

EuroGEOSS Showcases: Applications Powered by Europe

D5.6 Investment and Funding Landscape Navigator





The e-shape project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 820852

ABSTRACT

The overall aim of WP5 is the long-term economic sustainability of e-shape Pilots, their penetration in the public and private markets and the support of their upscaling. This will be achieved by providing a wide range of support measures that will be accessed in a dedicated online environment – the e-shape Sustainability Booster, complemented by on-demand services supplied by qualified experts.

Access to finance is one crucial aspect to ensure sustainability beyond the lifetime of the e-shape project. The Investment Readiness Support activities aim to follow and map additional sources of support for innovation and funding opportunities for the e-shape Pilots and to support the Pilots in identifying, selecting, and securing investment and funding.

The Investment and Funding Landscape Navigator represents the information component of Investment Readiness Support. It is a tool that contains investment and funding opportunities mapped to the e-shape Showcases, made available through a user interface that allows search and filtering for best match with a specific e-shape Pilot.

The information in this document reflects only the author's views and the European Commission is not liable for any use that may be made of the information contained therein.

DOCUMENT TYPE	Deliverable
DOCUMENT NAME:	e-shape-WP5-D5.6 Investment and Funding Landscape Navigator
VERSION:	Final
DATE:	03/02/2021
Status:	Final
DISSEMINATION LEVEL:	PU

	Authors, Reviewers													
Author(s):	Nico Thom (EVF)													
Affiliation(s):	Evenflow (EVF)													
FURTHER AUTHORS:	Lefteris Mamais (EVF)													
PEER REVIEWERS:	Lionel Menard (PMT), Nicolas Fichaux (PMT)													
REVIEW APPROVAL:	PMT													
Remarks / Improvements:														

VERSION:	Date:	Comments, changes, Status:	Person(s) / Organisation Short Name:					
V0.1	13/06/2020	Initial draft	Nico Thom (EVF)					
V1.0	22/10/2020	Final version for submission to the PMT	Nico Thom (EVF), Lefteris Mamais (EVF)					
V2.0	09/11/2020	Revised version	PMT					
V2.1	15/01/2021	Revised version	Nico Thom (EVF)					
Vfinal	03/02/2021	Final review for submission to EC	РМТ					

v0.x	draft before peer-review approval										
v1.x	After the first review										
v2.x	After the second review										
Vfinal	Deliverable ready to be submitted										

	STATUS / DISSEMINATION LEVEL													
	Status	DISSEMINATION LEVEL												
SO	Approved/Released/Ready to be submitted	PU	Public											
S1	Reviewed		Confidential, restricted under conditions											
S2	Pending for review	СО	set out in the Grant Agreement											
S3	Draft for comments		Classified, information as referred to in											
S4	Under preparation	CI	Commission Decision 2001/844/EC.											

TABLE OF CONTENTS

ABS	TRACT	. 2
ТАВ	LE OF CONTENTS	. 5
LIST	OF FIGURES AND TABLES	. 5
1	INTRODUCTION	. 6
2	NEED FOR ACCESS TO FINANCE	. 6
3	METHODOLOGY	. 8
4	INVESTMENT AND FUNDING LANDSCAPE NAVIGATOR	12
5	GUIDANCE	14
6	LIMITATIONS AND NEXT STEPS	14

LIST OF FIGURES AND TABLES

Figures:

Figure 1: Investment and Funding Landscape Navigator positioning within Sustainability Booster	6
Figure 2: Vehicles of investment and funding matched to company stage. Sou https://startupfundingbook.com	
Figure 3: Rationale for choosing either public or private sources of finance. Source: The future of the Europ space sector, EIB, 2019	
Figure 4: Space-focused financial instruments in Europe. Source: The future of the European space sector, 2019	
Figure 5: Documentation and mapping of identified sources of investment and funding	. 11
Figure 6: Early mockup investor view	. 12
Figure 7: WordPress backend, entering new dataset	. 13
Figure 8: Landing page Investment and Funding Landscape Navigator	. 13
Figure 9: Detailed investor view	. 14
Figure 10: Investment Readiness Support timeline	. 15

