sectoral cluster.
- Directly it will be possible to directly click on the map to show more information about specific countries and regional clusters (thus applying a filter through clicking).

6.5.2. Type of ecosystem map

There are different models for such an ecosystem map, three examples of which have been reviewed by the study team. To evaluate these ecosystem maps, the team has looked into the presentation of the ecosystem (clustered or individually shown) and the process to fill the map (bottom-up or top-down). The main elements have been summarised in Table 6.3 below (see also the Annex to this report).

Table 6.3 Ecosystem map models

	Pro	Con
Presentation of ecosystem		
Startup Europe	 Good visual indication of plethora of actors involved in ecosystem; Easy to filter for different types of actors. 	 Overcrowded; Search function not working optimally; Absence of thematic labels per cluster.
Start Up Italy	Easy to filter.	 Overcrowded; Absence of search function; Absence of thematic labels per cluster.
French Tech Ticket	Simple / elegant;Thematic labelling per cluster.	
Process to fill the map		
Startup Europe (Bottom-up)	 Transparent and accessible; Can increase buy-in / chances of success if initiatives are incentivised to be part of the system. 	Risk of low self-subscription, resulting in mis- and under-representation.
Start Up Italy (Bottom-up)	Identical to Startup Europe.	Identical to Startup Europe.
French Tech Ticket (Top-down)	Accurate representation: covers what are deemed the most important actors.	Less transparent and accessible;Needs to be regularly updated.

In terms of the presentation of the ecosystem, the French Tech Ticket ecosystem map can be considered a 'best practice'. It is concise, shows the relevant actors in the ecosystem without being too full, and a thematic labelling per cluster is applied. Moreover, it is possible to search for actors. In its current form, the Startup Europe and Start Up Italy maps are less attractive, as the presentation is 'crowded' (number of initiatives in certain places is overwhelming) and the search functionality is limited. From the viewpoint of the user, it is unhelpful that there is no thematic/sectoral characterisation available for the different local ecosystems.

In terms of the process to fill the map, the Startup Europe and Startup Italy ecosystem maps can be considered best practices – at least in theory. Bottom-up registration lowers the bar for intermediaries to include themselves on the map and makes it easily accessible. In practice, there may be a risk that there is low self-subscription and that the presentation of ecosystem actors does not accurately represent the various options.

6.5.3. Integration with Startup Europe

Based on the review above, as well as the recommendation as a strategic choice to extend the Startup Europe platform to accommodate this web platform, it is recommended the Startup Europe ecosystem map is used as the ecosystem map. When entrepreneurs navigate to the ecosystem map on the homepage of the web platform, they should be directed to the Startup Europe ecosystem map. 172

However, in order to maximise the added value of this functionality, it is highly advisable certain amendments are made to address certain limitations of this map:

- Ensure proper representation of all the major relevant start-up ecosystem actors;
- Improve visual representation of local ecosystems by clustering them and adding thematic labels;
- Improve search bar functionality.

As explained in Section 4.2, it is recommended the designated intermediaries are tasked with ensuring the web platform ecosystem map is filled with the necessary information about relevant ecosystem actors – thus (temporarily) adopting a top-down approach that should be phased out when uptake of the web platform is sufficient. This would address the first recommended amendment.

The current content managers of the Startup Europe web platform¹⁷³ have indicated that the visual presentation of the ecosystems is still developing, and it could be (relatively easily) adapted to better serve the needs of entrepreneurs and intermediaries if this proves useful and/or necessary. It is therefore advised that the further development of the Startup Europe ecosystem map takes these specific aspects into consideration.

6.5.4. Links within the platform

It should be possible to access the ecosystem map directly from the homepage of the web platform.

6.5.5. External sources

In light of the merger with Startup Europe the web platform will use their ecosystem map.

¹⁷² This can be found here: http://startupeuropemap.eu/map/. Our recommendation is to extend the Startup Europe platform and to upgrade this to Drupal (see below). Once this is done, all the content will be part of the same platform, and users will not need redirecting. This presents a better experience for the user.

¹⁷³ Hugin and Munin, interview with content manager on 4 November 2016.

Proposed opening screen of the amended Startup Europe ecosystem map:



Ecosystem

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The designated intermediaries should assist in filling the database of incubators, accelerators and other relevant actors (see also Section 5.5.3).

6.6. EU and country-specific information

From the homepage of the platform, it is possible to navigate to 'Country-specific' pages for the EU28 Member States and a Union-wide overview. These will display the sections 'Key facts', 'Visa/permit opportunities', 'List of intermediaries' and 'Events'. This is explained in further detail on the following pages.

The first page will show the Key facts and Visa/permit opportunities for the EU as a whole. On this page, it will then be possible to go to a specific EU28 Member State to view all the relevant information regarding that specific country.

6.6.1. Key facts

The platform will feature country-specific pages that display 'key facts' of relevance to (prospective) entrepreneurs. This should give an overview of relevant facts and information sources at one glance. It should moreover be possible to compare these between countries, for example selecting indicators to be shown for Germany and Belgium or Italy and France.

On the basis of literature research and stakeholder consultations (see Section 2.7'Why Europe' and the interview reports in the Annex) we recommend including the following as the most relevant information: 174

- Taxation: Information about tax climate;
- Businesses: Information on how to set up a company;
- Education: Statistics about levels of education attained in country, sector specific;
- Infrastructure: Statistics about IT infrastructure (internet broadband penetration) and physical infrastructure (international airports, highways, high-speed railways);
- Attractiveness: Ranking of country as an attractive place to live in, including work-life balance.

The Union-wide view lists these key facts for the EU28 as a whole.

6.6.2. Visa

On the country-specific pages, information about visa/ permit opportunities relevant to non-EU entrepreneurs are displayed. See Section 5.8 below where the specific Visa functionality is described that will be featured here as well.

6.6.3. List of intermediaries

On the country-specific pages, an overview is given showing all the intermediaries that are located in that country. It should be possible to click these initiatives to find out more information (linking to their profile-page). From the information on that profile-page, it should be possible to directly contact them as well, using the email address provided in their profile.

6.6.4. Access to funding

The web platform for non-EU entrepreneurs should only provide information that is relevant to our target group. In addition, although it should link to relevant funding opportunities, it should not simply duplicate already existing Commission initiatives (such as the EU Access to Finance portal)¹⁷⁵ or absorb information that is already available on various private commercial platforms (such as f6s, AngelList, Gust and Seedrs).¹⁷⁶ See Section 5.7 below, where the specific Access to Funding functionality is described that will be featured here as well.

6.6.5. Events

On the country-specific pages, an events calendar will show which events are taking place in that respective country. The Union-wide page displays the events calendar as presented on the homepage, with events for all the EU28 Member States.

6.6.6. Links within the platform

This information should be displayed when using the 'Find your destination' filter and a specific country or ecosystem is chosen, and/or interest in visa/permit opportunities is indicated. It should additionally be possible to access the country-specific information directly from the homepage of the web platform. Furthermore, the Visa section is linked to the Visa page (see Section 5.8) and the Access to Funding section is linked to the Access to Funding page (see Section 5.7).

6.6.7. External sources

The table 6.4 on the next page shows (initial) sources for the country-specific pages. These could be further developed or amended if needed based on user feedback.

¹⁷⁴ This list may in the future be adapted if needed, based on feedback from the start-up community.

¹⁷⁵ See http://europa.eu/youreurope/business/funding-grants/access-to-finance/index_en.htm.

¹⁷⁶ See https://www.f6s.com/, https://angel.co/?ref=nav, https://gust.com/, https://www.seedrs.com/.

Table 6.4 Source of country-specific data

Information	Source	
Key facts		
Information about tax climate	DG TAXUD's 'Taxes in Europe' database (http://ec.europa.eu/taxation_customs/tedb/taxSearch.html)	
Information on how to set up a company	European Commission's Your Europe initiative's 'Doing Business in Europe' (http://europa.eu/youreurope/) generally and information about starting up specifically (http://europa.eu/youreurope/business/start-grow/start-ups/index_en.htm).	
Education statistics	Eurostat data on Education and training (http://ec.europa.eu/eurostat/web/education-and-training/data/database) and Tertiary education statistics and underlying data as reported in Eurostat yearbooks (http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_in_figuresEurostat_yearbook).	
Infrastructure statistics	Physical infrastructure: World Economic Forum, infrastructure sections in Global Competitiveness Reports and underlying data (https://www.weforum.org/reports); IT infrastructure: Digital economy and society statistics - households and individuals and underlying data as reported in Eurostat yearbooks, specifically 1.1 Internet Access and 1.2 Internet usage (http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_in_figuresEurostat_yearbook); Possible: OECD's annual 'Entrepreneurship at a glance' reports (http://www.oecd.org/industry/entrepreneurship-at-a-glance-22266941.htm), part of the Entrepreneurship Indicator Programme with Eurostat.	
Country ranking as attractive place to live	OECD Better Life Index country-specific pages (http://www.oecdbetterlifeindex.org/) as well as specific indicators, such as 'Work-Life Balance' (http://www.oecdbetterlifeindex.org/topics/work-life-balance/); Possible: Ranking in Annual World Happiness reports (http://worldhappiness.report/) ¹⁷⁷ .	
Visa/permit		
Union-wide opportunities	EU Immigration Portal (http://ec.europa.eu/immigration/)	
National EU28 opportunities	EU Immigration Portal (http://ec.europa.eu/immigration/) EU 28 national websites, also listed on EU Immigration Portal	
List of intermediaries		
Intermediaries in EU28	To be added by designated intermediaries.	
Access to funding		
Union-wide opportunities	Direct link to EU Access to Finance Portal.	
Public funding	To be added by designated intermediaries.	
Private funding opportunities	Direct links to relevant commercial platforms, such as: f6s www.f6s.com; AngelList www.angel.com;	

 $^{^{177}}$ See e.g. Figure 2.2 in World Happiness Report 2016 Update, http://worldhappiness.report/ed/2016/.

Information	Source		
	Gust www.gust.com;Seedrs www.seedrs.com.		
Events			
Country-specific events	To be added by designated intermediaries.		

A visualisation of the country-specific page can be found on the next page.

Starting page for EU and country-specific information:



6.7. Access to Funding

6.7.1. Access to funding on the web platform

The web platform for non-EU entrepreneurs should only provide information that is relevant to our target group. In addition, although it should link to relevant funding opportunities, it should not simply duplicate already existing Commission initiatives (such as the EU Access to Finance portal) 178 or absorb information that is already available on various private commercial platforms (such as f6s, AngelList, Gust and Seedrs). 179

In this respect, we have identified that a platform where country-specific public funding opportunities (national, regional and local) are brought together is missing. We therefore recommend that the platform *provides links to* the EU Access to Finance portal and private commercial platforms with funding opportunities, but *integrates and absorbs* relevant public funding initiatives in the various Member States (on national, regional, and local levels).

The Access to Funding functionality would then become the de facto platform for EU28 public funding that is relevant for entrepreneurs. This would provide substantive added value from the viewpoint of start-up entrepreneurs, providing the missing (easily searchable) overview of the relevant public funding opportunities in Member States, and linking to relevant platforms with private funding opportunities and EU funding. In the future, the (currently non-existent) tailored EU funding facility can be included here.

This overview should be created at first top-down through registration by the designated intermediaries. Over time, when the platform becomes increasingly widely known and is used more broadly, this should become self-sustaining as registrations of funding opportunities take place bottom-up and appear on the web platform subject to validation by the designated intermediaries.

Concretely, the web platform's Access to Funding page would then have 3 sections:

EU Funding instruments (external link)	Link to Access to Finance portal
Private funding opportunities (external links)	Links to various private commercial platforms such as f6s, AngelList, Gust and Seedrs ¹⁸⁰ .
Public funding opportunities (internal, integrated overview)	Overview of public funding initiatives in the EU28 Member States, with an ability to search for and filter on specific countries, size of funding, sectoral focus, stage of start-up, and a direct link to the funding opportunity.

6.7.2. Links within the platform

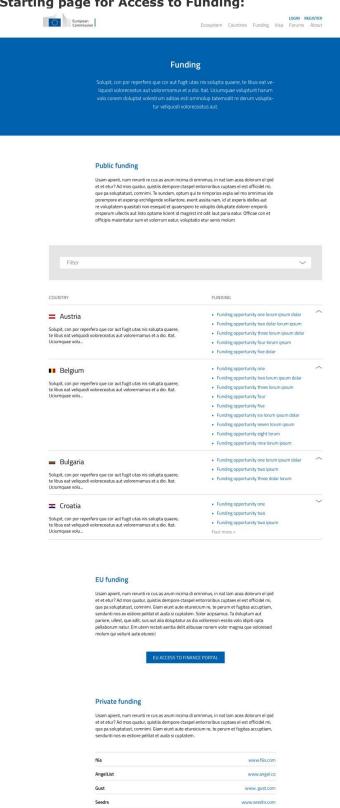
As shown in the user journey, the information regarding country-specific public funding should be displayed when using the 'Find your destination' filter and a specific country or ecosystem is chosen, and/or interest in funding opportunities is indicated. It should additionally be possible to access the Access to Funding information directly from the homepage of the web platform.

¹⁷⁸ See http://europa.eu/youreurope/business/funding-grants/access-to-finance/index_en.htm.

¹⁷⁹ See https://www.f6s.com/, https://angel.co/?ref=nav, https://gust.com/, https://www.seedrs.com/.

These are just examples, this list should be complemented and finalized in consultation with DG CNECT's Startup Europe initiative.

Starting page for Access to Funding:





6.8. Visa/permits

On the homepage, there will be a link to a page dedicated to visa/permits (residence permits) applicable in the EU28, including national and EU visa/permits. This will thus show a subsection of the information that is available on the country-specific pages.

On the EU-wide page, information about relevant EU visa/permit opportunities are also displayed. These are currently limited. 181

6.8.1. One Central Visa Application Portal

In the ideal situation, the web platform should allow entrepreneurs to directly make an application to the various Start-Up Visa / Entrepreneur Residence Permits, thus serving as a central visa application portal. This goes beyond the EU Immigration Portal, which provides information about the visa possibilities but so far only links to the websites of the competent national authorities, where applications can be made. There are, roughly speaking, two options for implementing this. Although technically all options are feasible, it should be stressed that political will on the part of the Member States is an important precondition to creating an effective central visa application portal that adds substantial value compared to the existing EU Immigration Portal.

In the minimum scenario, applications for the national visa/residence permits can be handled within the web platform's infrastructure, but the terms and conditions for these applications remain the same. As it is, these differ across Member States and entrepreneurs would thus have to go through a separate procedure for each individual application. Although it would be more user-friendly to enable applications to be made from 'within' the web platform, it does not add substantial value compared to the current EU Immigration Portal. As it would still cost money to develop this function and to coordinate with national authorities to link their national application forms to the web platform, this option is not cost-effective and therefore considered to be inadvisable by the study team.

In the more ambitious harmonisation scenario, not only would the applications for the national visa/residence be handled within the web platform's infrastructure, but the application process would be streamlined: access criteria (such as evaluation criteria, documents to be furnished) would be the same for all Start-Up Visa / Entrepreneur Residence Permits. This would create major added value as it would substantially decrease the administrative burden for entrepreneurs, lower the barriers for moving to the EU and would make the EU a more attractive start-up destination. However, streamlining the application processes in this way would amount to mutual recognition and harmonisation, which would require substantial coordination efforts among national competent authorities and the political will to commit to an effective central visa application portal. It is noted that the logic of harmonising access criteria would favour harmonisation of benefits associated with the visa/residence permits as well, to avoid 'shopping' by entrepreneurs and level the playing field. From the viewpoint of the entrepreneur, this option is considered superior. However, as this option would require alignment of procedures and requirements that fall under the national competences of Member States, this option is considered to be not feasible.

An additional benefit of the harmonisation scenario is that if an EU start-up visa/permit is developed in the future, the harmonisation would serve to ease negotiations of its scope, as the EU visa/residence permit could build on the harmonised national access criteria and benefits.

¹⁸¹ In the future, this may be complemented by a European Start-Up Residence Permit.

Table 6.5 Options and elements for different visa portal scenarios

	Status quo	EU scheme: minimum scenario	Harmonisation of national procedures (mutual recognition)	Introduction of EU start-up visa
Application	Redirected (vian EU immigration portal) to national websites	Applications via Start-up Europe portal	Applications via Start-up Europe portal	Applications via Start-up Europe portal
Access criteria	Divergent (nationally determined)	Divergent (nationally determined)	Harmonised among EU7	Harmonised across EU Member States
Benefits	Divergent (nationally determined)	Divergent (nationally determined)	Divergent, tendency to harmonisation among EU7	Harmonised across EU Member States
EU mobility rights	Limited to travel	Limited to travel	Full rights only in EU7, otherwise limited to travel	Full rights across EU Member States
Duration and options for renewal	Divergent (nationally determined)	Divergent (nationally determined)	Possibly divergent, tendency to harmonisation among EU7	Harmonised

As this information is already available through the EU Immigration Portal, this should be integrated. The proposed functionality goes beyond the EU Immigration portal by tailoring its offer specifically to our target group and by streamlining the application process. The EU Immigration Portal redirects visitors to the website of competent national authorities or the Commission (for available EU visa/permits). More importantly, the EU Immigration Portal is not geared to non-EU entrepreneurs, and although there is information available on visa/permits dedicated to self-employed, it is not easy to extricate visa/permit options that are relevant and tailored to our target group from the options available. Attention needs to be paid to the completeness of the platform, as not all Startup Visa/permit options currently available in the Member States seem to be represented. 182

This page will serve as the direct link to visa/permit opportunities. In the future, information about the European Start-Up Visa/permit should be included here. If the Immigration Portal is integrated, it should be possible to filter on visa/permits in specific EU countries, with a possibility to obtain more information, and to directly contact someone in the Member State that can answer questions about the visa/permit in question. In the future, it should be possible to directly apply to the visa/permit through the STARTUPEUROPE.EU web platform – although this will require some adaptations to the EU Immigration Portal (both in terms of completing the options listed on the portal and in adding contact persons per option).

6.8.2. Links within the platform

This page should be directly accessible from the homepage. Relevant filtered information will appear in the results-pages when the 'Find your destination' is used and interest in visa/permit options is indicated. See section 5.2.6.

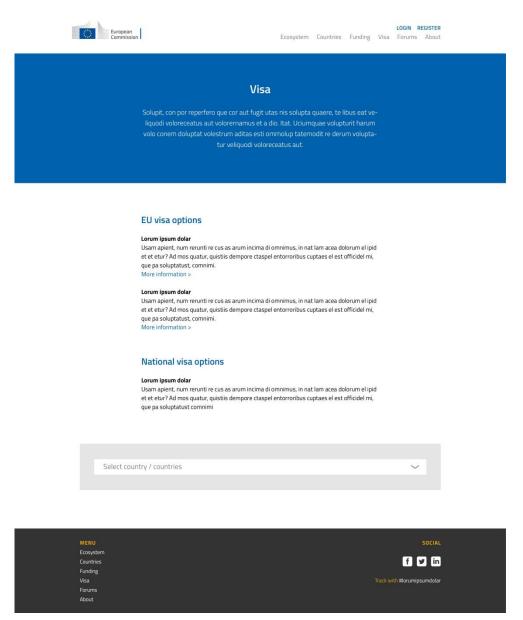
 $^{^{\}rm 182}$ This is the case e.g. for the Italian Start-Up Visa.

6.8.3. External sources

This information will be sourced from the EU Immigration Portal.

The visa pages are visualised on the following pages, both the starting page (with EU options) and the country-specific visa options.