C 1 INTRODUCTION

The overall aim of WP5 is to enable the long-term sustainability of the e-shape Pilots, their penetration in public and private markets and to support their upscaling. In that regard, Task 5.2 focusses on providing e-shape partners with "Market Penetration Support". As part of this process, an "Investment and Funding Landscape Navigator" has been designed and will be operated throughout the duration of the project. This deliverable (5.6) explains the **need for access to finance** (chapter 2) when aiming at long-term market success of the pilots developed in e-shape, and presents the **methodology** (chapter 3) used to identify appropriate sources of investment and funding, followed by a description of the technical/procedural aspects of the resulting Investment and Funding Landscape Navigator (chapter 4). This report concludes with a summary of the steps that will be taken (chapter 5) to ensure this resource provides value to e-shape and beyond.

2 NEED FOR ACCESS TO FINANCE

The Sustainability Booster, as a whole, aims at supporting e-shape's Pilots in maximising their sustainability potential, whether in the real market (i.e. commercial exploitation) or within follow-up research and development activities. It does so by offering (i) intelligence on market and technological developments and trends to enable informed decision-making; (ii) guidance related to business, legal and IP aspects; and (iii) tools for innovation support.



Figure 1: Investment and Funding Landscape Navigator positioning within Sustainability Booster

The "Investment Readiness Support" activities that are part of Task 5.2 will offer guidance to e-shape pilots and the greater EuroGEO community. In that regard, the Investment and Funding Landscape Navigator is designed as a tool that allows users such as e-shape Pilots to find vehicles of access to finance matching their specific context. Active support in e.g., preparing documentation for investors or pitch training represents the guidance aspect.

e-shape Pilots have their roots in advanced R&D activities and are aimed at developing products and services towards Technology Readiness Level (TRL) 9. To that end, the required financial resources for technological development are backed by the Grant financing the e-shape project.



While the developed solutions at the end of the project may be market ready, market presence will require further efforts, such as:

- Operations of product or service
- Licences and fees
- Rent, utilities, and equipment
- Administrative costs
- Salaries
- Communication and marketing
- etc.

These costs may occur before having a first client or even be prerequisite for acquiring first customers. Thus, if business operations and further development cannot be financed through revenues generated from the product or service, additional funding or investment may be required, depending on maturity of product or service, the business as such, the nature of the product or service, targeted sectors and markets etc.

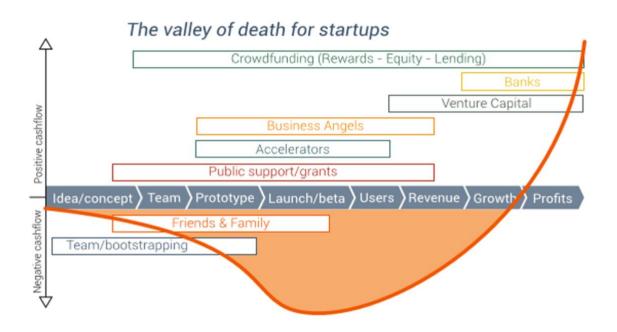


Figure 2: Vehicles of investment and funding matched to company stage. Source: https://startupfundingbook.com

Further factors influence preferences of entrepreneurs/solution developers in their choice of vehicles (see Figure 3).

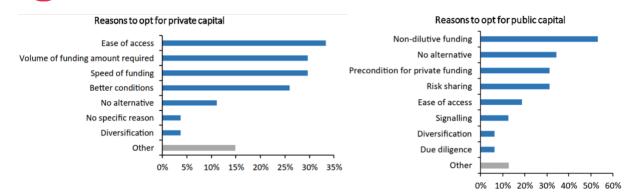


Figure 3: Rationale for choosing either public or private sources of finance. Source: The future of the European space sector, EIB, 2019

Informed by these aspects, the "Investment and Funding Landscape Navigator" (described herein) gathers suitable sources of investment and funding, maps these to the e-shape Showcases, and makes information accessible through an online user interface.