Starting page for visa (EU options)



Results page for country-specific visa



EU visa options

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More information >

Lorum ipsum dolar

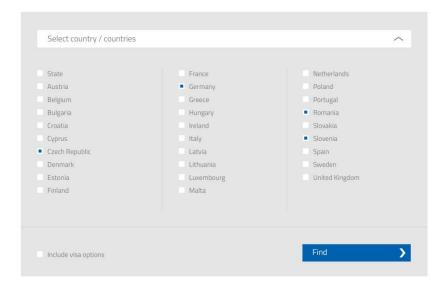
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More information >

National visa options

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6.9. Community of Practice

The platform will provide a secure area for incubators, accelerators, business partners and schemes across Europe to exchange and refine good practice on supporting third-country nationals. It should also provide a secure area for entrepreneurs to exchange experiences with other entrepreneurs and interact with the other parties. This will maximise the added value of the web platform to entrepreneurs, who will be able to engage with like-minded individuals and other actors relevant in their (potential) ecosystem. On the other hand, through promotion of the Community of Practice, the engagement of stakeholders with the platform will be raised, increasing the sustainability of the platform.

Our recommendation would be to build the community of practice functionality during phase 2 of the development of the web platform. There are already a number of vibrant online communities that cater for entrepreneurs on existing platforms such as Quora, f6s and LinkedIn. In fact there are many other platforms where entrepreneurs connect and share experiences. Our experience of building online community sites shows that even with a lot of time and investment (i.e. initially populating the forum using a top-down approach to stimulate engagement) we may still struggle to build an online community that captures the attention of our target audience. To succeed, the goal of what the online community is trying to achieve should be very clear so that we distinguish ourselves from other communities.

If the main added value of the Community of Practice is envisaged to be to provide a platform to intermediaries where they can share best practices among each other, development of this functionality in the first phase would be stronger on its merits. However, considering that the end goal of the Community of Practice will be to engage both entrepreneurs and intermediaries, we recommend this is fully developed in phase 2, when the likelihood of uptake among users has already risen.

6.9.1. Promotion, recruitment and engagement of users

The aim is for users of the platform to host their own Communities of Practice that will facilitate the creation and sharing of resources, and enhance strategies that will increase participation in the entrepreneurial/start-up ecosystems and increase engagement in the platform.

It will be important to focus on the continuous engagement of stakeholders that have been initially identified in this study as part of stakeholder mapping process. The stakeholder groups are as follows:

- Entrepreneurs;
- intermediaries (incubators, accelerators, universities, innovation centres etc.).

The Community of Practice will have different elements:

- Forum function: the opportunity to open discussion groups on the web platform, and join discussions;
- Public engagement: an identity on social media for the web platform, e.g. Facebook, LinkedIn, Twitter, possibly Instagram and Snapchat;
- Ambassador network: network of non-EU entrepreneurs that have been successful in setting up their business in the EU, EU delegations, universities (see also Chapter 5).

 $^{^{183}}$ See e.g. https://www.sitepoint.com/the-ultimate-guide-to-online-communities-for-entrepreneurs/ and http://startup.channelnewsasia.com/blog/-/blogs/top-10-online-networking-platforms-for-entrepreneurs.

We would recommend that a Digital Community manager is appointed who will be responsible for these different elements. The central content manager of the platform would be able to function as the Digital Community manager, with the designated intermediaries acting as decentralised community managers (posting relevant news and events about their country). The Digital Community manager should collaborate with the designated intermediaries that function as decentralised content managers for their country.

These are explained in more detail on the coming pages.

6.9.2. Forum function

On the platform, it will be possible for both entrepreneurs and intermediaries to create discussion groups and join discussion groups. These shall be (lightly) moderated by the central content manager. It will only be possible to open or join a discussion group for actors that have created a profile and are logged in. Furthermore, it will be possible to report posts as 'inappropriate' if they are offensive or not on topic.

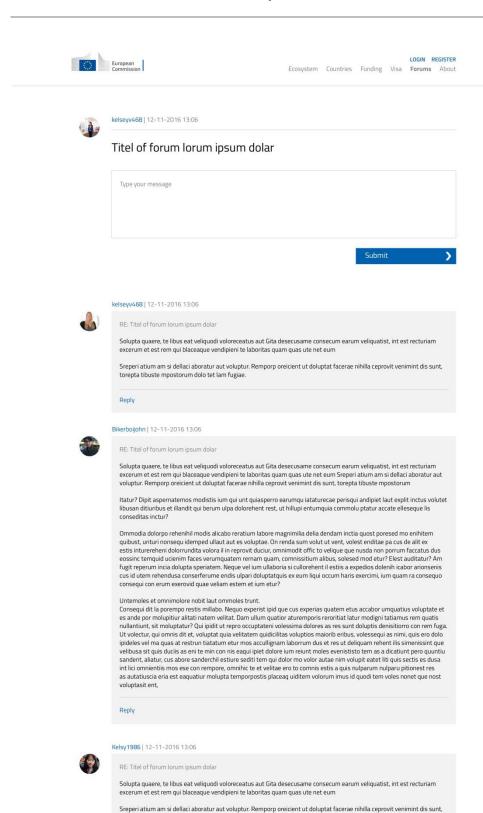
This functionality is relatively straightforward and visualised on the next page.



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Reply

6.9.3. Public engagement - promotion through social media

The Digital Community manager will be responsible for managing the STARTUPEUROPE.EU social media accounts. The Community manager will use social media platforms to promote and encourage visitors to the EU start-up platform such as Twitter, Facebook, LinkedIn and YouTube. Social media will be used to:

- Promote the new features to direct people to the content on the STARTUPEUROPE.EU platform;
- · Promote the events and new topics;
- Encourage animation of the platform's discussions and communities of practice;
- Promote content uploaded by users to highlight the growing interest in EU start-up platform.

The ideal mixture of social posts will be:

- Items of interest on the STARTUPEUROPE.EU platform submitted by users from a variety of different non-EU countries;
- Member State activities, opportunities and events;
- News from the entrepreneurial and start-up sector;
- Items/ posts of interest that are found by the designated intermediaries.

The Community manager would regularly:

- Identify opportunities and produce articles about the STARTUPEUROPE.EU platform that would appear in relevant print and online media to raise the platform's profile in the targeted countries and regions;
- Send regular promotional emails to relevant multipliers (such as the private platforms identified
 as relevant in the 'Access to Funding' section) to generate interest in the STARTUPEUROPE.EU
 platform and to keep users informed of updates, such as upcoming EU related and Member State
 events, thematic weeks and online discussions;
- Include articles in the Startup Europe Club monthly newsletter.

6.9.4. Ambassador Network

As part of establishing a vibrant online community around the STARTUPEUROPE.EU platform, we would recommend recruiting a network of ambassadors. This network would consist of e.g. successful non-EU entrepreneurs established in the EU, EU delegations abroad, EURAXESS Links officers in third countries, and participants in the EURAXESS university networks. They would:

- Provide potential users with independent and public validation of the benefits of the EU start-up platform;
- Help deliver the key messages in line with the communications strategy (as identified in Chapter 6).

The types of activities that Ambassadors are encouraged to deliver include:

- Give a demonstration of the STARTUPEUROPE.EU platform to their organization;
- Contact their local networks and volunteer to speak about the benefits of STARTUPEUROPE.EU;
- Be an active member on the STARTUPEUROPE.EU platform online community, including: taking part in discussions, commenting on articles and blog posts, and uploading content to the platform;
- Write a blog post about their experiences as an Ambassador and/or their experience as an entrepreneur/start-up;
- · Sign up to and share EU start-up platform ebulletins with their network;
- Promote the STARTUPEUROPE.EU platform at events;
- Suggest promotional ideas and opportunities to DG RTD;
- Follow the STARTUPEUROPE.EU platform on Facebook, LinkedIn and Twitter;
- Retweet and share the STARTUPEUROPE.EU platform social media posts.

The most active and/or effective Ambassadors will be invited to attend networking events organised by Member State support services (and other stakeholders groups), as and when the opportunity arises. This will allow them to raise their profile as well, a benefit identified as a relevant motivation in one of our interviews.¹⁸⁴

6.10. Other functionalities (on the homepage)

6.10.1. Promotional banner

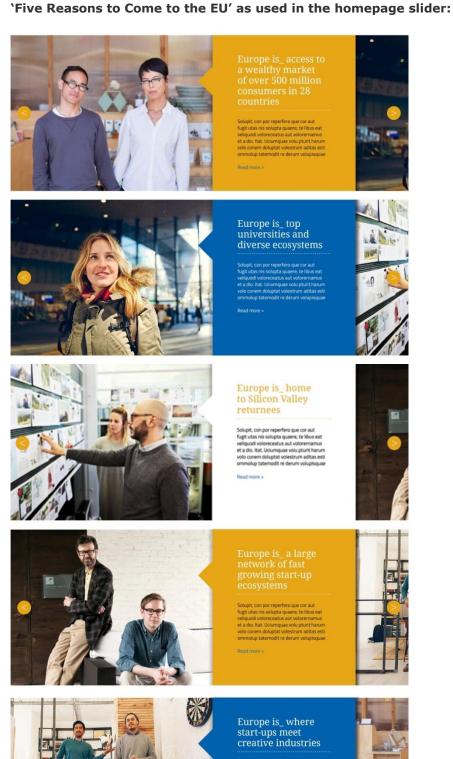
The homepage will feature a promotional banner that shows material taken from the promotion campaign (see Chapter 6). It will slide every 5 seconds to show a different image.

6.10.2. Slider that depicts 'Five Reasons to Come to the EU'

The homepage will also feature a slider that shows five different reasons to come to the EU, as these were identified for the promotion campaign and through our literature research and stakeholder consultation. These features will slide every five seconds to show a different image. When clicked, this links to an article expanding on the reason shown, in the words of an entrepreneur.

This is shown in the visualisations on the next pages.

 $^{^{\}mbox{\scriptsize 184}}$ Interview with Founder of Glimworm, see Annex IV.



Follow-up page for one of the (clickable) slider options:



Ecosystem Countries Funding Visa Forums About



Europe is_ access to a wealthy market of over 500 million consumers in 28 countries

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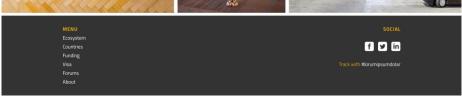
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6.10.3. News and events calendar

In the news area, we propose a Newsletter subscription option to be displayed. This feature allows visitors interested in learning more about the EU start-up platform to subscribe to a mailing list that will be used to promote the platform and its' features and benefits. The mailing list could be used to send out quarterly eNewsletters highlighting key information, new features and resources.

The homepage will also feature an events calendar sections that will show all relevant events for the entrepreneurial community throughout the EU.¹⁸⁵

6.10.4. About page

The web platform will have an about page that shows, at minimum, the vision that underpins the platform and the Frequently Asked Questions (FAQ).

This is visualised on the next page.

 $^{^{\}rm 185}$ The visualisation is incorporated in the homepage visualisation in section 5.1.

About page of the platform:



Ecosystem Countries Funding Visa Forums About

About

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6.10.5. Helpdesk function

For the proposed platform we recommend a helpdesk function is created. The role of the helpdesk is summarised below:

- Acts as the first point of call for handling general queries and concerns raised about the platform;
- · Trawls for new resources and calendar items;
- Supports the curation of material and resources where appropriate;
- Coordinates the uploading of materials to the site;
- Manages the monitoring of submissions and contributions by users;
- Is responsible for the creation of stats reports;
- Is responsible for approving and verifying users on the platform;
- Facilitates communication between units such as the platform development team, content management teams and DG RTD;
- Helps with the collation of information from helpdesk requests for support;
- Manages the general feedback form where the user can ask a question and contact the EU startup Platform helpdesk.

6.11. Content management strategy for the web platform

The content on the web platform needs to be regularly updated and reviewed. In the sections above it has been indicated which external sources will be used to source relevant content for each functionality or "content area". Several actors will play a role in this, corresponding to their overall role in the web platform. This is shown in the table below, where the role of the various actors in content management is summarised.

Table 6.6 Overview of content creators

Stakeholder	Role
DG RTD / DG CNECT	Share relevant news and initiatives with central content manager.
Central content manager (external contractor)	Acts as Digital Community Manager, is responsible for the Community of Practice as a whole and for updating the platform with relevant EU events and initiatives.
Decentralised content managers (designated intermediaries)	Ensure proper content management for their country, by ensuring intermediaries, relevant visa/permit options and funding opportunities, and news and events regarding their country is placed on the platform. Also collaborates with the central content manager to monitor the forum function.
Entrepreneurs	Can generate content through creating a profile, sharing news stories, opening and joining discussion groups.
Intermediaries	Can generate content through creating a profile, sharing news stories, opening and joining discussion groups.

The community manager would be responsible for:

- · Identifying and contributing relevant content;
- Motivating individual, local, regional and national stakeholders to create and/or share content on the platform.

The aim here is not to generate large quantities of content but to generate quality content. Although initially much of the platform content will be sourced from other sites, over-time the strategy should be to increase the level of user-generated content on the STARTUPEUROPE.EU platform.

The aim is to feature identified and sourced quality content e.g. larger resources of particular relevance to the themes of entrepreneurship, funding and start-ups, although these items should be chosen with care. The usefulness of the user-generated content will be monitored through usage statistics and feedback on the platform.

The Community Manager would monitor the community daily, and post discussions on topics, comments, and resources – at least weekly – for the first quarter to encourage the community to converse and share online. As the community becomes more self-sustaining with regular usergenerated content, we envisage the Community Manager role being more about facilitating the community than generating weekly content.

6.11.1. Generating content

Content uploaded to the EU start-up platform will be generated from various different sources including:

- Registered users who are actively engaged on the platform seeking to upload articles, resources and blog posts;
- Stakeholders who are regular visitors or new to the platform but have yet to register and are actively engaged with platform to promote their articles, resources and blog posts;
- DG RTD led content from stakeholders sourced from our designated intermediaries, the stakeholder database or through online searches by theme and/or specialism.

All content generated by DG RTD, registered users and engaged stakeholders will be logged accordingly. This log of all content should be regularly reviewed by the community manager to understand topics, themes or areas that are not widely covered or areas of the platform that need populating with unique content.

We recommend that DG RTD develops an internal brand guideline for the EU start-up platform content. These branding guidelines, to be developed in line with the promotional campaign guidelines, will help to ensure a recognised, consistent and appealing format for content, thus maximising its potential impact. This focus on consistency will provide a benchmark for quality and relevant content to support the population of the EU start-up platform subthemes and to encourage the use of sharing content in the collaborative spaces.

6.11.2. Reviewing engagement

Continuous improvement should underpin the community engagement strategy and should therefore be built into on-going commitment to best practice. The community manager should monitor and review uploaded content in terms of quality, usefulness, reach, engagement and relevance to theme / topic / policy. It is important that DG RTD are proactive about reviewing the content produced for the platform to ensure a standard of quality and to evolve content in line with the changes to policies in the start-up sector.

The Community Manager would use available tools such as Google Analytics (or Piwik) to look specifically at unique page views and average time on the specified page. By reviewing unique page views they would be able to gauge the popularity of a piece of content through the number of visitors to the page. They would be able to see if content is too difficult to digest by reviewing the time spent on that piece by each visitor. A suggested strategy would be to undertake a sample audit within a seven day time frame of the content logged in the Content Log system. Often content is most active following the initial publication.

Stakeholders should be encouraged to share content produced for the platform via their own channels to generate discussion either through comments and likes on EU start-up platform or through social media channels. Content promoted via social media should be measured by level of engagement. How the content is received by the public will provide valuable insight into topics or new avenues of interest.

6.11.3. Content roles and responsibilities

In order to properly manage the publishing of content on the web-platform it is useful to consider the various roles and levels of authorisation required to publish content within the various sections of the platform. A table that illustrates how these roles could operate is detailed on the next page:

Table 6.7 Content roles and responsibilities

rabic or content	roles allu respolis	ibilities		
Content type	Content creator	Content editor	Content checker	Publication
Type of content to be published	Initiates content (idea, headline, draft or bullet points)	Edits content for the web	Checks content for technical accuracy, journalistic quality, and/or web suitability	Posts/sends content
Web page				
About	PE	WE	WE, WM, PE	WE
Member State pages (updated annually at least)	PE	WE	WE, WM, PE	WE
Thematic pages	PE	WE	WE, WM, PE	WE
Calendar item	PE	WE	WE	WE
Resource item, inc. case study (at least one per month)	PE, NM, CM	WE	WE, WM, PE	WE
News/feature item (at least one per month)	PE, NM, CM	WE	WE, WM, PE	WE
Useful links	PE	CM, TA	CM	СМ
Online community including outreach				
Posts/comments	PE, CM, NM	N/A	CM (moderation)	CM*
eNewsletter	PE, CM, WE	WE	WE, PE	СМ
Social media post	PE, CM, WE	WE	PE	WE
Social media comment	PE, WE	WE	PE	WE

Abbreviations: WE: Web Editor; WM: Web Manager; CM: Community Manager;

PE: Policy Expert;

NM: Network Members (entrepreneurs and intermediaries).

As well as content generated from experts and the various stakeholder groups themselves, we also recommend curating content from other sources to ensure the community is regularly engaged. A content curation tool, e.g. Scoop.it, will help to monitor the web and social media for relevant content that can be useful for generating articles, news stories and for starting discussions in the community. This will help us to share useful content published by national authorities, partner organisations and other stakeholders within the online community. We would also suggest the use of a hashtag (e.g. #STARTITUPINEUROPE) to help monitor this content, irrespective of the platform used, and bring it into the community for discussion.

A strategy for doing this is depicted in the figure on the next page.

Figure 6.1 Curating relevant content to share via the appropriate channels SEARCH ENGINES **BLOGS** SOCIAL MEDIA RELEVANT NEWS. EXPERT/STAKEHOLDER LISTENING VIA SEARCH STAKEHOLDER/EXPERT REPORTS, QUERIES AND ARTICLES PUBLICATION, EVALUATION HASHTAG EG #STARTITUPINEUROPE MONITOR COMMUNITY MANAGER TOOLS: **CURATE CONTENT** Scoop. TOPSY AND REVIEW () Storify SHARE ONLINE SOCIAL MEDIA Start-it-up-in-Europe YAMMER/COLLABORATION TOOL **fot**8908∞in⊻ Web Platform SHARE AGGREGATED CONTENT FROM WEB. SHARE LEARNING, ENCOURAGE SHARE VIA SOCIAL NETWORKS, USING HASHTAG EG #STARTITUPINEUROPE EXPERT BLOGS/RESOURCES COLLABORATION

6.11.4. Content Monitoring and Quality Control

User generated content should be reviewed weekly and checks made for:

- Obscene or offensive language;
- Posts that are derogatory or abusive of other users/posts (beyond would could be classed as a 'healthy' debate);
- Content that breaches EU and national rules and conventions governing Intellectual Property (see Strategy for respecting Intellectual Property).

Any offending posts would be removed immediately and, if appropriate, user accounts of offender would be revoked. Upon registration, users would be made aware of the expectation to adhere to these rules, and the consequences of breaking them, when they join the platform.

6.11.5. Strategy for respecting Intellectual Property

Content hosted on the platform, or directly linked to it, should not breach EU and national regulations and conventions governing intellectual property. This will apply to all forms of content: written, graphical and audio-visual. The community manager would provide the platform content management team with written and verbal notification of their moral and legal responsibilities. Furthermore, platform users would be required to confirm at the point of uploading content to the platform that material is not subject to copyright ownership; they are the copyright owner and consent to its publication and dissemination by platform users; or that they have explicit written permission for its publication on the platform.

6.11.6. Social Media Engagement

The aim of sharing content via dedicated Start it up in-Europe social media accounts will be to drive traffic to the platform. We recommend that we utilise and extend the social media activities already taking place on the Startup Europe platform (these activities are currently undertaken by Hugin and Munin). Currently, we envisage the social media engagement to include:

- Assigning a dedicated social media manager, who will be responsible for engaging with potential and current users on social media. Their responsibilities will include:
 - Posting on different social media services when new content is added to the platform;
 - Responding to queries we receive on the STARTUPEUROPE.EU social media accounts; and
 - Actively searching for relevant conversations on social media and signposting the participants to the platform.
- Ensuring STARTUPEUROPE.EU users are able to easily share content on the platform through social media by embedding 'share this' buttons across the platform, particularly on the STARTUPEUROPE.EU blog;
- Encouraging ambassadors, entrepreneurs and intermediaries to post on social media services;
- Actively monitoring the statistics on the various social media channels.

6.11.7. Translation

For this platform (and especially for the Community of Practice area on the site) we propose a mix of human and machine translation for the website. Whilst some content will be generated in several languages by ambassadors and designated intermediaries, being able to engage with users across multiple languages will be key to sharing knowledge. In particular, as the aim is to develop a community site, a lot of user generated content will be available and therefore 'on the fly' translation is important.

There are many different approaches to multilingual sites. Some websites provide automatic machine translation first, and humans translate within a specific time period; some only deliver content in one language and provide automatic machine translation widgets e.g. Google Translate for all other languages. To keep costs down we suggest a mixture of human and machine translation. Where designated intermediaries are generating content in multiple languages, this will be of a higher quality and should always be shown as a priority over machine translated content. However, should the user wish to see content in a language that has not been human translated, a machine translated version will be made available.

An advisory note should be presented to notify the user that the content produced is machine translated and may not be of a high quality. Whilst this is likely to result in some issues around misunderstanding due to the quality of translation, having a machine translation tool is the best option available for community websites and to avoid language mixing on pages. It should be noted that Drupal has a number of modules that could be utilised to assist with content translation.

6.12. Technical specifications

6.12.1. Drupal architecture options

One of the strengths of Drupal is that it is not just a tool for building a single website: it can be used equally well for managing multiple companion sites together. This capability has existed for many years, but is not always well understood. Drupal has several different options available for users looking to run a series of Drupal sites together, each with its own trade-offs.

Following a similar model to that used by the EURAXESS platform (where each country website is created as a separate sub-site within the main platform), we would suggest that the following two Drupal site architectures are considered as a way of enabling the creation on multiple sub-sites within the main platform. A sub-site would be created for each member state and the content on each sub-site would be administered by designated users for each country.

Domain Access:

- a single database is used to store all content (for the main site and sub-sites);
- content is configured by site (e.g. by country);
- a single website theme is used for the main sites and all sub-sites;
- the codebase and modules are shared across all sites;
- where content appears is controlled through permissions and groups.

Multi-site:

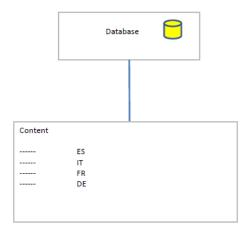
- the codebase is shared across all sites;
- each site has its' own database;
- each site can have its' own set of modules;
- each site can be themed individually.

The diagram on the following page illustrates the two approaches. 186

¹⁸⁶ More information on these two approaches can be found here: https://www.palantir.net/blog/multi-headed-drupal.

Figure 6.2 Models for site architecture

Domain Access



A single database used to store all content

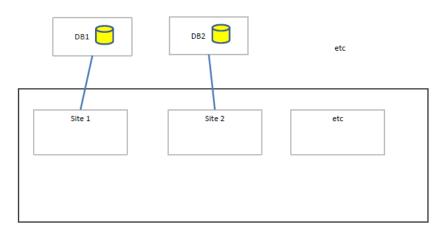
Content is configured by site (e.g. country)

In this approach there is usually a single theme that is used for the main site and all sub-sites

Contrib modules are stored in the same place

Where content appears is controlled through permissions and groups

Multi-site



The codebase is shared across all sites
Each site has it's own database
Each site can have it's own modules configured
Each site can be themed individually

6.12.2. Website Maintenance

The platform (and sub-sites) will require regular updates as determined by the Drupal community. Security releases should always be a priority and patches or updates to Drupal core and contributed modules should be factored into the development schedule immediately. Bug fixes are also important and should be scheduled into the next available sprint in development. Upgrades to modules should be reviewed and actioned as appropriate. It is important that users who experience technical difficulties with the platform have a mechanism to report their issues (see Helpdesk in Section 5.6.5) so that issues can be logged and graded based on the severity. Appropriate action based on the severity should then be taken by the technical team supporting the platform. If an issue is actually determined to be a feature request, this should be logged as feedback to aid the on-going development of the website. The user should, of course, be notified that their feedback has been taken on board and assured that their feedback is valued.

6.12.3. Website Traffic

Website visitor data would be monitored using an analytics platform such as Piwik (Piwik is a well-established open source analytics platform and is already used to capture analytics data for a number of EC platforms). This will provide DG RTD with the data needed to be able to analyse visitor traffic and provide regular feedback on the use of the platform. We recommend that the analytics software should be hosted on a server inside the European Union, and a dashboard available for speedy access to reporting data.

The platform should use SEO-friendly URLs¹⁸⁷ to ensure the site receives as much visibility on search engines as possible. A discovery phase during design and build of the platform would be used to finalise the user goals when using the platform. As part of this study we have already developed some of the user journeys and user stories (as depicted throughout the chapter) – further development of these prior to finalisation of the platform will help to establish specific key performance indicators that can be measured once the platform is launched.

6.13. Drupal 7 and Drupal 8

We suggest continuing with Drupal, using version 7. Although this is not the latest version of Drupal, version 8 is in its infancy and therefore supported modules are still too few to support a full community site. Although there are other CMSs available, Drupal is, in our experience, a good tool for building scalable, secure sites. Should the site at any point need to be migrated to the Europa platform, it will be beneficial to use a technology the Commission services are using.

However Drupal 8 should still be considered as scalability and performance will be essential in ensuring success of the platform. Drupal 8 offers a number of features in this area that will enable to site to scale and perform well as traffic increases and more users engage with the site. These features include: 188

- BigPipe this is a page rendering technique, originally developed by Facebook, that can dramatically improve site performance for end-users;
- Advanced caching features Drupal 8 caches all entities and only loads JavaScript when necessary. When a page is viewed, its content doesn't need to be reloaded again. Previously viewed content is quickly loaded from the cache. Once configured and enabled, caching is completely automatic.

¹⁸⁷ 'SEO' stands for 'Search Engine Optimalisation' and refers to targeted use of keywords to appear higher in the ranking of search results by potential users.

¹⁸⁸ Details of other improvements in Drupal 8.x can be found here: https://www.drupal.org/docs/8/modules/features/whats-new-in-features-for-drupal-8.

6.14. Web platform hosting options

In the table below, an overview is given of the four different hosting options that are theoretically possible.

Table 6.8 Overview of different hosting options

	Startup Europe	EURAXESS	New web platform (inside EC infrastructure)	New web platform (outside EC infrastructure)
Organisation				
Platform owner	DG Connect	DG Research and Innovation	DG Connect / DG Research and Innovation / DG DIGIT	DG Connect / DG Research and Innovation
Technical manager	Hugin and Munin	DIGIT / Intrasoft	DIGIT / contractor	Contractor
Content manager	Hugin and Munin	Decentralised, provided by parties in the Member States	DIGIT / contractor	Contractor

The first question to be reviewed was whether the web platform for non-EU entrepreneurs should be built as an extension of already existing platforms, or be built as an entirely new platform. After reviewing these possibilities, our recommendation is to extend an already existing platform. This is based on three distinct considerations:

- It is the Commission's current strategy to limit the proliferation of new platforms;
- Building a new platform is costlier than extending a pre-existing platform;
- There are suitable European Commission platforms that can be extended in line with our goals.

Therefore, rather than creating a completely new platform, we have considered options for re-using or extending existing platforms already owned or managed by the Commission. We narrowed our choice down to two platforms that are already related to the entrepreneur ecosystem:

- Startup Europe Club http://startupeuropeclub.eu/;
- EURAXESS https://EURAXESS.ec.europa.eu/.

Each platform was then reviewed from technical, strategic and cost perspective, as shown in the next Table.

Table 6.9 Overview of different hosting options

able 6.9 Overview of different nosting options		
	Startup Europe	EURAXESS
Organisation		
Platform owner	DG Connect.	DG Research and Innovation.
Technical manager	Hugin and Munin.	DIGIT / Intrasoft.
Content manager	Hugin and Munin.	Decentralised, provided by parties in the Member States.
Technical		
Hosting location	Outside Commission infrastructure Hosting provider details: Web Host: http://www.webfaction.com; Location: Netherlands, Noord-Holland, Amsterdam.	Inside Commission infrastructure Some of the Member State mini-sites are hosted outside of the Commission Infrastructure.
Programming language and system components	PHP;Nginx;Google Analytics;jQuery;Twitter Bootstrap.	 Piwik; Twitter Bootstrap; iQuery; PHP; Nginx 1.10.1; Modernizer.
Content management system	 WordPress 4.1.13; If the choice is made to extend/adapt the Startup Europe platform, we recommend for security reasons that the content and functionality is migrated to Drupal 7.x (or possibly Drupal 8.x); We must ensure that new platforms created on DIGIT's Europa platform adhere to the guidelines as set out in the Commission's Digital Transformation programme. 	Drupal 7.x.

	Startup Europe	EURAXESS
Other?	The map feature is built on MapBox.	A Drupal multi-site configuration (using the Domain Access module) is used to provide the 40 country mini-sites within the same site context.
Scalability	WordPress may struggle to perform well under heavy load may not be able to support a large community of users. WordPress was primarily built as built as blogging platform but has since been extended to become a popular CMS platform. It is possible to scale-up a WordPress site but this usually requires a specialist hosting arrangement.	The Drupal architecture used by DIGIT may not be optimally configured to handle large numbers of concurrent users and therefore may not scale well as platform usage increases. Feedback gathered from the EPALE platform management team indicates that DIGITS platform is struggling to handle the volume of traffic on the EPALE site, suggesting that the current architecture will not scale to support many thousands of concurrent users.
Security	WordPress' many plugins can have vulnerabilities and be easily hacked 189, particularly if the website owner does not update to the latest version or the plugin gets old. Or simply, hackers target WordPress because it is so popular. However, there is a paradox solution: install third-party plugins that increase your security. During our technical analysis of this platform we discovered a number of potential security issues with the site associated with known WordPress plugin vulnerabilities.	Drupal has enterprise-level security and provides in-depth security reports, this is why it's popular with governments and large enterprises. In addition DIGIT performs regular security scans against the platforms hosted on their infrastructure and provide advice and assistance when it comes to patching or upgrading Drupal. In November 2016, DIGIT's Europa platform suffered a major Distributed Denial of Service (DDoS) attack, meaning that platforms hosted on their infrastructure were offline for several hours ¹⁹⁰ . With these types of attacks on the increase it is likely that similar attacks can be expected in the future.
Content and reach		
Target group(s)	Entrepreneurs (generally).	Predominantly researchers and research institutions/universities. Following the recent re-launch of the platform EURAXESS is now also addressing entrepreneurs and businesses.

¹⁸⁹ See https://www.elegantthemes.com/blog/resources/wordpress-vs-drupal.
¹⁹⁰ See http://www.infosecurity-magazine.com/news/european-commission-hit-by-ddos/.

	Startup Europe	EURAXESS
Purpose of the programme/platform	 An EU initiative to: Raise awareness of the opportunities and challenges faced by web-entrepreneurs; Network, Europe-wide, among the stakeholders and facilitate access to resources; Develop web talent. Strategic goal: 191 To strengthen the environment for Web Entrepreneurs to start and stay in Europe. The focus is on starting up and scaling up. 	 An EU initiative for researchers to: Find relevant job offers and funding; Find host organizations / universities for their research; Find partners to help launch a start-up; Have access to a network of 500 service centres in 40 countries providing assistance with moving to a foreign country. Strategic goal:¹⁹² To increase researchers' mobility and strengthen the European Union's research community.
Content and features	 The main features of the site are: For Startups – a resource for start-ups and entrepreneurs that allow start-ups to take advantage of EU Funding opportunities, available tools, information on EU regulations, support and search opportunities that best meets the needs and wants; For Stakeholders – a resource for those involved in the start-up ecosystem such as actors (accelerators, incubators, investors, mentors, corporations, and business angels) to aid in building a better connected environment for start-ups in Europe. These could be activities that take place regional or nationally within Europe, but not limited to as the Startup Europe initiative provides the possibility for Startsups and actors to expand businesses startups and even allow them both to look for new customers outside Europe through Sillicon valley networks; Startups Finder – this feature (facilitated by dealroom.co) enables users to search for funding opportunities not only just for Startups but also by actors (accelerators, incubators, investors, mentors, corporations, business angels and individuals) filtered by location, business industry type, size, 	 The site was recently re-launched in November 2016 as a Drupal site (previously it was a ColdFusion site). Here is a summary of the new site features: Responsive Design: the revamped EURAXESS portal has been designed to adapt to any type of device: mobile, laptop, desktop; Broader Target Group: besides the researchers and research institutions/universities, EURAXESS is now also addressing entrepreneurs and businesses; Profiled Info: the revamped EURAXESS portal proposes registered users with matching collaboration, job and hosting opportunities; Improved Search Functionality: the search functionality has been improved to allow for both free and pre-defined/facet search; Partnering Tool: registered users are now able to search for both individuals and research organisations/businesses; moreover, all registered users, regardless of whether they are individuals, research organisations/businesses will be able to search for CVs;

¹⁹¹ See these links for more details: https://ec.europa.eu/digital-single-market/en/startup-europe#Article and http://docplayer.net/4396973-15-ict-13-specific-challenge-web-entrepreneurship.html.
192 See these links for more details: https://euraxess.ec.europa.eu/useful-information/about-euraxess and http://www.euraxessmanual.com/wp-content/uploads/converted-files/EURAXESS_toolkit_researchers.pptx.

Startup Europe	EURAXESS
growth, the type of funding offered. For additional feature for such as Data Type filter, this requires a premium subscription; • Events – an events calendar that is used to list a variety type of international events that will take place in the different start up hubs across Europe - a place to network which is a fundamental part in the Entrepreneur journey. This includes a mixture - from offering a market place where start-ups from all over Europe meet and are possibly matched with corporations, accelerators and incubators to hackathons, meetups, ask me anything sessions, webinars, mentoring sessions, workshops and conferences taking place; • Blog – featuring the latest news and information (such as previous events with images included, and interviews from successful startups) for start-ups, investors, incubators and accelerators in regards to the Startup Europe initiative (5 projects connecting 16 local ecosystems); • Map – this interactive map is proving a very popular resource and now contains details of 355 startups and actors. Its usage is still continuing to increase as new users register on the Startup Europe Map to gain visibility all over Europe. It's provides a community area uniting the various actors in the Startup ecosystem enabling them to grow, connect and collaborate. The map can be viewed via this link: http://startupeuropemap.eu/home.	 Funding Offers: the revamped EURAXESS portal introduces a real funding database, where research funding agencies are invited to enter national research funding opportunities; Hosting Offers: another novelty of the revamped portal is the hosting database, where research institutions are invited to enter their hosting offer; Internship Offers: are also a novelty of the revamped portal; Training Resources: the revamped EURAXESS portal introduces a collection of research related training resources that aim at improving the researchers career prospect; Career Development Centre Search Functionality: EURAXESS provides a free service that research institutions can make use of for researchers, with dedicated staff providing advice on career development opportunities; both registered and unregistered visitors can search for the nearest EURAXESS Career Development Centre; Subscription Functionality: visitors can subscribe to specific pages and be notified of content updates; subscription is limited to registered users only; EURAXESS Service Centres Search Functionality: both registered and unregistered visitors can search for the nearest EURAXESS Centre; Upload CV functionality: at the revamped EURAXESS portal, aside from filling in the EURAXESS CV form, registered researchers can now upload an additional CV; Upload Logo feature: if desired, the research organisations/universities/businesses can upload their logo on a specific offer; Science4Refugees Buddy Programme: a collaboration tool designed to help refugee researchers stay up to date in their research field, by connecting with European researchers to discuss research problems, find solutions and study together.

	Startup Europe	EURAXESS
Promotion of the site	A number of targeted promotional campaigns were used during the launch of the site. Ongoing promotional activities include: Monthly newsletter; Social media (twitter) - in English only; Press releases (journals, magazines, etc.); Regular blog updates.	The EURAXESS site is actively promoted by the various local countries and international hubs.
Links with other sites (context)	The site links to: • http://startupeuropemap.eu/home; • http://www.startuphubs.eu/.	40 member state "mini-sites", e.g.: http://www.EURAXESS.it/; https://www.EURAXESS.de/; http://www.EURAXESS.bg/. There are sites for each of the 6 extra-European hubs: 193 ASEAN - the hub encompasses Singapore, Thailand, Indonesia, Malaysia and Vietnam; but more countries of the ASEAN are planned to join in the next few years); Brazil (was launched in May 2013); China; India; Japan; North America (USA and Canada).
Branding	 The platform is branded so as to increase its attractiveness and usefulness to start-ups and intermediaries in the entrepreneurial ecosystem; Not directly bound by the EC guidelines, it is visually more attractive (more colourful) and dynamic site. 	 The platform is branded so as to increase its attractiveness and usefulness to researchers; Branding is more formal and follows the EC guidelines.

¹⁹³ A "hub" is a EURAXESS Links network in which the services are extended to more than one country within the same geographic area but are generally managed from one single country (e.g. Singapore or USA). More information about the hubs can be found here: http://www.internationales-buero.de/en/EURAXESS_links.php.

	Startup Europe	EURAXESS
Traffic volume	Traffic volume is between 15,000 and 20,000 visitors a month (based on data for October and September 2016). The web analytics show that the top 3 audience geographies are: United States; Germany; Spain	Not made available to the study team.
Costs		
Cost of initial development	Not made available to the study team.	Approximately EUR 2.4 million for 2 years, dedicated to the relaunch of the portal.
Costs of content management	Only information available is that currently, central content management is done by 1 FTE. However, they are running into validation issues and there would be work enough for 2-3 FTE in central content management.	There is no budget allocated to content management as the member countries are responsible for their national content and the EURAXESS Links representatives provide the content for the international content.
Costs technical management	Not made available to the study team.	The approximate budget for technical maintenance is EUR 150,000 per annum – this covers technical maintenance for the whole portal which is a highly complex structure with 40 member stage sub-sites and 6 extra-European hubs.
Sustainability		
Renewal of the contract	Contract is to be renewed every few years. The recent Communication by the Commission see Section 5.10.3 below) indicates that further investment will be made in this platform.	Survival of the platform is near-guaranteed.
User engagement	User engagement from the target group is growing on a monthly basis.	Platform is much used by researchers, but not by (non-EU) entrepreneurs.

6.14.1. Platform Hosting

As the Startup Europe Club platform is hosted <u>outside</u> of the Commission infrastructure and the EURAXESS platform is hosted <u>within</u> the Commission infrastructure, our review first considered the advantages and disadvantage of hosting a platform with DIGIT's Europa platform. These are summarised below:

Table 6.10 Platform hosting

Hosting inside the Commission's IT infrastructure	
Pros	Cons
Well established and supported infrastructure (through DIGIT).	Potentially slow to deploy and develop (dependent on DIGIT resources).
Hosting costs absorbed by the Commission.	Specialist technical knowledge needed for on- boarding process - limited number of suppliers available therefore potentially higher costs for development, implementation and maintenance.
Can utilise standard deployment and support mechanisms.	Limited set of technologies available (EC's infrastructure only offers Drupal based websites). Only approved Drupal modules allowed.
Site security pro-actively monitored by DIGIT.	Site design constrained by DIGIT guidelines.
Standard EU domain name.	May not scale well for high-volume sites.
Overall platform creation and strategy managed by DG-COMM.	
DG COMM does not want a website outside of the EC remits.	