3 METHODOLOGY

Identification of investment and funding opportunities as input to the Investment and Funding Landscape Navigator has been based on:

- Exploitation of existing networks
- Desk research
- Expert interviews (with private investors, EO companies that raised or attempted to raise capital, and representatives of public funding instruments)

Focus of investigation has been on public funding available in Europe on European and Member State level, as well as on private investment from globally active investors with a focus on Europe and/or potential export markets. Further focus has been on supported sectors. This includes the space and EO sector as such as well as all the verticals supported by e-shape Showcases.

Results of the investigation have been documented in a spreadsheet structured as follows:

- Name
- Link
- City (HQ)
- Country (HQ)
- Type of investor
 - Public
 - EU level
 - Member State level
 - Private
 - Angel
 - VC
 - Private Equity
 - Micro Capital
 - Corporate VC
 - Family Investment Office
- Funding type / instrument

6

- o Prizes
- Accelerator
- o Incubator
- o Innovation Hub
- o Grant
- o Loan
- o Equity
- o Mix
- Investment stages
 - o early
 - o pre-seed
 - o Seed
 - $\circ \quad \text{Series A}$
 - o Series B
 - Series C
 - o Growth
 - Company stage
 - Idea/concept
 - o Team
 - Prototype
 - o Launch
 - o Users
 - o Revenue
 - o Growth
 - Profits
- Sector focus
 - Agriculture
 - Health
 - Energy
 - Ecosystem
 - o Water
 - Disaster
 - o Climate
 - **EO**
 - Space
 - Other
- Geographical focus
- Notable investments

e-shape partners, including WP5 leaders Evenflow, are part of the European Earth Observation community with well-established connections to the European institutions, the Space Programme, and the funding and support instruments these provide. This ecosystem has thus been a starting point for mapping instruments of funding and support, including e.g. the Copernicus Prizes, Incubators such as ESA BICS or ESA Incubed, or Grants such as under H2020. Further exploring these lead to a more comprehensive overview of grants, prizes, financial instruments, competitions, and regional and national funds that either focus on EO, space, or verticals matching e-shape Showcases.

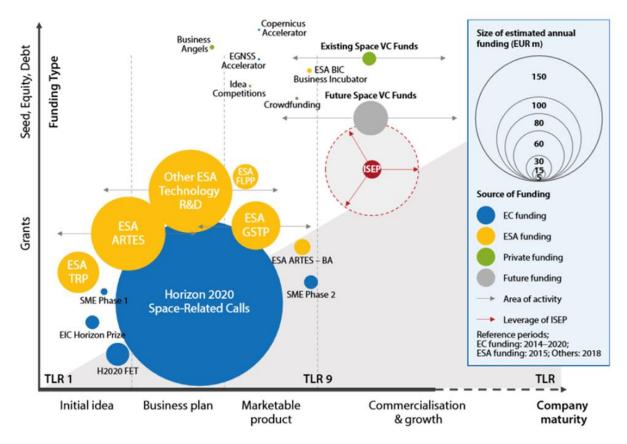


Figure 4: Space-focused financial instruments in Europe. Source: The future of the European space sector, EIB, 2019

In this investigation, recent analyses into the European space sector have been studied to understand key current trends. Thus, companies from the space sector, including EO companies, have been attracting an increased volume of investment over the past years¹. Venture capitalists (VCs) and angel investors represent the two biggest groups of investors in space ventures, accounting for approximately two thirds of all investments, while satellite operators are the biggest single group of private investors overall.² Investigating such investors has been the starting point for the identification of private investors with a track record in investing in space or EO companies. However, while there is a growing number of investors that focus on space, these are still the exception. Thus, research has been extended to private investors with a focus on verticals addressed by e-shape Showcases as well as on those with a focus on deeptech companies, since downstream EO applications are often based on such enabling technologies.