One big advantage of using this pre-existing infrastructure is that there is a dedicated Directorate-General in DIGIT that has expertise in both technical aspects of the build and management of platforms. This should lower technical costs.

In terms of performance, however, there are some concerns. One is whether DIGIT has sufficient capacity to support the platform. ¹⁹⁴ Our experience as managers of web platforms hosted within the Commission infrastructure furthermore highlights: ¹⁹⁵

- there are many complaints from users and stakeholders about the performance of the platform;
- scalability of Commission infrastructure sites is limited, so that it is not possible to support many thousands of concurrent users.

Another important limitation to the Commission infrastructure arises from the Commission's guidelines on visual identity: the options to customize the 'look and feel' are limited to what is allowed under these guidelines.

¹⁹⁵ Feedback on EPALE platform functioning, managed by Ecorys.

¹⁹⁴ This was substantiated through feedback received in the context of another Commission web platform, EPALE.

Additionally, as DIGIT only supports a limited number of content management system, and each content management system has its own strong and weak points, it could be the case that the platform cannot be built in the 'language' that would be most suitable to the functionalities wanted. Other technical limitations could restrict the type of functionality that we could offer on the platform such authentication via social media accounts and online payments (for example the ECAS module currently does not support user authentication via Facebook or other social media accounts).

The limitation in options for content management systems also translates to a more limited number of options for contractors to build it. Building platforms inside the Commission infrastructure ('on-boarding') requires more specialised technical expertise that not all platform developers have. This could mean that development as well as technical maintenance costs are higher.

On the basis of the above considerations, we would *in general* advise to opt for a web platform that is hosted outside the Commission infrastructure, especially considering the high tech-savviness of our target group which demands a high-functioning and visually attractive platform to keep them engaged.

6.14.2. Building the platform within EURAXESS or Startup Europe

We then went on to explore the advantages and disadvantages of using the EURAXESS or Startup Europe platform as a potential starting point for the development of the new platform. A summary is detailed in the below.

Table 6.11 Pros and cons of EURAXESS and Startup Europe

Pros	Cons
EURAXESS	
The platform is already owned DG RTD.	EURAXESS was not built for our target group.
DG RTD already have a good existing relationship with Intrasoft who develop and manage the technical aspects of this platform.	The new platform would need different technologies that may not be compatible with EURAXESS.
The EURAXESS platform already encompasses (or contains) the 40 mini-sites maintained by each of the member states, therefore making it easier to incorporate content from these sites.	Hosting within the Commission infrastructure imposes a number of constraints.
The 40 mini-sites could be extended to incorporate content relevant to the EU start-up Platform.	web platform is dependent (on a technical basis) on EURAXESS delivery timescales and constrained by the existing EURAXESS work programme (this holds vice versa as well, where development of our platform could divert resources from EURAXESS development).
The platform is well established, has high visibility (in terms of SEO).	The new platform will need its own platform owner and content delivery team, in line with the different target group's needs.
	Presenting 2 platforms on the same site with different messages and branding is confusing to both our target group and to researchers.
Startup Europe	
The goals of the Startup Europe Club platform already align closely with the goals for the new platform, both practically and strategically.	Sustainability of the platform is a potential issue (as it is contracted periodically).

Pros	Cons
The best matched platform in regard to the target audience it attracts.	Currently there is still relatively low traffic on the site (approximately 15,000 – 20,000 visitors a month, although web analytics show that this is growing).
Already an established starting point for entrepreneurs and has good existing links with the entrepreneur ecosystem.	Currently the quality of information on the StartupEurope map is questionable (as registrations are currently not validated).
Hosted outside of the Commission infrastructure and therefore would not be limited by the technologies that could be used to build the functionality required.	WordPress is not the most secure or scalable Content Management System.
Extension of the Startup Europe Club platform aligns with the strategic priorities of the Commission with regard to streamlining support to entrepreneurship, start-ups and scale-ups.	

Apart from the observation that the Commission infrastructure imposes several disadvantages, as discussed above. With regard to EURAXESS, the most important pro is that the platform already uses several mini-sites, which could be used by the designated intermediaries as decentralised content managers to generate relevant content for the website. However, the arguments against EURAXESS are of a fundamental nature, and are all related to the fundamental question that it was not built for our target group. This means that there are no scaling benefits for the content management of the platform, nor the branding.

With regard to Startup Europe, apart from the advantages of it not being in the Commission infrastructure, the most important advantage is that it was built with our target group in mind. This means that the additional central content management needed for our web platform could be done by the same team. The branding of the platforms would also be complementary. With regard to the arguments against Startup Europe mostly relate to issues that are either temporary (these will be overcome as the platform matures) or can be addressed in consultations with the platform owner (DG CNECT) and the platform managers (for example with regard to the ecosystem platform). There is one substantial issue that would merit further attention though, this regards the platform security.

6.14.3. Our recommendations

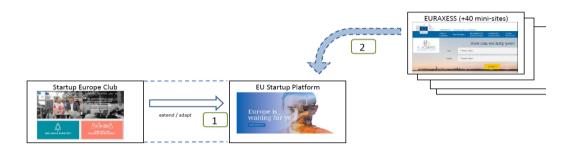
We therefore recommend integrating this initiative's web platform fully with the existing Startup Europe Club platform to create a comprehensive web platform for entrepreneurs in the European Union. The recent communication issued by the Commission further stresses the importance of Startup Europe for the European start-up ecosystems. One of the key actions detailed in this communication is detailed below:

In 2017, the Commission will reinforce Startup Europe which will take a wider scope beyond the ICT and web start-up sector. The Commission will coordinate EU work to connect clusters and ecosystems across Europe, as well as bring stronger coherence between the different EU initiatives in particular by linking up national and regional Ministries, innovation agencies and other stakeholders and ecosystems.

Source: COM(2016)733 Final.

¹⁹⁶ COM2016/0733/final `Europe's next leaders: the Start-up and Scale-up initiative'. To be found here https://ec.europa.eu/digital-single-market/en/news/new-initiative-startups-start-and-scale-europe.

An illustration of our proposed approach is highlighted in the diagram below, modelled on the EURAXESS approach:



To optimise the platform's functionalities, we recommend the following:

- To improve scalability and security we would recommend that the site is migrated to a Drupal site (ideally this would be Drupal 8.x – see Section 5.9 for more details about Drupal 8's functions). This approach would also have the advantage that it could be potentially incorporated into DIGIT's Drupal based platform in the future;
- 1. The new site architecture should be modelled is a similar way to the site architecture used on the recently re-launched EURAXESS portal. This site architecture enables:
 - many member state mini-sites to be created and maintained within the context of the main site;
 - content supplied from these mini-sites can be easily incorporated into the main site;
 - advanced searching and matching capabilities.

Prior to commencing with the platform build, we would suggest further dialog with Intrasoft regarding the exact specification of the approach used on the EURAXESS platform as although they are using the Domain Access to approach to provide multi-site functionality, there are some subtleties as to how this is implemented in practice.

6.15. Costing of the web platform

The table on the next page provides a breakdown of the estimated costs for development and maintenance of the various features and functions of the platform. Unless otherwise specified the costs are based on the estimated man-days for each task. As the tasks could involve a number of different technical specialists (e.g. technical architect, database specialist, web developer, web designer) we have assumed an average day-rate of EUR 600. Please note these costs are for the development (including theming and web design), maintenance and hosting of the platform only. Only external sources are referenced).

Please note that the (yearly) costs for years 3, 4 and 5 will be similar, as all the main development will have taken place by then. Details of the estimated costs relating to the content management aspect of the platform are given in a separate table. The total costs for the web platform in the first five years are summarised in Table 6.12. A more detailed breakdown can be found in the Annex.

Table 6.12 Total costing of the web platform

Year	1	2	3	4	5
Technical development and maintenance costs	EUR 359,000	EUR 147,200	EUR 120,200	EUR 120,200	EUR 120,200
Content management costs	EUR 100,800				
Total	EUR 459,800	EUR 248,000	EUR 221,000	EUR 221,000	EUR 221,000

Table 6.13 Costing of technical development and maintenance of the web platform Integrating third party content: year 1, 2, 3, 4, 5

Functionalities	Year 1	Year 2	Year 3 - 5
Country-specific information EU 28 (overview + thematic search function) Taxation; Businesses; Education; Infrastructure; Attractiveness.			
Source(s)	See below this table*.	Ongoing development will be required as third-party platforms will change over time.	
Additional (sub)functionalities needed	Ability for EU MS to register/update information.		
Costs development	EUR 15,000	EUR 6,000	EUR 4,800
Costs for maintenance	EUR 9,000	EUR 7,200	EUR 4,800
Access to ecosystems (ecosystem map) Incubators; Accelerators; Universities; Possible other actors.			
Source(s)	Startup Europe platform.		
Additional (sub)functionalities needed	Ability to (self-)register initiatives; Validation process built-in system.		

Functionalities	Year 1	Year 2	Year 3 - 5
Costs development	EUR 9,000		
Costs for maintenance	EUR 6,000	EUR4,800	EUR 4,800
Access to ecosystems (search function) Incubators; Accelerators; Universities; Other actors.			
Source(s)	Startup Europe platform.		
Additional (sub)functionalities needed	Ability to (self-)register initiatives; Validation process built-in system.		
	Recommendation functionality.		
Costs development	EUR 30,000		
Costs for maintenance	EUR 9,000	EUR 7,200	EUR 6,000
Access to funding (search function) Public			
Source(s)	DG GROW's Access to Finance; EU 28 Member State websites; Possible: new facility SME facility; Possible: new Marie-Sklodowska facility.	Recommendation functionality will need to be adjusted over time to ensure recommendations are still relevant to users.	

Functionalities	Year 1	Year 2	Year 3 - 5
Additional (sub)functionalities needed	Ability for EU MS to register/update information.		
	Recommendation functionality.		
Costs development	EUR 36,000	EUR 13,200	EUR 9,600
Costs for maintenance	EUR 12,000	EUR 7,200	EUR 4,800
Access to funding (search function) Private			
Source(s)	NA	We may wish to link to other private platforms over the course of the contract.	We may wish to link to other private platforms over the course of the contract.
Additional (sub)functionalities needed			
Costs development	EUR 6,000		
Costs for maintenance	EUR 3,000	EUR 3,000	EUR 3,000
Access to residence permits and visa (overview and search function) EU 28 Member States; EU options.			
Source(s)	EU Immigration Portal; EU 28 Member State websites.		

Functionalities	Year 1	Year 2	Year 3 - 5
Additional (sub)functionalities needed	Ability for EU MS to register/update information.		
Costs development	EUR 15,000	EUR 6,000	EUR 4,800
Costs for maintenance	EUR 9,000	EUR 6,000	EUR 4,800
Events calendar			
Source(s)	Startup Europe platform www.F6S.com; www.angellist.com; www.gust.com; www.seedrs.com.		
Additional (sub)functionalities needed	 Ability for EU MS to add/update information; Ability for registered initiatives to add/update information. 		
Costs development	EUR 12,000	EUR 3,600	EUR 3,000
Costs for maintenance	EUR 6,000	EUR 4,800	EUR 4,200
Source(s)	Registered initiatives		
Additional (sub)functionalities needed	 Ability for EC DGs to add/update information; Ability for EU MS to add/update information; 		

Functionalities	Year 1	Year 2	Year 3 - 5
	 Ability for registered initiatives to add/update information. 		
Costs development	EUR 6,000		
Costs for maintenance	EUR 4,800	EUR 4,800	EUR 4,200
Forum			
Source(s)	Registered users (all types) can contribute and post content.		
Additional (sub)functionalities needed			
Costs development	EUR 15,000	EUR 3,000	EUR 3,000
Costs for maintenance	EUR 9,000	EUR 6,000	EUR 6,000
Blog			
Source(s)			
Additional (sub)functionalities needed	Ability for EC DGs to add/update information.		
Costs development	EUR 7,200		

Functionalities	Year 1	Year 2	Year 3 - 5
Costs for maintenance	EUR 4,800	EUR 3,600	EUR 3,600
News and success stories			
Source(s)			
Additional (sub)functionalities needed	Ability for EC DGs to add/update information.		
Costs development	EUR 6,000	EUR 3,000	EUR 600
Costs for maintenance	EUR 3,000	EUR 3,000	EUR 2,400
Other			
Platform setup (master site) (note 1)**	EUR 12,000		
Theming and design (note 2)**	EUR 9,000		
Convert WordPress site to Drupal (note 3)**	EUR 24,000		
Drupal multi-site configuration and setup (up to 28 mini-sites) (note 4)**		A further 10 mini-sites configured and launched in year 2.	
	EUR 18,000	EUR 9,000	
Project management (technical)	EUR 12,000	EUR 9,000	EUR 9,000

Functionalities	Year 1	Year 2	Year 3 - 5
Annual penetration test	EUR 6,000	EUR 6,000	EUR 6,000
Measuring traffic (note 5)**	EUR 14,400	EUR 6,000	EUR 6,000
Hosting configuration, server setup, server management, domain registration	EUR 10,800	EUR 4,800	EUR 4,800
Hosting cost (per annum) (note 6)**	EUR 20,000	EUR 20,000	EUR 20,000
Total costs	EUR 359,000	EUR 147,200	EUR 120,200

* Sources:

DG TAXUD's 'Taxes in Europe' database (http://ec.europa.eu/taxation_customs/tedb/taxSearch.html);

European Commission's Your Europe initiative's 'Doing Business in Europe' (http://europa.eu/youreurope/);

Generally and information about starting up specifically (http://europa.eu/youreurope/business/start-grow/start-ups/index en.htm);

Eurostat data on Education and training (http://ec.europa.eu/eurostat/web/education-and-training/data/database) and Tertiary education statistics and underlying data as reported in Eurostat yearbooks (http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_in_figures_-_Eurostat_yearbook);

Physical infrastructure: World Economic Forum, infrastructure sections in Global Competitiveness Reports and underlying data (https://www.weforum.org/reports);

IT infrastructure: Digital economy and society statistics - households and individuals and underlying data as reported in Eurostat yearbooks, specifically 1.1 Internet Access and 1.2 Internet usage (http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_in_figures_-_Eurostat_yearbook);

OECD's annual 'Entrepreneurship at a glance' reports (http://www.oecd.org/industry/entrepreneurship-at-a-glance-22266941.htm);

OECD Better Life Index country-specific pages (http://www.oecdbetterlifeindex.org/) as well as specific indicators, such as 'Work-Life Balance'

(http://www.oecdbetterlifeindex.org/topics/work-life-balance/);

Ranking in Annual World Happiness reports (http://worldhappiness.report/);

Additionally: Euraxess services; EU 28 Member State websites.

** Notes:

Note 1: Initial platform build and configuration;

Note 2: Assumes creation of one theme that will be used for the main site and all sub-sites;

Note 3: Convert Startup Europe features and functionality to Drupal CMS;

Note 4: Based on using the Domain Access approach to deliver a multi-site platform. This assumes configuration of up to 20 mini-sites in year 1;

Note 5: Based on using Piwik to collect web traffic and visitor information;

Note 6: 3 x servers + Content Delivery Network (e.g. CloudFlare).

Table 6.14 Costing Content Management

	Notes	Annual cost
Content development and co-ordination		EUR 60,000
Monthly newsletter	2 days per month	EUR 14,400
On-going moderating/facilitating/animating user led content	3 days per month	EUR 21,600
Monitoring user satisfaction		EUR 4,800
Total cost		EUR 100,800

7. COMMUNICATION

In this chapter a short outline of the main elements and rationale behind the communication, is given. We refer to the communication and promotion campaign as 'the campaign' – representing the integrated whole which is meant to promote the EU scheme.

We first outline the objective and name of the scheme and then, after considering the target audiences, address the appropriate communication approach. This communication approach is thereafter translated into different relevant communication channels. After considering the 'how' and 'for whom', the next section focuses on the 'what': the key messages for our target groups are presented, and complemented with an outline of a stimulating visual approach for the campaign. We then expand on storytelling, given the importance of testimonials of role models for garnering (free) publicity. Finally, we discuss how the success of the scheme can be monitored and how information gathered over the course of the scheme can be used to improve it over time.

7.1. Rationale and objectives of the campaign

Objective

The objective of the campaign is to convince non-EU resident highly skilled entrepreneurial innovators that Europe is 'the place to be' to launch a start-up / scale-up, direct them to the STARTUPEUROPE.EU platform, and encourage them, via this platform, to start their business and entrepreneurial activities in Europe.

The specific objectives are:

- To attract non-EU entrepreneurial innovators to the EU;
- To retain non-EU (start-up) talent that is already in the EU (students and researchers);
- To stimulate EU (start-up) talent abroad to 'return back home'.

Name of the EU scheme

The name of the EU scheme will be STARTUPEUROPE.EU, in light of the proposed merger with Startup Europe platform. In digital communication, visual reference to the scheme will be made as:

STARTUPEUROPE.EU

What is on offer?

The success of the campaign and – more generally - also of the EU scheme, largely depends on the chosen scheme scenario. As noted earlier, the specific aspects which comprise the EU scheme are yet to be decided. Following from our interviews and literature analysis, the main barriers for non-EU entrepreneurs aspiring to start a business in Europe is gaining access to Europe, being able to freely move and develop their business across the internal EU borders. Funding is less pressing issue for the entrepreneurs.

As a result, an all-inclusive EU scheme¹⁹⁷ provides the strongest marketing proposition. Scenario 3, including an EU start-up visa/permit, will also be very marketable, as it offers something new and tangible. Scenario 2, which is without a visa/permit while offering funding, also provides tangible support, however entrepreneurs will have to find their own ways in arranging a visa/permit or for gaining access to Europe or get help for this. If the EU scheme only contains a platform and designated intermediary support (Scenario 1), marketing appeal will be the weakest since there is not much on offer (apart from intermediary support).

 $^{^{197}}$ Scenario 4: including the web platform + intermediary support + EU funding + EU start-up visa/permit.

Table 7.1 Marketing appeal under different scheme scenarios

STARTUPEUROPE.EU	Marketing appeal
Scenario 1 Web platform + intermediary support	Weakest
Scenario 2 Web platform + intermediary support + EU funding	ОК
Scenario 3 Web platform + intermediary support + EU start-up visa/permit	Strong
Scenario 4 Web platform + intermediary support + EU funding + EU start-up visa/permit	Very strong

As discussed before, Scenario 3 is the preferred scenario for the EU scheme. The promotion campaign as presented on the following pages is designed based on the minimum Scenario 1. The design is however flexible. If an EU visa/permit will be launched, the campaign can easily accommodate this (much) stronger proposition of the scheme into the communication tools and key messages.

Potential merger with Startup Europe

The proposed merger of the EU scheme (or at least the platform) with Startup Europe is important for the promotion campaign. The merger follows from the recent communication from the EC in which a larger role for Startup Europe is envisaged. The communication campaign as presented in this chapter follows the requests of the tender specifications for this study in which no reference is made to a merger of the EU scheme with Startup Europe. Elements of the campaign can be transferred to and merged with the promotion of Startup Europe, which would make it a stronger, more integrated branding tool.

7.2. Target audiences

An extensive analysis of the target audience is presented in Chapter 2. In short, the communication will be addressed towards three groups of non-EU resident highly skilled entrepreneurial innovators:

- Aspiring migrants;
- · Legal migrants;
- Returnees.

The potential beneficiaries of the EU scheme will particularly be in the seed phase of their business, but may also be in a start-up phase or even scale-up phase. For the latter two phases, the entrepreneurs might have a successful business outside Europe, which they intend to establish or scale-up within the European Union.

Note that returnees are different from the other two groups as they do not need a visa or residence permit and may be more informed about ecosystem and funding opportunities. However, the key message remains similar for all target groups.

¹⁹⁸ COM2016/0733/final `Europe's next leaders: the Start-up and Scale-up initiative'. To be found here https://ec.europa.eu/digital-single-market/en/news/new-initiative-startups-start-and-scale-europe.

The focus of the campaign is be on 'start-ups' (defined as companies with a scalable business model and innovative products and services) and 'tech people'. We use the term 'tech people' as it has strong connotations with start-ups. Start-ups are most often conceived as businesses linked to the digital economy (internet, e-commerce, artificial intelligence, telecommunication, robotics), as is the case with the majority of successful start-ups. However the target audience is much broader. Start-ups may also occur in, for example, medical technology, creative industries, services, or education.

Persona profiles

The persona profiles for the campaign (see Table 7.2) are, based on the interviews conducted for this study and the analysis presented in Chapter 2.

The common denominator for all three persona is their tech background and their globally dispersed background and orientation. The latter refers to the residence of the entrepreneurs in countries all over the world, in and outside the EU and having nationalities from all over the world, in and outside the EU. Networking, including both digital and non-digital, is therefore key to their way of orientating to start-up their business in the EU. As a consequence, networking is also central to an effective communication campaign for the STARTUPEUROPE.EU scheme.

Table 7.2 Persona for the STARTUPEUROPE.EU campaign

Characteristic	Aspiring migrant	Legal migrant (student)	(Silicon Valley) returnee
Age	Early thirties (average age of a start-up founder is 34,6 years).	Early twenties (students at the end of their Bachelor, Master of PhD).	Early forties (have had a career outside of Europe and wishing to return, sometimes with their family).
Gender	More men than women.	More men than women.	More men than women.
Tech background	Tech background as in Table 2.4.	Tech background as in Table 2.4.	Tech background as in Table 2.4.
Residence	Resides outside Europe.	Resides in Europe at one of the large technical universities.	Resides in the United States.
Legal residence and aspiration	Non-EU citizen. Seeking for an EU residence permit.	Non-EU citizen. Resides in the EU on a student residence permit. Seeking for status change.	EU citizen seeking to return to Europe.
Nationality	Every nationality possible. In particular: US, Canada, BRIC countries.	Every nationality possible. In particular: China, India, Russia, US, Ukraine and Nigeria (Table 2.7).	EU Member State.
Business phase	Seeks to scale-up (an) existing business(es) from outside Europe or to start-up a business.	Starting entrepreneur. In a seed phase or early start-up phase.	Experienced entrepreneur. Seeks to start- up a new business in Europe or scale-up (an) existing business(es).
Goal	Orientation for starting-up in Europe via various networks (personal and professional) and general internet search.	Orientation for starting-up in Europe via networks and the internet search and the ecosystem(s) related to the university.	Orientation for starting-up in Europe via networks (personal and professional) and general internet search. Natural links with country(s) of origin in Europe.

7.3. Communication approach

As the target audience is globally dispersed – and orientates itself to its destination via networks – networking is the key in the STARTUPEUROPE.EU communication strategy. To this end the communication strategy links with existing networks (online and offline) while also creating its own STARTUPEUROPE.EU networks (online and offline).

These four 'branches' of the networked approach are expanded upon in the table below with examples (see Table 7.3). Combined, they present an integrated approach to making the STARTUPEUROPE.EU platform known amongst the targeted users.

Table 7.3 Networking approach branches

What	Where	How
Create own networks	Online	 STARTUPEUROPE.EU web platform communities; STARTUPEUROPE.EU social media profiles and outreach.
	Offline	 STARTUPEUROPE.EU network of designated intermediaries; STARTUPEUROPE.EU ambassador network.
Link with existing networks	Online	Link with existing networks and communities such as F6S, Seedrs, Angellist, Gust.
networks	Offline	 European Start-up Network (ESN); EU Delegations; EU information centres in third countries; Participation at events.

The key to a successful STARTUPEUROPE.EU initiative is the provision of a steady stream of engaging content, via the platform and also spread via social media, this contact has to be relevant and valuable to the user. To increase the usefulness of the platform, all available data (such as the completed profile) needs to be used to personalise the experience for the user.¹⁹⁹

The web platform should have something new every time a user visits or logs in to the platform. Creating relevant content is therefore important. Apart from testimonials, content managers should create:

- Articles;
- Video's;
- · Whitepapers;
- Blogs;
- Photos;
- · Infographics;
- Review.

 $^{^{\}rm 199}$ In compliance with all relevant data protection laws and regulations.

7.4. Communication channels: paid - owned - earned

These different 'products' of the campaign need to be distributed via different channels to be effective. We have developed an integrated approach for the campaign that rests on the three arms: 'paid – owned – earned'. The paid – owned – earned model was first developed as a way of thinking by Daniel Goodall in 2009, who was working at Nokia at the time.²⁰⁰ The model captures the shifts, since the rise of social media, from a focus on paid, *via* owned (including PR) communication approaches to an increasing importance of earned communication.

Together, the paid - owned - earned arms are a complementary mixture of mutually reinforcing media channels that work to generate awareness and engagement. This model is in particular relevant for the STARTUPEUROPE.EU campaign, which targets an audience that is - generally speaking - on the forefront of technological developments.

How this can be applied is shown in the table below, which gives includes an overview of the tools appropriate to our campaign. Tools recommended to be used are shown in black while those that are discouraged are marked red. The table is followed by a (summary) explanation of the application of the three arms to the campaign.

Table 7.4 Mixture of communication tools

	Paid (advertising)	Owned (branding)	Earned (word of mouth)
What is it	Anything that is paid for to drive traffic to STARTUPEUROPE.EU. The EC pays to boost awareness and engagement.	Any communication channel or platform that belongs to, is created by and controlled by STARTUPEUROPE.EU.	Free publicity created by peer groups and opinion leaders, either in response to owned communications or via voluntary mentions.
Features	Create awareness to large audience and generate initial engagement.	Build direct and long term relations; conversion to action.	Generate authentic awareness within target groups.
Tools	 Print ads; TV ads; Display ads; Sponsorship of events; Paid search; Online advertisements; Promoted Facebook posts; Advertising on social media. 	 STARTUPEUROPE.EU website; EU Delegation, embassies' websites; Associated social media profiles; Blogs; Brochures and PowerPoint; Webinar, E-;learning; Own Physical and virtual events; Participation (information stall, speech etc.) at other events. 	Online and offline press mentions, reviews, reposts, recommendations, shares and likes.

^{*}Facebook, Google+, Twitter, LinkedIn, YouTube, Instagram, and other.

²⁰⁰ See Goodall's blog here https://danielgoodall.com/2009/03/02/owned-bought-and-earned-media/ and a backgrounder (by communications consultant Steve Seager) here http://www.steveseager.com/paid-owned-and-earned-media-framework-for-marketers-business-leaders/.

7.4.1. Paid communication

Paid media might function as a catalyst that feeds into the STARTUPEUROPE.EU platform and may eventually create earned communication. However, since the target audience is so geographically dispersed (across the globe) it will be very costly and hardly impossible to deliver a paid campaign that reaches the whole of our targeted audience.

In terms of outreach and budget, most efforts of the campaign will be invested in online media. As the target groups are geographically scattered all over the world, it will not be feasible to have a campaign in print (radio or television). Since the target group is technologically savvy, an online campaign is the most appropriate approach to reach out to potential scheme beneficiaries.

Based on the data gathered, we propose the following for the 'paid'-arm of the campaign:

Online and social media advertising and promotion

Online and social media advertising would prove to be a good channel to reach out to our target audiences. These tools will also provide flexibility for the re-allocation of spending and real time adjustment of keywords/advertisement content over the campaign period (SEO and Phase 2).

Promotion on social media channels, specifically Facebook and LinkedIn.

The target groups to be addressed should be identified on the basis of 3 priorities:

- per "importing" Member State (MS with important shares of specific communities of highly skilled migrants entrepreneurs will be key for the identification of multipliers within their territory);
- Highly skilled entrepreneurs in third EU countries, who could be potentially interested in investing in EU;
- EU entrepreneurs based in third EU countries, who could be potentially interested in re-investing in EU.

On Facebook, sponsored campaigns can target specific languages and behaviour when online, international and nation-specific Facebook groups for entrepreneurs can be addressed. On LinkedIn professional (private and public) groups are also appearing to be popular platforms for entrepreneurs to interact and find out about business opportunities in Europe.

Online advertising, specifically Google Ad Words.

A keyword/semantic contextual purchase would ensure our advertising to be served on a range of websites adjacent to articles/content containing keywords that align with our campaign.

Stakeholders in the EU

In order to amplify the message of the campaign beyond social media / paid channels defined above, we suggest creating synergies with appropriate multipliers at different levels such as:

- Organisations present at national level within the EU to reach out to EU resident entrepreneurs, researchers and students in "importing" countries, as per priority a). For instance, the Enterprise Europe and their Start-up Ireland programme. Or community organisations in countries with important demographics combining priority a) and b);
- National organisations operating for EU citizens living abroad (Chambers of Commerce in third EU countries), as per priority c).

Incubators and intermediaries will also play a big role in the promotional campaign and the success of the platform we are currently in the process of creating. Based on the approved type of organisations we proceed with the research of specific institutions and organisations. This search will be carried out at the beginning of the campaign in parallel to the production of the communication tools.

Platforms with high numbers of registered entrepreneurs

We suggest advertising on platforms that already have great networks of entrepreneurs across the world, for instance F6s. Targeting options would be available. Application forms, newsletters promoting the EC platform of business in the EU and discussion dashboard options would all be available.

The messages shall be tailored to be country specific when needed, for two reasons:

- Content (different communication channels, messages, tone of voice);
- Technical (national differences in regulation, for example, in cookie policies).

In practice, it means that communication messages and distribution should be reviewed by the designated intermediaries for 'their' country, to ensure negative connotations and awkward plays-on-words are avoided. The overall communication approach will follow the general Startup Europe approach, which has already been dealing with the mentioned limitations for a longer time.²⁰¹

The online campaign will be monitored on a rolling basis, providing continual feedback on what is the best targeting approach. This means that the targeting of our messages will become increasingly more 'intuitive' over time.

7.4.2. Owned communication

The core of the owned arm is the STARTUPEUROPE.EU platform. The platform is where information is provided and the designated intermediaries are presented. Building on this platform, various other owned communication media and activities are utilised, mainly in the form of publishing on associated social media accounts. The owned media are core for capturing the non-EU resident highly skilled entrepreneurial innovators and for conversion of their interest in coming to Europe into action.

The designated intermediaries in the EU countries will play a crucial role in producing content that is relevant to their country. They will manage (national) social media accounts, and share news and updates both there and on the web platform (see also Section 5.7). In effect, this element represents an on-going campaign that lasts as long as the initiative persists.

In addition, indirect promotion will take place via EU Delegations, EU embassies and EU information centres in third countries. The EU delegations may promote the STARTUPEUROPE.EU via national embassies posted in the same third country, EU information centres and other EU networks in third countries. For this purpose, information is shared on their websites, and an information package or PowerPoint presentation may be designed further.

EU Delegation

3rd parties*

Figure 7.1 Indirect marketing

 $[\]ensuremath{^*}$ For example: Member State embassies, EU information centres, other EU networks.

 $^{^{201}}$ No translation should be necessary as the promotion campaign will be conducted entirely in English.

Indirect promotion via EU delegations and at events may make use of the secured 'campaign portal' providing campaign tools (such as lay-out guidelines, images, PowerPoint summarising the campaign, general information on the scheme, testimonials, etcetera). When promoting the EU scheme actively in third countries, national circumstances and (political) sensitivities should also be taken into account.

Issues to consider while promoting STARTUPEUROPE.EU in third countries

Third country governments might not be very receptive towards the STARTUPEUROPE.EU initiative, as it may lure away their best brains to Europe. The extent to which these sensitivities will occur will depend on each respective country. For example, China has an active policy of promoting the Chinese diaspora all over the world, while in Russia, authorities are much more reluctant as it appears that highly educated Russians who leave the country often leave on a permanent basis. In other words, political sensitivities should be taken into account when implementing marketing activities in third countries.

As the STARTUPEUROPE.EU web platform will be linked to Startup Europe and EURAXESS, which are recognised brand names, the marketing of STARTUPEUROPE.EU shall also make use of these channels wherever possible.

Regarding (participation in) events, the existing planning for the Startup Europe initiative shall be taken as a 'baseline' for the planning relevant to our current initiative. National events can and should be organised by the designated intermediaries, who, as associations are already involved in the European and national start-up networks, will have their own events planning. The planned events can be expanded to include our target group, and the planning should be reviewed for comprehensiveness in the light of the expansion of the Startup Europe initiative's scope as a consequence of this study.

7.4.3. Earned communication

The earned media is another crucial pillar under the STARTUPEUROPE.EU campaign. It will generate awareness among relevant start-up networks and will add credibility to the STARTUPEUROPE.EU scheme. The better the proposition of the initiative, the easier it will be to increase earned media, through free media coverage and positive reviews, comments, and shares on users' social media. Designated intermediaries will be tasked with responding to mentions by others (reactive) and with garnering positive stories (see Section 5.7). Like the owned-arm of the campaign, this is an on-going effort.

Free media coverage can be earned by good use of the owned media channels: by regularly posting relevant news updates, events, and showcasing testimonials of entrepreneurs on the website, entrepreneurs (the customers here) are given material to discuss. More importantly, 'buzz' can be created through smart usage of (owned) social media accounts, for example by reaching out to users with questions or challenges and using Twitter hashtags (e.g. 'What does Europe start-up nation mean to you? #StartupEurope' or 'Why did YOU startup in Europe? #StartupEurope'); hosting Facebook live sessions with the webplatform's ambassadors; and posting videos to YouTube. The goal is to get people talking about the campaign, the platform and the broader StartupEurope initiative.

As can be seen, the owned and earned media approach can and should be blended. It must be noted that a good owned and earned media campaign requires patience, cultivation, and sustained engagement. It needs a steady stream of traffic-building programs, fresh content, and optimised design. Focused management, sufficient budgets, and appropriate performance metrics are needed to build owned-media platforms, whether they are foundational search or social-media efforts, site hubs, alerts, or feedback-gathering communities, to name a few possibilities. Patience is required, but it also means that over time the reach and impact of the STARTUPEUROPE.EU's owned and earned media will increase over time.

7.5. Key messages

As follows from the objective of the communication campaign,²⁰² the key message(s) should be activating while also being quite broad, since the general proposition is the promotion of 'Europe' as a destination to start a business (nation branding). At the moment, Europe is relatively unknown to the global population as an inspiring destination where innovation can flourish. The key messages are designed to brand Europe as exactly such an attractive destination.

They key message will be based on the following statements and composition of wording:



The following visualisation entails the destination for tech people (Europe) and an underscore "_" which has a technical / internet connotation:

²⁰² Objective of the campaign is to convince non-EU resident highly skilled entrepreneurial innovators that Europe is 'the place to be' to launch a startup / scaleup. Both the campaign and the webplatform elaborated in the previous chapter are a medium to this end.



The main communication elements are part of the key message. The sender and destination ('Europe'), a personalised approach ('your'), the context (it is about 'start-ups'), and the comprehensive and all-including focus of the target audience ('world'). Note that the term 'Europe' is being used instead of the 'European Union' or 'EU' since the European Union / EU might be not as known as 'Europe', also the connotation on the term 'Europe' is less political and instrumental.



The key messages are be complemented with sender and will activate the audience to visit the STARTUPEUROPE.EU platform. The number of platform visitors will be one of the Key Performance Indicators (KPIs) of the campaign.

Europe is_ your start-up world.

Variations to the key message may be used to reinforce the communication. The supporting messages have the structure with: the sender and destination ('Europe'), a personalised approach ('your'), and a signature of the sender, STARTUPEUROPE.EU platform. Supporting messages may continue to develop over time. They may be attuned to actual developments in politics, the economy or start-up scene. Following, some example of how the key message offers ample opportunities to play with and bring variation to the campaign. When used online, clicking on the message should redirect users to the STARTUPEUROPE web platform.

Europe is_ expanding your start-up opportunities.

Europe is_ your start-up network.

STARTITUPINEUROPE.EU

Europe is_waiting for you.

STARTITUPINEUROPE.EU



The key messages will be visually presented in the:

- Campaign slider in the STARTUPEUROPE.EU web platform;
- Links to the platform on other 'owned' websites (for example the EU Delegation);
- Printed material (such as brochures) of (PowerPoint) presentation;
- Paid media messages (if any);
- Other communication tools.

Figure 7.2 Campaign slider on the STARTUPEUROPE.EU web platform



7.6. Visual approach

The visual approach consists of the campaign key-visuals and content photography, with a presentation of recognisable situations and people which will result in personalisation of the communication.

Figure 7.3 Photography style













Figure 7.5 (Recognisable) European cities (Tallinn in Estonia)



Figure 7.6 Combination of a European city and real entrepreneurs



Figure 7.7 Other example



7.7. Storytelling (testimonials)

Weaving storytelling into a communication strategy will give the STARTUPEUROPE.EU campaign longevity and renewed engagement. Testimonials of non-EU resident highly skilled entrepreneurial innovators who have successfully started-up their business in Europe, will provide content to the 'owned' media channels and will provoke earned communication (in the form of, for example, likes on Facebook posts).

This should also be accompanied by a PR strategy that targets media in the third countries where the campaign is run. There are historical ties between certain Member States and third countries, and the content managers of the webplatform and the Ambassador network of the initiative should be leveraged to engage in outreach to these third countries. Additionally, journalists and local entrepreneur support initiatives from third countries should be invited to relevant events at European or national level.

Figure 7.8 Key message and storytelling



The interviews conducted for this study (presented in the Annex IV) illustrates that real-life stories will be the best supporting evidence of the key message. In other words, the key and supporting messages will be 'told' via the campaign slider and the testimonials (storytelling). This approach is flexible, and it may be developed as the STARTUPEUROPE.EU scheme evolves and becomes more successful.

The stories will be visualized and present by:

- Photos of real-life start-ups;
- Written short text (maximum 400 words);
- Header, summarising the specific story in the format of the key messages;
- Short video, to be placed on the STARTUPEUROPE.EU platform and shared via social media.

The stories will show a variety of start-ups (nationality, type of business, background, location in the EU, etcetera) and will provide 'evidence' of the attractiveness of Europe for start ups. Elements to be covered might be (for example!):

- Europe is a large network of fast growing start-up ecosystems;
- Europe provides access to a wealthy market of over 500 million consumers in 28 countries;
- Europe has top universities and a diversity of vibrant start-up ecosystems;
- · Europe makes it easy to start-up your business;
- Europe is the place to start-up and enjoy life;
- Europe allows students to become a start-up after graduation;
- · European cities are likely to produce the 'next Google';
- Europe is the place to release innovative products and services (first);
- Europe is where start-ups meet creative industries;
- Europe is to start-up in 28 countries;
- Europe is a network of multi-country high-tech ecosystems;
- Europe is home to Silicon Valley returnees;
- Et cetera.

Note that these elements are generic. They shall be personalised in the real life stories.

To collect and catch the real life stories we propose the following. The network of designated intermediaries will have a role to identify interesting people and interesting stories. The main communication material will be developed at central EU level and are to be disseminated using a secured 'campaign portal' providing campaign tools (including lay-out guidelines, images, PowerPoint presentation summarising the campaign, general information on the scheme, testimonials, etcetera) to be applied in activities for the promotion of the scheme.

We suggest starting with 10 'success stories' and add to this at least 10 new stories per year, spread over different EU Member States. New stories should be created in a regular basis.

Figure 7.9 Testimonials presenting the main reason to start-up in the EU





Europe is_home to Silicon Valley veterans

Solupit, can por reperfero que cor aut fugit utas nis solupta quaere, te libus eat veliquodi voloreceatus aut volorernamus et a dio. Itat. Uciumquae volu pturit harum volo conem doluptat volestrum aditas esti ommolup tatemodit re derum volupisquae

lead more >



7.8. Phased approach

We suggest taking a phased approach in the delivery of the campaign in order that lessons can be learned, improvements made and contingencies implemented during the contract. In fact, the relative success of the channels and messages adopted across the different work packages (or media) will be evaluated at the end of Phase 1 of the campaign according to the established KPIs (see the next section). This will make it easier to make adjustments based on performance before initiating Phase 2.

The advantages of a phased approach lie in the possibilities to conduct thorough market research, studying how to best match specific tools and channels to our target audiences in their respective countries. Several research methods could be utilised in this respect that would allow us to understand their media habits, their needs, where they are likely to be found and what media or platforms they most likely consult. For instance, we could run an online focus group using a dedicated online platform in order to gain feedback on the campaign slogans and visual concepts from highly skilled entrepreneurs. Workshops with a good sampling of entrepreneurs, as well as internal and external stakeholders, would also be a good way to brainstorm ideas or test existing ones.

Based on the successes of Phase 1 of the communication campaign and on the findings from multi-country message testing, we would also be able to triangulate how individuals from varied regions are likely to respond to specific communication stimuli and to apply minor cultural adaptations to our key messages. Moreover, Phase 1 would enable us to test our channels and to understand which tools would maximise the success of our communications objectives in reaching out to our target audiences by the virtue of a consolidated evidence-based approach.

Data gathering and reporting on the performance of all promotional activities throughout Phase 1 would of course be a crucial exercise, as well as a comprehensive evaluation of outputs following pre-established KPIs. As such, we could enlarge or re-shape Phase 2 to attain even greater results by taking into account the outcomes of Phase 1 of the campaign and by bearing in mind cost and time savings, whilst maintaining campaign message impact.

Following this logic, we suggest to commence Phase 1 in five target countries out of the six mentioned earlier: Brazil, Russia, Israel, India, South Africa and the US. The sampling of five countries would allow us to keep the promotional campaign specific, cost effective, as well as easy to monitor and optimise during its execution. Phase 2 will be grounded on how effective the media and messages utilised were in achieving the campaign's goals during the first phase. We would indeed advise the EC following an in depth evaluation at the end of Phase 1.

Table 7.5 Phases in the publicity campaign

Phase	Publicity campaign
Preparation (month 1-6)	 Profiles for online target group, reach, and conversion; Developing user kit for EU Delegations to launch the campaign in pilot countries; Developing social media campaign.
Phase I (month 7 -18)	 For aspiring migrants the campaign: pilot five countries; For legal migrants: pilot campaign in the five best high tech universities in Europe; For the returnees: campaign launch in the USA; Launch social media campaign.
(month 16 - 18)	Evaluation.
Phase II (after month 18)	• Enhance the campaign to further countries, target groups and communication channels.

7.9. Key performance indicators

The promotion campaign and the EU scheme as a whole should be monitored to evaluate its success. Over time, targeting of paid media can be adjusted and fine-tuned as more information about our target groups becomes available. This could also point the direction for which (additional) policies can be revised or devised to better support the goal of the initiative.

Different metrics can be used for this purpose. We propose to monitor (a selection of):

- 1. Visa/permits: Number of national start-up visa/ permit applications;
- 2. Traditional media:
 - a. Newspaper articles;
 - b. Television interviews / segments;
 - c. Radio interviews / segments.
- 3. Social Media: Social media metrics:
 - a. Facebook, Instagram, LinkedIn, Youtube etc. followers and subscribers;
 - b. Likes, shares on social media platforms;
 - c. Number of views of Youtube/Facebook videos;
 - d. Hashtag popularity on Twitter/Facebook.
- 4. External platform: Links from other platforms;
- 5. Events: event registrations;
- 6. Web platform: Different usage metrics:
 - a. Number of web platform views;
 - b. Number of created discussion groups;
 - c. Number of interactions on the web platform (posts, articles, etc.);
 - d. Number of registered users;
 - e. Number of active registered users;
 - f. Bounce rates;
 - g. Time spent on site;
 - h. Traffic sources;
 - i. Keywords;
 - j. Direct/referred traffic;
 - k. Content interaction (most/least popular pages, visitor entry/exit pages);
 - Device usage (desktop, mobile, etc.);
 - m. New vs returning visitors;

- n. Referrer (found website via search, social, etc.);
- o. Device used (desktop, mobile, etc.);
- p. Country of visitor (or town/city for domestic clients;
- q. Visitors to 'campaign' specific pages.
- 7. Where newsletters are used (e.g. as part of a marketing campaign), the suggested KPIs are:
 - a. Number of emails delivered;
 - b. Number of emails opened (assumed read);
 - c. Number of emails bounced;
 - d. Number of clicks.

The task for monitoring these metrics is divided between DG RTD/DG CNECT on the one hand, and the web platform's content managers on the other. Metrics regarding number of visa/permit applications should be monitored by DG RTD/CNECT, as they have a better position to receive the required information from the national competent authorities.

Other information (events, social media, and web platform-related metrics) should be monitored and reported on by the content managers, providing monthly updates to the Commission. This should be included in the assignment for the web platform content management. Usage metrics of the web platform can be monitored through Google Analytics reporting sheets, which can also be personalised to the needs of the initiative.²⁰³

7.10. Organisation and Costs²⁰⁴

An effective online campaign will follow a three-step approach in which in the first phase (awareness) is being created. Subsequently, the message is being reinforced by promotional messages and the target groups are more specifically targeted (reach). Finally, that traffic is being generated to the STARTUPEUROPE.EU web platform (traffic). In this logical sequence of online communication activities, it is more effective to make choices (specific targets) and create maximum awareness than to have a very broad ambition but a 'weak voice'.

For the more detailed development of the campaign and calculation of campaign costs, we have consulted *Havas Media*, which is expert in online communication. In order to explore possibilities, limitations and costs of online communication activities, we have selected 6 non-EU countries and 5 European top-universities for tech people. It is proposed to select 5 of these non-EU countries to start the campaign with.

We have selected the following five universities, which are top-universities across geographically different European countries: 205 Technical University Munich, Delft University of Technology, University of Bologna, Aalborg University and École Polytechnique. For example, Technical University Munich has nearly 36,000 students, if which 10% have an international background. Delft University of Technology has an entrepreneurial reputation and supports 70 start-up companies and 25 alumni companies.

An intelligent and self-learning online campaign can be implemented through access to the profiles of the target audiences and potential geographical locations (i.e. students in the vicinity of universities). Buying models of target groups attention will be either via preferred deals with, for example, online tech magazines and blogs, or via open auctions (which is cheaper). The online promotion campaign's modalities are such that results and impacts are monitored on a rolling basis, providing continual feedback on what is the best targeting approach. This means that the targeting of our messages will become more 'intuitive' over time.

²⁰³ See for examples here https://support.google.com/analytics/answer/1151300?hl=en and https://blog.kissmetrics.com/expert-google-analytics-reports/.

²⁰⁴ Regarding organisation, see also Section 5.7 on Content Management.

²⁰⁵ Great value colleagues (2016) 50 Most technologically advanced universities. Retrieved from http://www.greatvaluecolleges.net/50-most-technologically-advanced-universities/.

The campaign is compliant with EU data protection legislation. The EU remains owner of the generated data and will be provided with a dashboard that could provide insight on the user data and traffic that is being generated.

The Annex contains further details on the paid online campaign. Costs of such a campaign may differ per country and depend on how 'wide' and 'deep' the campaign will be implemented. Table 7.6 provides an initial guidance on amounts that should be spent per country in order to have an effective and impacting online campaign.

Table 7.6 Costs of the online campaign per country (x 1,000 EUR)

	FR	DE	IT	NL	DK	BR	IL	IN	RU	SA	IR
3rd party data	-	-	-	-	-	63	17	92	99	36	14
Site list	34	28	31	26	20	42	17	37	45	18	19
Retargeting	39	28	29	31	21	45	12	39	47	17	13
Private deals (all)	32	22	22	27	19	30	11	22	34	15	-
Private deals (linked-in)	-	-	32	-	-	44	8	62	19	32	-
Private deal (Facebook)	64	26	30	13	5	43	12	63	15	17	-
Mobile Geo Fencing	9	18	28	8	10	-	-	-	-	-	-
TOTAL	178	122	172	105	75	267	77	315	259	135	46

Source: Havas Media (for Ecorys).

The total costs of this campaign will be EUR 1,810,000 (EUR 1,623,000 excluding the UK). However, a 'lighter' version can be implemented, where certain items are excluded for some or all countries. This should be reviewed in light of the budget that is available to DG RTD/CNECT for these purposes (also in line with the overall Startup Europe marketing).

In addition to these costs, there are some costs associated with the production of promotion material to be disseminated via the owned media. An indication of these costs is given in Table 7.7. It is advisable that these costs are included in the contract with the (central) content manager for the STARTUPFUROPE.FU initiative.

Table 7.7 Costs of promotion materials

What	Cost (EUR)
Campaign sliders (production of key messages and visuals) (10 sliders)	5,000
Testimonials (photography, copy, video) (10 testimonials)	35,000
Professional texts fro brochures, flyers, posters (events), etcetera	10,000
Total	50,000

Most costs will be related to the time spent on the provision of owned communication (social media profiles, blogs, participation on events) provided by the designated intermediaries and the overall management of the EU scheme and the designated network. As calculated in Section 4.2 the overall costs of the EU 28 designated intermediary network are estimated at around EUR 940,000 to EUR 1.5 million. This includes all designated intermediary activities, including support to entrepreneurs, screening of support providers, provision of up-to-date valuable website content including communication via social media and participation on events.

8. COSTS OF THE SCHEME

Cost indications have been given in the previous chapters. A summary of potential cost scenarios for the EU scheme is presented in Table 8.1. In particular the eventual costs for EU funding of the startups and the promotion campaign will depend on a large number of factors.

The table also shows that the developing and maintaining the web platform will be the least expensive element of the scheme. Setting up and maintaining a network of designated intermediaries will be the foremost expenditure. It will cover support to entrepreneurs, screening of incubators, accelerators and other support providers that wish to make a profile on the web platform, provision of up-to-date valuable website content including communication via social media and participation on events.

Table 8.1 Total costs of the EU scheme

Cost category	Where analysed	How much
EU 28 designated intermediary network	Section 4.2	Estimated at EUR 940,000 to EUR 1,5 million (average 0.5 to 1 FTE per EU Member State plus overall management of the network).
EU funding	Section 4.5	Depending on a number of factors, such as types of funding, number of start-ups funded, levels of funding. A grant scheme similar to French Tech Ticket, to for example 500 start-ups (2 to 3 founders per start-up) and EUR 45,000 per start-up will cost EUR 22,5 million on an annual basis. The costs of EU funding via loans and equity funding (option II) will be much lower, depending on the financing conditions.
Web platform	Section 5.11	EUR 221,000 per year, starting from year 3.
Promotion (paid online advertisements on tech blogs and social media)	Section 6.10	Flexible. No maximum. Depending on how 'wide' (number of countries) and 'deep' (online presence) the paid online campaign will be implemented.
Promotion (owned)	Section 6.10	EUR 50,000 on an annual basis for the provision of promotion materials (including new testimonials).
Promotion (owned)	Chapter 6 Section 4.2	Communication via the web platform and social media by designated intermediaries. Part of the overall costs of the designated intermediaries (see first line in this table).
Additional costs		Out of pocket costs policy makers, DG RTD, EU Delegations, etcetera, for developing, implementing and promoting of the scheme. (To the extent that no extra FTE shall be employed, this is partly absorbed in the existing cost base).

9. CONCLUSIONS AND RECOMMENDATIONS

9.1. Benchmarking existing schemes

The global competition for start-up talent is expected to grow over the coming years, as more and more countries in and outside the EU will implement policies and schemes (including specific migration rulings) to attract foreign innovative entrepreneurs.

In the EU a minority of countries have introduced specific start-up visa/permits. Not every EU country sees added value in putting specific schemes in place to attract foreign (non-EU) start-up talent. Considerations for this might be: Innovative entrepreneurs have adequate access via existing migration rulings (self-employed permits or entrepreneur's permits); there is no need to attract foreign start-up talent (sufficient innovative potential among inhabitants); the political momentum for opening borders to more immigrants is simply not there.

In the discussion of an EU start-up visa/permit, it is better to speak of an EU start-up permit or EU start-up ruling. In particular since even one year access is generally considered to be too short to have a new business taken-off.

With regards to visa/resident permits, a step forward is that the EU Blue Card Directive acknowledges and strengthens intra-EU mobility. It does allow holders to start a business, but this is limited to a part-time venture and holders then need to switch status to self-employed permits or entrepreneurs permits that exist in all Member States. can only happen in the context of an employment at an existing organisation. Although it is an important first step, it is not suited for attracting our target group of non-EU entrepreneurs. The students and researchers directive does give students and researchers the possibility of orientating to setting-up a business for at least 9 months, which again is a step in the right direction but only covers a certain segment of our target audience.

Current provisions at EU level are not suited to support non-EU entrepreneurial innovators. In terms of funding, EU instruments are designed for established SMEs and restricted to EU residents and residents of Horizon 2020 and COSME countries only. The same applies for EU funded support initiatives. Research funding (such as Marie Curie grants) have a more worldwide outlook, but provide only grants for doing research, which is different from funding for setting-up a business.

Startup Europe is a recognised brand name for connecting EU start-up ecosystems. It addresses the right target group. As the EU Startup Manifesto calls for an EU start-up visa/permit and addresses the need for 'bringing Europe's best brains back home' an EU scheme to attract non-EU entrepreneurial innovators, should be linked to and build upon the Startup Europe 'brand' and achievement.

National schemes designed to attract foreign start-up talent seem to be most effective with an 'all inclusive' approach, meaning (a) that access to a visa/permit is linked to (or via) specific support systems at national or local level, and (b) a certain amount of subsistence funding is provided. Examples of 'all inclusive' schemes are Startup Chile and French Tech Ticket. This being said, subsistence funding is a less essential part to an EU scheme, especially compared with the added value of a visa/permit.

Setting aside the legal residency question, any start-up permit scheme should seek and foster a connection with already existing ecosystems, ideally by granting intermediaries a role in assessing the applications and supporting start-ups once a visa/permit is granted.

Incubators and accelerators (public, private, public-private) are most suited to fulfil this function as they are already accustomed to these types of processes, however other types of intermediaries might be able to play this role as well. Also, not every start-up needs an incubator. Another issue is that incubators come in various forms. In particular incubators that provide financial support in exchange of equity in the start-up may be suited for some start-ups but not appropriate to others – for example, some start-ups already have their own funding.

An EU start-up permit should strike the balance between attractiveness and selectivity. At minimum, the EU scheme should provide assistance to those entrepreneurs seeking a (national) dedicated start-up visa/permit. This is provided for in the design of our scheme through the leveraging of designated intermediaries, that connect prospective entrepreneurs with the right incubators, accelerators et cetera. If a start-up permit is adopted, it should focus on the innovation potential of new start-ups – a criterion that can be fulfilled by 'outsourcing' the judgement of the economic part of an entrepreneur's application for a permit to certified incubators.

Start-up sometimes complain about the amount of paperwork (red tape) needed to get a visa/permit. Also there is a general impression that the duration of many of the existing schemes (one year) is too short. The lack of travel opportunities and possibilities to expand the business to other EU Member States is sometimes considered as a barrier in developing the business.

9.2. Design of the EU scheme

The EU scheme can have the following five components:

- A web based service platform;
- · A publicity campaign;
- Business support (designated intermediaries);
- EU financial support;
- EU start-up visa/permit.

It should be designed with a central aim to provide landing to non-EU entrepreneurial innovators. Furthermore, the implementation of the scheme should take place so as to be complementary to already existing Commission initiatives that support like-minded target audience – innovation driven entrepreneurs.

As for the funding, we foresee three possibilities that could be considered on how to support innovation coming from outside of EU having great potential in providing jobs in the EU Member States. In brief these are to:

- · Adapt or extend the current EU grant scheme;
- Enable more accessible loans and / or equity funding;
- Support competitions.

Regarding crowdfunding, which has been requested to explore in particular, we conclude that limited if not no action is foreseen from DG RTD. At the Commission level, the latest staff document indicates that the EC decided not to step in. Rather the Commission shall see how it develops and what national regulators will do. ²⁰⁶ The possibility of DG RTD in engaging with crowdfunding could be to certify existing platforms to provide a sign of quality (such as EBN certification of incubators).

As for funding options of the scheme, we recommend further exploring the possibilities of enabling loans and providing equity to non-EU entrepreneurial innovators. EIF could be well suited instrument with network of intermediaries to disperse the financial support in leans and /a or equity.

²⁰⁶ European Commission (2016) Press release. Commission publishes results of Call for Evidence on EU financial services. Retrieved from: http://europa.eu/rapid/press-release_IP-16-3750_en.htm?locale=en.

We have added to the scheme a component of designated intermediaries. This components also provides welcoming support and guides the entrepreneurs to well-known and lesser-known ecosystems all over the EU territory. We explored three scenarios on the role that intermediaries could play in supporting non-EU entrepreneurs:

- Model A: Bottom-up establishment;
- Model B: Designated intermediaries;
- Model C: Designated intermediaries and bottom-up establishment.

Although Model A might seem to enable a market-driven approach, heavy investment in promoting the scheme to intermediaries would be required in order to have a functioning web platform. This would require resources for management of the platform to be employed first before the non-EU entrepreneurs could make use of the scheme. In the first phase of the scheme implementation (see Section 4.5 on Implementation), and move to model C one's the scheme has taken off. Model C is needed for long term sustainability of the scheme.

In addition to the role of intermediaries in implementing the scheme, we have explored how the EU scheme will be implemented by extending existing schemes or, if needed, establishing new ones. We conclude that the better option is to extend the Startup Europe initiative of DG CNECT with this scheme of DG RTD for non-EU entrepreneurs. The main argument for Startup Europe is that this platform is built with target group of this scheme in mind namely, the entrepreneurs.

We propose that the implementation of the scheme takes place over three phases: preparation phase, phase I, evaluation of the steps taken and phase II with further fine-tuning and rolling out.

9.3. Web platform

The web platform should be designed from the perspective of the non-EU entrepreneur looking to come to Europe and as such, should provide information on all relevant aspects of this journey (from ecosystems to visa/permits and funding) as well as an opportunity to share experiences.

As the web platform should focus on where it can add value to already existing platforms, it will provide direct links to others.

For a combination of strategic, branding and technical reasons, the most suitable place for the STARTUPEUROPE.EU web platform is as an extension to the Startup Europe platform.

To encourage usage of the platform and enhance stakeholder engagement, the web platform should be supplemented by a strong and targeted promotion campaign, and strong efforts to build and maintain the community of practice.

Content generation for the platforms and maintenance of the Community of Practice should be assigned to a central content manager (Digital Community manager) and designated intermediaries with country-specific knowledge and expertise, to optimise the 'fit' between the content and our target groups.

Special attention should be paid to updating the EU Immigration Portal with all the necessary information about the start-up visa/permits that have been implemented in the Member States, as some of these are currently missing.

The web platform should be developed in a phased approach, with the possibility to add more advanced functionalities (such as a recommendation function) in a later stage.

To maximise the added value of the STARTUPEUROPE.EU platform as complementary to the Startup Europe initiative, it is recommended that it is developed under the joint guidance of DG RTD and DG CNECT. This includes the approach to the visual identity of the platforms.

To further maximise the complementarity of STARTUPEUROPE.EU and Startup Europe, the process of creating a profile (thus appearing on the Startup Europe ecosystem map) should be integrated through both platforms.

9.4. Promotion campaign

The core communication tool will be the platform itself. With regards to the specific promotional elements, there will be a campaign slider and testimonials from non-EU start-ups presenting the main reasons to come to Europe (supporting messages). Real-life stories will be the best evidence of the key message: key and supporting messages will be 'told' via the campaign slider and the testimonials (storytelling).

The supporting messages are linked to the specific attraction factors of Europe in general, and more specifically, to the target groups. These attraction factors follow from research and our interviews with start-ups and tech people. Supporting messages may continue to develop over time.

In terms of outreach and budget, most efforts of the campaign will be invested in online media. As the target groups are geographically scattered literally all over the world, it will not be feasible to have a campaign in print (radio or television). Since the target group is technologically savvy, an online campaign is the most appropriate approach to reach out to potential scheme beneficiaries.

The second pillar of the campaign will be indirect promotion via EU Delegations, EU embassies and EU information centres in third countries. The EU delegations may promote the STARTUPEUROPE.EU via national embassies posted in the same third country, EU information centres and other EU networks in third countries. For this purpose, an information advertisement for these websites may be placed, and an information package or PowerPoint presentation may be designed further.

Final Report - ANNEXES

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1. ANNEX I LIST OF INTERVIEWEES

In the context of this study, we have interviewed several (non-EU) start-up entrepreneurs to learn about their experiences. An overview of the persons we spoke with can be found on the next page:

Table AI.1 Overview of interviewed start-up entrepreneurs

Name	Programme	Nationality	Age	Sex	Type of business	Date	By who	
Α	Dutch Startup Visa	Canadian	25 - 30	Male	Biotech: Nestegg	27 October	Veronika Brantova	
В	French Tech Ticket	Israeli	28 - 32	Male	Construction / Materials: Tridom	27-28 October	Niels Wanrooij / Paola Abis	van
С	Dutch Startup Visa	Iranian	30	Male	IT company making software predictive cash flow for SMEs	8 November	Veronika Brantova	
D	Italian Startup Visa	Iranian	30-35	Male	Software: SockSeed	10 November	Niels Wanrooij	van
Е	Italian Startup Visa	Serbian	24	Female	Selling traditional products online	14 November	Veronika Brantova	
F	Italian Startup Visa	American	28	Female	Design: Per Figore	5 November	Niels Wanrooij	van
G	Cyprus, has obtained local visa	Indian	33	Male	High performance software consulting	17 November	Veronika Brantova	
I	Italian Startup Visa	Russian	30 - 35	Male	Software: RouteSoftware S.R.L.	18 November	Niels Wanrooij	van
Н	Dutch Startup Visa	South African	40	Female	Cooking gadget: HandleHands Distribution: Oak and Mie	18 November	Niels Wanrooij	van
J	Dutch Self- employment visa	American	50	Male	General ICT: Glimworm	22 November	Niels Wanrooij	van
	Belgian self- employment visa	Pakistani	30-35	Male	Innovation Consulting	22 November	Veronika Brantova	
K	n/a	London		М	Balderton Capital	23 November	Brigitte Slot	

Table AI.2 Overview of Intermediary interviews

Name	Programme	Type of business	Location	Sectors / themes	When interview	By who
WORKSHOP AUSTRIA						Valerie Wolff
	YES!Delft	University Business Incubator	Delft, Netherlands	CleanTech, Industrials, Energy, Health & MedTech, ICT, Mobility and Consumer Products	22 June	Niels van Wanrooij, Viera Spanikova
	Startup Delta	Umbrella of Dutch incubators/intermediaries	Netherlands	All	27 June	Niels van Wanrooij
	EBN	Network of Business Innovation Centres in Europe	Brussels, Belgium	All	30 June	Jakub Gloser
	Dutch Start-Up Visa	n/a	The Hague, Netherlands	n/a	18 August	Niels van Wanrooij
	Allied for Startups	Umbrella of start-up associations	Brussels, Belgium	All	9 September	Niels van Wanrooij
	North East Business & Innovation Centre (BIC) (as participant in Erasmus for Young Entrepreneurs)	Encouraging entrepreneur exchanges within Europe	Wearfield, UK	All	20 October	Veronika Brantova
	CyRIC Cyprus Research & Innovation Center	Cypriotic incubator	Nicosia, Cyprus	Engineering design and prototyping; electronics and communications; software solutions	20 October	Veronika Brantova
	Berytech	Lebanese incubator	Beirut, Lebanon		7 November	Niels van Wanrooij

Overview of Commission officials and other experts that have been interviewed in the context of this study:

DG HOME Boscher Marie; DG HOME STETTER Sebastian: DG EMPL LEJEUNE Guy (contact by mail); DG CNECT LASO BALLESTEROS Isidro; DG CNECT KOEPMAN Helen; DG GROW BALDASSARRI Simone; DG GROW DAGE Helene Diane: DG GROW MELONE Armando (access to finance); DG GROW KAMINSKA Lucyna (start-ups); DG RTD VAN DEN BERG Rinske; FEHRINGER Karin (platform); DG RTD DG RTD ADAM Angela Maria (platform); DG RTD TZIVELOGLOU Pantelis (platform); DG RTD GLINOS Konstantinos; DG RTD VIALATTE Philippe;

- Margaret Mulligan, European Business and innovation centre Network (EBN);
- Prof. Alberto Onetti, Mind the Bridge;
- Karen Boers, European Startup Network (ESN);
- Christine Sullivan, Fragomen Brussels;
- Maria Vincenza Desiderio, Migration Policy Institute Europe;
- Katja Berkhout, Venture Café Rotterdam.

EBN Congress

From 28 – 30 September, two members of the study team attended the EBN Congress in Guimarães, Portugal to present the ongoing study and speak with various start-up entrepreneurs and incubators. During this Congress, we spoke with EBN-members from within and outside the EU. This allowed us to validate our findings and ideas directly with representatives from our target group and produced helpful inputs to our study.

2. ANNEX II FREQUENTLY ASKED QUESTIONS

Question	Answer
Why does the EU provide support to entrepreneurs?	Talented entrepreneurs and their start-ups create jobs and contribute to generating economic growth in regions and countries, where they are established. In addition, they add to productivity increase and innovativeness and foster the entrepreneurial culture.
What support does the EU provide to EU entrepreneurs?	The EU offers a wide range of support, including incubator and financial schemes, to its entrepreneurs and their start-ups. An example of the incubator support is the European Network of Business and Innovation Centres (EBN) that consists of 150 quality-certified EU/BICs (business and innovation centres) all over Europe. Examples of the financial support schemes are: SME Instrument, COSME Loan Guarantee Facility, and COSME Equity Facility for Growth.
Why should the EU provide support to non-EU entrepreneurs?	Countries in the world compete to attract foreign entrepreneurial talent by providing support to them and their start-ups. This already takes place in Canada, Chile, France, Singapore and China. The EU is also interested to attract entrepreneurial talent to start a company in Europe. Successful start-ups will boost the European economy by generating employment and economic growth. There are many EU-wide support schemes for EU entrepreneurs and their start-ups available, while there is no EU-wide scheme supporting non-EU entrepreneurs and their start-ups.
What does the EU do to keep successful entrepreneurs at home and not losing them because American incubators offer them more interesting opportunities?	The EU offers a wide range of support, including incubator and financial schemes (see above). The actual political climate in the USA makes the country less attractive for foreign entrepreneurs. The promotion campaign to attract non-EU entrepreneurs to the EU targets, among others, also the EU returnees in the USA (Silicon Valley).
Why should there be an EU Start-up visa/permit?	The EU Start-up visa/permit will make the EU a more attractive place for non-EU entrepreneurs. It will simplify the access of the non-EU entrepreneurs to the EU as a whole. Currently, the non-EU entrepreneurs need to apply for visa for each EU Member State individually. It is a complex and time-consuming process, as the application requirements differ per country. This application process is an obstacle in attracting non-EU entrepreneurial talent to the EU.
Who will benefit from the EU Start-up visa/permit?	Number of stakeholders will benefit when the EU Start-up visa/permit is in place:
	-Countries/regions that attract non-EU entrepreneurs will benefit from established start-ups and their contribution to the national/regional economic growth and job creation, as well as an increased productivity and innovativeness;

Question	Answer
	-Regional/local community will benefit from fostering entrepreneurial culture; -Applicants themselves by having an easier (less complex and less time consuming) access to the EU.
When will the EU Start-up visa/permit be implemented? Why does it take a relatively long time?	The Ecorys report from January 2017 recommends implementation of the EU Start-up visa/permit as an important factor of promoting and making Europe more accessible by non-EU entrepreneurs and their start-ups. Six EU Member States have already a start-up visa/permit and more will follow. During the Dutch Presidency of the Council of the EU in the first half of 2016 the work on introducing the EU visa/permit started. Ecorys report recommends continuing this work. The implementation of the EU visa/permit is a political process and as such may take long time.
Are there examples of start-up visa schemes from other countries?	There are examples from both inside and outside of the EU. An example of the former is the French Tech Ticket. Examples of the latter are the Start-Up Chile and the Start-Up Visa Program Canada. These start-up visa schemes have attracted increasing numbers of applicants over the years.
Why should a promotion campaign take place? Is it needed?	A well designed and targeted promotion campaign is essential in rising awareness and interest about Europe as an attractive place for starting a business. Europe is competing for entrepreneurial talent and start-ups with other countries, such as Australia, Canada, Chile and Singapore that have developed and applied own marketing and promotion campaigns. The targeted promotion campaign will help Europe to compete for entrepreneurial talent and start-ups world-wide. It will raise awareness about Europe as a place to innovate and inspire entrepreneurs that Europe is a place to be for start-ups.
What is an aim of the campaign?	The aim of the campaign is to increase the awareness and interest of non-EU entrepreneurs in Europe as a place for their start-up.
Will the platform be updated? How regularly and by whom?	The platform will be regularly updated by designated intermediaries (a network of incubators throughout Europe). The update will take place on a [monthly] basis.
Which non-EU countries granted the highest number of entrepreneur/start-up visas in recent years?	Start-up Chile received 2 448 applications of which 90 were granted in 2015. EntrePass Singapore received 1 000 applications of which 50% were granted in 2013. Data about non-EU countries is limited and not complete. Therefore, only several countries could be compared.
Why develop a scheme targeting	It has been shown that entrepreneurs both foreign and domestic are beneficial to employment opportunities in societies, as their

Question	Answer
highly-skilled non- EU resident entrepreneurial innovators when so many young Europeans in the EU are unemployed?	start-ups create new jobs in the economy as they grow both directly by start-ups hiring employees, and indirectly through new opportunities associated with innovation. Therefore, the EU aims to attract more entrepreneurs to the EU, to increase the number of available jobs directly and indirectly through boosting innovation.
Will the scheme increase brain drain from countries at need and limit their own socio-economic development	By increasing opportunities for non-EU entrepreneurial innovators to set up a business in Europe, third country nationals from countries at need can increase their skills and gain valuable experience in dealing with the EU market. Their host countries will benefit from these expats in two main ways: firstly, when the expats return they bring home their experience to the benefit of their home country. Secondly, even without the expats returning, their work in the EU benefits those that stay behind through remittances as well as through strengthening economic ties and easing the forming of bilateral (trading) relationships with the host and home countries.

3. ANNEX III LIST OF ENTREPRENEURIAL DOMAINS

Derived from a combination of sources: https://startupxplore.com/en/blog/the-5-hottest-startup-sectors-where-investors-are-putting-their-euros/; French Tech Ticket; European Start-Up Monitor 2015.

Advertising

Aerospace

Analytics/Big data

Apps

Artificial Intelligence

Automotive

Bio-, nano-, and medical technology

Cleantech

Cloud computing

Communications

Consumer Business

Consumer mobile / web applications

Consulting company, agency

Creative industry and Culture

Design

E-commerce

E-health

Education and Edtech

Energy

Enterprise software

Entertainment

Fashion

Fintech (finance technology)

Food/Drink and Foodtech

Gaming

Green tech (green technology)

Hardware

Healthcare IT and service

House/Construction/Real Estate

Human Resources

Industrial technology / production / hardware

Internet of Things

IT / software development

Legal

Manufacturing

Marketing

Media

Music/Audio

Natural Resources

Offline services

Online marketplace

Online service portal

Public Relations

Robotics

Search

Security

Social Ventures

Software

Software as service

Sports

Transport

Travel

4. ANNEX IV PROFILE OF START-UP VISA/PERMIT BENEFICIARIES (EXAMPLES)

Table V.1 Profile of beneficiaries

Initiative	Name	Nationality	Age	M/F	Type of business / start-up
French Tech		USA	35	М	Matchmaking platform for the transport and logistics in Africa.
French Tech		Burkina Faso	37	М	Matchmaking platform for the transport and logistics in Africa.
French Tech		French	35	М	Matchmaking platform for the transport and logistics in Africa.
French Tech		Canada	47	F	Instant opinion of their community of friends while shopping
French Tech		Canada	46	F	Instant opinion of their community of friends while shopping
French Tech		Japan	28	F	Analyses customer behaviour through image recognition technologies.
French Tech		Hong Kong, China	37	М	Analyses customer behaviour through image recognition technologies.
French Tech		Italy	29	F	Help users make the right career choice using data-mining and location.
French Tech		Italy	29	М	Help users make the right career choice using data-mining and location.
French Tech		Lebanon	30	М	Help users make the right career choice using data-mining and location.
French Tech		Vietnam	34	М	Real-time facial scanning and 3D cameras to offer server security
French Tech		Vietnam	33	М	Real-time facial scanning and 3D cameras to offer server security
French Tech		Vietnam	31	М	Real-time facial scanning and 3D cameras to offer server security
French Tech		Russia	27	М	Data analyses to improve the process of in vitro fertilization success rate
French Tech		Morocco	26	М	Analyse energy consumption of customers of renewable energies
French Tech		France	26	М	Analyse energy consumption of customers that transfer to renewable energies

Initiative	Name	Nationality	Age	M/F	Type of business / start-up
French Tech		India	32	М	Electrochemical treatment using high quality diamond electrodes for disinfection and water purification.
French Tech		Israel	31	М	Using robotics technology and 3D printing in construction of buildings
French Tech		Israel	31	М	Using robotics technology and 3D printing in construction of buildings
French Tech		Chile	28	F	Online education platform dedicated to the training of farmers.
French Tech		Chile	35	М	Online education platform dedicated to the training of farmers.
French Tech		Chile	26	F	Online education platform dedicated to the training of farmers.
French Tech		Brazil	31	F	Circular economy project developing organic materials, that can also be used as fertilizer.
French Tech		France	26	М	Circular economy project developing organic materials, that can also be used as fertilizer.
French Tech		Chile	35	М	Circular economy project developing organic materials, that can also be used as fertilizer.
French Tech		China	30	М	Reinvent the tea bag to offer new tasting experience
French Tech		China	30	F	Reinvent the tea bag to offer new tasting experience
French Tech		India	34	М	Recommends products to customers who make their first purchase on an e-commerce site.
French Tech		India	40	М	Recommends products to customers who make their first purchase on an ecommerce site.
French Tech		France	24	F	Using open-source robotic mobility to revolutionize the accessibility of wheelchair users worldwide.
French Tech		USA	33	F	Using open-source robotic mobility to revolutionize the accessibility of wheelchair users worldwide.
French Tech		USA	36	М	Using open-source robotic mobility to revolutionize the accessibility of wheelchair users worldwide.
French Tech		Argentina	31	М	Application for HR departments to reward their employees

Initia	itive	Name	Nationality	Age	M/F	Type of business / start-up
French	n Tech		UK	28	М	Application for HR departments to reward their employees
French	n Tech		France	34	М	Application for HR departments to reward their employees
NL Visa	Start-Up		USA (6)			
NL Visa	Start-Up		Russia (4)			
NL Visa	Start-Up		Canada (3)			
NL Visa	Start-Up		India (2)			
NL Visa	Start-Up		Macedonia (2)			
NL Visa	Start-Up		Macedonia			
NL Visa	Start-Up		Iran		М	Customer relations / business management
NL Visa	Start-Up		Ukraine			
NL Visa	Start-Up		Mexico			
NL Visa	Start-Up		Indonesia			
NL Visa	Start-Up		New Zealand			
Italy Visa	Start-Up		Russia	31	М	Geolocation, Leisure (Hiking)
Italy Visa	Start-Up		Russia	42	М	
Italy Visa	Start-Up		Japan	29	М	Design, FoodTech

Initiat	tive	Name	Nationality	Age	M/F	Type of business / start-up
Italy S Visa	Start-Up		Iran	34	М	Augmented Reality
Italy S Visa	Start-Up		Ukraine	41	М	Electronics, Automation
Italy S Visa	Start-Up		Brazil	30	М	Telecoms
Italy S Visa	Start-Up		-	31	М	FinTech
Italy S Visa	Start-Up		USA	28	F	Design

The above selection of persons is based on information that was shared with the study team on request to the various Start-up visa/permit schemes, supplemented by additional searches conducted by the study team.

5. ANNEX V WEB PLATFORM MODELS (RESEARCH)

The EU web platform 'Welcome to Europe' / 'Europe is open for innovation' / 'Europe is open for Business'. What do we need to decide is layered, going from fundamental choice to details:

5.1.1. What kind of platform are we going to build?

What kind of 'animal' is it?

Models from the viewpoint of the entrepreneur

Model 1: Information hub, sends you to other sites.

Model 2: Information matching, collects relevant info and allows for smart searching and matching.

Model 3: Intermediary linker, collects relevant info and links to intermediaries that help you navigate local and EU-wide ecosystem.

How does the platform differentiate itself from other existing platforms? To avoid confusion for the entrepreneur the Commission may wish to consider the role of other EC operated platforms in regard to discoverability (SEO, Google ranking etc), to ensure that the "Welcome to Europe" platform becomes the default starting point for all enquiries of this nature. This may require other EC platforms to initially sign-post to the "Welcome to Europe" platform for visitors arriving from the result of Google searches.

5.1.2. What functionalities are there?

How will information be presented on the platform?

How are we 'dressing up' our animal?

Ability to access information (ecosystems, funding, visa, support, other?)

Ability to explore EU ecosystem (using a geographical map)

Ability to make a profile (entrepreneurs, intermediaries, cities)

Ability to search via a matching function / ability to match

Ability to advertise your initiative (who?)

Already the second level, depends on answer to first question: what functions should the platform have

5.1.3. How do we get the information on the platform?

How do we teach our animal to perform its tricks?

Does our platform 'talk' to other platforms, does it import information, or does it only link to other platforms? (related to layer 1)

Should support initiatives enrol themselves on the platform to be listed on the geographical map or not?

Etc. (more choices will flow from the answers to the first two questions)

Note: all models would have the basic ability to create a profile for both entrepreneurs and support initiatives, with summary/pen profile paragraph and description of services needed/on offer and thematic focus.

5.1.4. Model 1

Information hub

'Galeries Lafayette'

Main functionality: Search

Supply-driven model

Most suited for website only

Platform provides overview of information on relevant initiatives for various themes such as access to finance, access to business support, thematic areas.

Platform aggregates information from other platforms and provides links to these, without incorporating all the information.

Result will be a signposting platform

Pros

All information is brought together under one umbrella without having to scrape or duplicate existing information.

Least amount of platform maintenance required of considered options.

Entrepreneur is responsible for his/her own search.

Cons

User needs to piece together his/her own 'package' bit by bit.

User is constantly redirected to external pages for every part of the package.

Availability of all information leads to 'information overload' and lack of focus.

Cumbersome, time-consuming process limits potential for uptake by target groups.

More suitable for entrepreneurs that already know precisely what they need.

Questionable what the full added value will be in relation to other platforms.

Relevant examples for 'look and feel'

Startup Europe 'One Stop Shop': http://startupeuropeclub.eu/are-you-a-startup/.

5.1.5. Model 2

Information matching

'Airbnb'

Main functionality: Search and filter

Demand and supply matching

Suited for both website and app

All information from external platforms and of initiatives is available on the platform itself, but 'under the surface'.

Ecosystem map: ability to 'see' the actors in an ecosystem on the map, including support initiatives, universities, local/regional development agencies, companies (start-ups and scale-ups, SMEs, multinationals)

Filtering: Ability to search all available information via queries on specific criteria.

Criteria include: geographical location, whether or not there is still a need to arrange legal residence, type of assistance needed/offered, cost of assistance, thematic expertise.

Ability to set multiple criteria if needed, i.e. 'Spain, legal residence still to be arranged, looking for access to finance and networking support, not costing more than 5% in equity, thematic area of biotech'.

When searching the above criteria, the outcome would be:

- An overview of applicable visa in Spain for non-EU entrepreneurs, with information on how to apply;
- an overview of support initiatives in Spain that offer access to finance and/or networking support and/or that take 5% in equity or less for such assistance and/or which focus on hiotech:
- A geographical overview (map) with pins for every organisation that is working in biotech;
- Apart from support initiatives;
- Display of matching results in order of relevance, with support initiatives meeting all the criteria on top.

Pros

Entrepreneur will have one consistent interface where (s)he will find all relevant information.

Ability to easily filter out irrelevant data, which enables focused searching.

Prevents 'information overload' and allows for quicker navigation for entrepreneurs.

Model can be developed as an app, expanding usage possibilities.

Support initiatives and other ecosystem actors can create their own profiles.

Cons

More maintenance-intensive, as data from the other aggregating platforms needs to be scraped.

Relevant examples for 'look and feel'

AirBnB: https://www.airbnb.com.

Booking.com: http://www.booking.com/.

French TechTicket Ecosystem map: http://www.frenchtechticket.com/15/ecosystem-map.

5.1.6. Model 3

Intermediary connector

Main functionality: Agent linker and search

Demand-driven model

Suited for both website and app

The platform will be populated by support initiatives and ecosystem actors.

Support initiatives will act as the 'aggregators of information'.

Pros

Simplicity, especially easy for the entrepreneur as all (s)he needs to do is contact the incubator.

Cons

Heavy (over)reliance on intermediaries.

Relevant examples for 'look and feel'

Erasmus for Young Entrepreneurs local contact points.

http://www.erasmus-entrepreneurs.eu/page.php?cid=5.

6. ANNEX VI ECOSYSTEM MAPS

6.1. French Tech Ticket

The ecosystem map on the website of French Tech Ticket²⁰⁷ is an elegant way of visualizing ecosystems in France. Various actors in a city or region are grouped together under one ecosystem indicator that is labelled according to the various thematic / sectoral areas that the ecosystem excels in, such as #Mobile/Web, #Social Innovation and #eCommerce in Bordeaux and #Web, #eCommerce, #Software, #Education, #Healthcare, #IoT, #CleanTech, #Energy and #Creative & Cultural in Lyons. This ecosystem map is filled top-down.

Benefits of this map are that it is attractive in its simplicity and ensures you do not get lost in the myriad of actors that play a role in the ecosystem. The top-down approach ensures no unwanted actors are represented. Thematic labelling allows for easy identification of the 'place to be' for entrepreneurs.

On the other hand, downsides of this approach are that it needs to be regularly updated by the platform management to prevent information from becoming outdated. A good selection mechanism is crucial and there is a risk important actors are not represented. So whereas the map is highly accessible for entrepreneurs looking for their destination, it does not score highly on accessibility and transparency for ecosystem intermediaries.



Link: http://www.frenchtechticket.com/11/choose-your-incubator

²⁰⁷ To be found here http://www.frenchtechticket.com/15/ecosystem-map#.



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#Wellness, #Medical Devices, #CleanTech,
#Tourism, #FinTech, #HR, #MedTech,
#Blockchain, #Retail, #Education, #Sport,
#Aerospace, #Industry, #Robotics,
#Software, #Hardware, #Data Science and
#Artificial Intelligence

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6.2. Italia Start-up visa

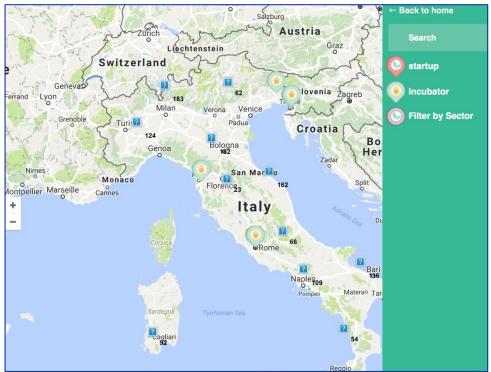
The Italia Start-up Visa ecosystem map²⁰⁸ works through self-registration of initiatives (bottom-up). It shows both start-ups and incubators. Additionally, there is a possibility to filter results by sector, such as 'Agriculture, forestry and fishing', 'Transportation and storage', 'Information and communication', and 'Other service activities'. When clicked on, the pin shows information about the activities of the actor in Italian. It is at this stage not clear if actors are checked after registration, before they appear on the map.

Benefits of this approach are that the map is accessible and transparent. Having both incubators and start-ups represented and the ability to filter thematically is a big plus. There is also a search function (which would work better if it was possible to search on ecosystem labels).

Downsides are that actors are not grouped into local or regional clusters and that there is no thematic labelling of groups. The thematic labelling that is applied seems outdated to the start-up world. Information only being available in Italian is a handicap.

As the platform depends on self-subscription, there is a risk of under- or misrepresentation of specific regions that can only be counteracted if complemented by a strong promotion campaign.

 $^{208 \ \} To be found here \ http://italiastartupvisa.mise.gov.it/index.php/Ecosystem-Map\#.$



Link: http://italiastartupvisa.mise.gov.it/index.php/Ecosystem-Map.

6.3. Startup Europe

The Startup Europe ecosystem map²⁰⁹ shows the start-up ecosystems in Europe, including different types of actors from start-ups, incubators and accelerators to investors, corporates, universities, public organisations, influencers and coworking spaces. There is also a search function. The map is filled bottom-up, as initiatives can sign themselves up. There is at current no (automatic) monitoring system of who signs up.

Benefits of this approach are that the map is accessible and transparent. Having all the ecosystem actors represented and the ability to search for specific initiatives or filter on one type of actor is a plus.

Downsides are that actors are not grouped into local or regional clusters and that there is no thematic labelling of groups. With so many actors represented, one can easily get an overload of information and it is not easy for entrepreneurs to find the right partners for them. The absence of an automatic monitoring system means that information is not always accurate. 210

As the platform depends on self-subscription, a number of regions and countries are currently underrepresented, as the platform has only recently been officially launched and has focused initially on having Startup Europe projects represented. This will improve over time, but there is a risk that specific regions will remain underrepresented if actors are not properly incentivised to sign themselves up. This can be counteracted if complemented by a strong promotion campaign.

²⁰⁹ To be found here http://startupeuropemap.eu/map/.

²¹⁰ For example, when searching for 'French Tech', the result that was shown was in South Africa.

²¹¹ See http://startupeuropeclub.eu/official-launch-startup-europe-one-stop-shop-brussels/ and interview with organisation managing Startup Europe platform



Link: http://startupeuropemap.eu/map/.

6.4. DG GROW Cluster Observatory

The European Cluster Observatory²¹² provides statistical information, analysis and mapping of clusters and cluster policy in Europe. The Cluster Mapping tool provides sectoral and cross-sectoral regional data and visualisation of the geographical concentration of cluster development in Europe. The industrial strength of cluster development is illustrated by so-called "cluster stars" indicators that reveal the presence of critical mass depending upon the cluster's size, the degree to which it is specialised and how productive it is.

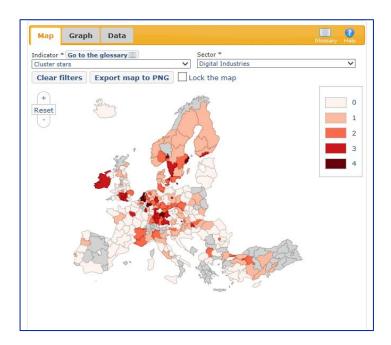
Benefits of the map is that actors are grouped into regional clusters with a thematic focus of the groups.

Furthermore, the map shows quality and strength of a cluster. Within each sector, the map demonstrates, based on colour schemes, which regions in Europe are well equipped with clusters in such a domain.

Downside of the map is that it needs to be regularly updated by the platform management to prevent information from becoming outdated. Furthermore, the look and feel of the observatory lacks dynamic nature.

Platform for non-EU entrepreneurs could welcome the grouping of actors that the Cluster Observatory enables. The grouping would however have to be adjusted to sectors or domains of high tech entrepreneurial activities (e.g. robotics, 3D printing are missing).

²¹² European Cluster Observatory - http://www.clusterobservatory.eu/



7. ANNEX VII INTERMEDIARY NETWORKS

7.1. Startup Nations (SN)

Startup Nations (SN) is network and platform dedicated identifying policy levers that can unleash high impact entrepreneurship and innovation. The network is made "startup savvy" policy advisers focused on exploring different regulatory changes and other policy and public



to

up of

sector

programs to help accelerate new and young firm formation in their economies. Members share ideas about what is working and what is not in their respective environments; connects to research and communicates priorities to the Global Entrepreneurship Research Network (GERN) and its individual members (e.g. Kauffman Foundation, the World Bank and Endeavor Global), and enables informal knowledge sharing among economies focused on leveraging entrepreneurs and their start-ups in order to create jobs, build economies and expand human welfare.

Table A.VIII.1 Start-up initiatives worldwide associated with the Startup Nations network.

CONTINENT/COUNTRY	ORGANISATION
Africa	
Mauritania	Startup Mauritania
Morocco	Startup Maroc / Fondation du Jeune Entrepreneur
South Africa	Startup South Africa
Asia	
Bangladesh	BetterStories
Cambodia	Young Entrepreneurs Association of Cambodia
China	TechNode / TechCrunch.cn
Hong Kong	Cyberport Creative Micro Fund & Incubation Program
India	Startup India / 10000 startups/Nasscom
Indonesia	Start Up Indonesia
Kazakhstan	Startup Kazakhstan
Kyrgyzstan	KG Labs Public Foundation
Malaysia	Startup Malaysia
Mongolia	Startup Mongolia
Philippines	Startup Philippines
South Korea	Startup Korea
Taiwan	iiiNNO Taiwan
Thailand	Startup Thailand / Global Entrepreneurship Thailand
Vietnam	StartDojo

CONTINENT/COUNTRY	ORGANISATION
Middle East	
Egypt	Technology Innovation and Entrepreneurship Center (TIEC)
Saudi Arabia	BADIR Program for Technology Incubators and Accelerators
Europe ²¹³	
Armenia	Startup Armenia
Belarus	Startup Belarus
Belgium	Startups.be
Croatia	Ministry for Entrepreneurship & Crafts
Cyprus	Industry Disruptors – Game Changers
Denmark	Startup Denmark / Creative Business Cup
Estonia	Startup Estonia
Georgia	Startup Georgia
Germany	German Startups Association
Greece	Academy of Entrepreneurship Federation of Hellenic Associations of Young Entrepreneurs (OESYNE)
Iceland	Startup Iceland
Ireland	Startup Ireland
Latvia	Latvian Startup Association
Lithuania	Startup Lithuania
The Netherlands	Startup Delta
Norway	Startup Norway
Poland	Startup Poland
Romania	Akcees / Techsylvania
Russia	Startup Village
Serbia	Innovation Fund
Spain	Mobile World Capital
Spain	Associación Española de Startups
Turkey	International Entrepreneurship Initiative / Startup Turkey
Ukraine	Startup Ukraine

²¹³ Please note, there is no member from France.

CONTINENT/COUNTRY	ORGANISATION
United Kingdom	StartUp Britain
Oceania	
Australia	StartUp Australia
New Zealand	Startup New Zealand
South America	
Argentina	Buenos Aires Emprende National Secretariat of Entrepreneurs & Small and Medium Enterprises
Brazil	Start-UP Brazil / Dinamo
Chile	Start-Up Chile
Colombia	iNNpulsa Colombia
Ecuador	IDEA Network
Dominican Republic	Directorate of Entrepreneurship – Ministry of Industry and Commerce
Guatemala	Emprende Guatemala
Jamaica	Startup Jamaica
Paraguay	INNOVANDOPY
Peru	Start-Up Peru
North America	
Canada	Startup Canada
Mexico	Startup Mexico/ several other initiatives
United States	Startup America

Source: Startup Nations, http://startupnations.co/startupnations/members

7.2. European Business and Innovation Centre Network (EBN)

The European Business and Innovation Centre Network (EBN) is created in 1984 to coordinate the activities of EC Business & Innovation Centres (BICs). Over the last three decades, EBN has become a reference point in Europe on innovation, spin-off, incubation, entrepreneurship, SMEs, and internationalisation through the 'Soft Landing' service, a new co-incubation



service for innovation led companies who wish to explore new markets offered by EBN Business Innovation Centres and other incubators at a selection of global locations. EBN has signed strategic partnerships and alliances with recognized European and international bodies:

European Commission (30 years ago and today EBN operates the EU|BIC trademark under license from DG Enterprise & Industry); European Space Agency (ESA); EUREKA (intergovernmental organisation for market-driven industrial R&D); European Patent Office; European Investment Bank; United Nations Development Programme (UNDP) (via an MoU); Enterprise Europe Network.

7.3. The Enterprise Europe Network

The Network helps small and medium-sized enterprises (SMEs) make the most of business opportunities in the EU and beyond. Have a look at the many services offered free of charge by our 600 member organisations, including chambers of commerce and industry, technology centres, universities and development agencies. Enterprise Europe Network offers services in the following areas:



- Support packages for innovative SMEs;
- Technology transfer;
- Access to finance;
- Advice on EU law and standards;
- Intellectual Property Rights (IPRs);
- Speak up on EU law;
- Research funding.

7.4. Comparison French Tech Ticket incubators - EBN members in France

Comparison of the designated French Tech Ticket incubators with the EBN intermediaries in France: There is only one overlapping organisation

French Tech Ticket incubators

- 104factory;
- 1Kubator;
- 50 Partners:
- Airbus BizLab;
- Belle de Mai;
- BizMedTech:
- Bond'Innov;
- BoostInLyon;
- Creative Valley;
- Ekito;
- EM Lyon;
- Eurasanté;
- EuraTechnologies;
- Fast Forward Normandie;
- Genopole;
- Impulse Partners;
- iPEPS-ICM;
- La Myne;
- La Paillasse;
- Le Comptoir;
- Le Connected Camp;
- Le Hub BPIFrance;
- Le Tarmac;
- Montpellier BIC;
- NUMA;
- Paca-Est Incubator;
- Paris Pionnières;
- Paris&Co Le Cargo;
- Paris&Co Le Tremplin;
- Paris&Co Welcome City Lab;
- · Plaine Images;
- Savoie Technolac [also in French Tech Ticket];
- Schoolab:
- SenseCube;
- Starburst;
- Startup42:
- Telecom & Management SudParis;
- Telecom Bretagne;
- Telecom Bretagne;
- Usine IO;
- X-UP.

EBN intermediaries In France

- EU|BICS AND SATELLITES IN FRANCE FOR ALL SECTORS;
- EBN ASSOCIATE MEMBERS IN FRANCE FOR ALL SECTORS;
- Aditec pas de Calais CEEI;
- Aerospace Valley;
- Agence de Développement et d'Innovation Aquitaine, Limousin, Poitou-Charentes;
- Agence Régionale de l'Innovation Poitou-Charentes;
- Alsace Innovation;
- Angers Technopole;
- Antipolis Innovation Campus;
- ARITT Centre;
- BIC Montpellier Méditerranée Métropole;
- BIC Plein Sud Entreprises:
- Bordeaux Technowest;
- Bretagne Développement Innovation;
- Cap Digital Paris Region;
- CAPITAL HIGH TECH;
- CASA, Sophia Antipolis;
- Castres-Mazamet Technopole;
- · CCI d'Eure et Loir CEEI Chartres;
- CCI de Lyon NOVACITE;
- CCI de Paris CEEI:
- CEEI 47;
- CEEI Cap Delta Ariège Expansion Parc Technologique Delta Sud;
- CEEI CREATIV;
- CEEI de Nîmes;
- CEEI Nice Côte d'Azur;
- CEEI Quimper-Cornouaille;
- CEEI Synergia La Technopole Caen-Normandie;
- CEEI Synergie;
- CEEI Théogone (Parc Technologique du Canal);
- Centre Fleming CEEI (pépinière associée d'Aditec);
- CENTRE INITIA (pépinière associée d'Aditec);
- CREAMANCHE (pépinière associée d'Aditec);
- CRESCENDO;
- e-placeNet (Pépinière associée d'Aditec);
- ESTIA-ENTREPRENDRE Technopole Izarbel;
- Executive Business Accelerator;
- Fondation Pour L'université de Lyon;
- GUYANE DEVELOPPEMENT INNOVATION;
- Haliocap (Pépinière Associée d'Aditec);
- i-source Gestion;
- Incubateur Descartes;
- INCUBATEUR PACA EST;
- INNOVACT BIC;
- L'Ecloserie d'Entreprises (pépinière associée d'Aditec);
- Laval Mayenne Technopole;
- Marseille Innovation;
- Martinique Technopole;
- Mice-Maison de l'initiative,; de la créativité et de l'Emploi (Pépinière Associée d'Aditec);
- Nantes Atlanpole;
- NOVALIA 82;
- Pépinière de la Porte des Flandres (pépinière associée d'Aditec);
- Pépinière et Hôtel d'Entreprises du Beauvaisis;
- PREMICE;
- · Promotech Nancy;
- Réseau Seine CREAtion;
- RETIS
- Ruche d'Entreprises Ciel;
- Ruche d'Entreprises de Roubaix;
- Ruche d'Entreprises de Tourcoing;
- Ruche des 2 Lys;

- Ruche du Douaisis;
- Ruche du Hainaut;
- Ruche du Littoral;
- Ruche Sambre Avesnois;
- Ruche Technologique du Nord;
- Ruches d'entreprises Nord de France;
- Saint-Etienne Métropole;
- SAVOIE TECHNOLAĊ;
- SEMIR;
- Synergie Lorraine SA;
- SYSTEMATIC;
- Technopole de l'Aube en Champagne;
- THESAME;
- Toulon Var Technologies;
- Val d'Oise Technopole;
- Village d'Entreprises (pépinière associée d'Aditec).

7.5. Enterprise Europe Network: non-EU locations

- ALBANIA
- ARGENTINA
- ARMENIA
- BELARUS
- BOSNIA AND HERZEGOVINA
- BRAZIL
- CAMEROON
- CANADA
- CHILE
- CHINA
- EGYPT
- GEORGIA
- ICELAND
- INDIA
- INDONESIA
- ISRAEL
- JAPAN
- JORDAN
- MACEDONIA
- MEXICO
- MOLDOVA
- MONTENEGRO
- NEW ZEALAND
- NIGERIA
- NORWAY
- PARAGUAY
- PERU
- RUSSIA
- SERBIA
- SINGAPORE
- SOUTH KOREA
- SWITZERLAND
- TAIWAN
- TUNISIA
- TURKEY
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Source: http://een.ec.europa.eu/about/branches

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The objective of this study is to design an EU-wide scheme (EU scheme) to attract highly skilled non-EU resident entrepreneurial innovators to Europe. The focus is on entrepreneurs at the early stages of their businesses' life-cycle (seed phase, start-ups, scale-ups), with potentially scalable businesses, in particular in high-tech and creative industries, but not exclusively. In this study the design and application of five scheme components are investigated: a web based service platform, publicity campaign, business support (via designated intermediaries), financial support, and an EU start-up visa (permit) or support in getting a visa (permit).

Studies and reports