At the time of drafting this deliverable document, the resulting list contains 152 entries of investment and funding sources. Presently, most of these have been added to the Investment and Funding Landscape Navigator, which will be constantly updated throughout the lifetime of the e-shape project.

¹ The future of the European space sector, EIB, 2019; Seraphim Space Index Q2 2020, Seraphim Capital, 2020

² The Q3 2020 Space Investment Quarterly, Space Angels, 2020

A	В	С	D	E	FG	н	I J	K	LN	A N	0	Ρ	QF	R S	T	UV	W	X	Y	ZA	A AB	AC	AD A	E AF	AG	AH .	AI A	JAK	AL	AM	AN	AO	AP /	Q A	R AS		AT		AU	
					Тур	pe of i	nvestor			Fun	ding	type /	instr	umen	t	Ir	nvestr	nent	stage	s		Co	mpan	y sta	ge				s	ector	r focu	IS								
2 Investor	Link	City (HQ)	Country (HQ)	EU-level	vC	Private Equity	Livate Family Investment Of	T T	Corporate VC	Accelerator	Incubator	. Innovation Hub	Gant	Equity	Mix	, early . pre-seed	Seed	Series A	Series B	Series C Geneth	Concept/Research	 Business planning 	Product development	fully operational	Expansion	Ready for IPO	a Agriculture Health	Energy	Ecosystem	🛛 Water	Disaster	d Climate	60	S pace	Geographical	focus	Contact per	son Con	itact person's email	s Nc inve
125 Peter Cowley	https://www.petercowley		UK				x								-	x																			UK only					Oxfore
126 imec istart	https://www.imecistart.co	Gent	Belgium						x		x					x											хх			х				x						FarmD
127 Vito Ventures	http://vito.vc/	Munich	Germany		×											x	x											×						x x	Global					Isar A
128 Aster Capital	https://www.aster.com/	Paris	France		x					x						x	x	x	x								x	X)	Global					
129 Investiere	https://www.investiere.cl	Zurich	Switzerland		x											x	x										x	X						x x	Global					Astroc
130 Übermorgen Ventures	https://uebermorgen.vc/	Zurich	Switzerland		x											x													x			x								
131 IFC Venture Capital Group	https://www.ifc.org/wps/	wcm/connect/Topics Ext	USA		x											x	x										x	x					x	x x	Global					Plane
132 Picus Capital	https://www.picuscap.com	Munich	Germany		x)	ĸ		x	x)	Global					Buildi
133 Concrete Venture Capital	https://www.concretevc.c	London	UK		x			x								x													-)						bird.i,
134 Takeoff Partners	https://www.takeoffpartr	Helsinki	Finland		X		x									x	x										x	-	X				x)	Americas, AP	C and	Europe			Collec
135 GreenSoil Investments	https://www.greensoil-in	Raanana	Israel		x				-	-	-		-	-		x	x			-			_	-		-	x	T	-			-	-	,	Israel, Europ					CropX
136 Innovation Endeavors	http://www.innovationen	Palo Alto	USA		x						-					x	x											-						2	Global					Plane
137 Germin8 Ventures	http://germin8ventures.co		USA		x			x			-					x	x									-	x		-				x			_		_		CropX
138 Draper Associates	https://draper.vc/	San Mateo	USA		x						-		-			x	x							+		+		+	+			-	x	x x	Global					ICEYE,
139 Leaps by Bayer	https://leaps.bayer.com/	Berlin	Germany		_				x	-	-		-	_		_			_	_				-		-	x x		-			-	-		Global	_				Apollo
140 Finistere Ventures		San Diego	USA		x		x	x			-					x											x	-					x	2	Global					CropX
141 S2G Ventures		Chicago	USA		x		-			-	-		_			x	x									-	x	T	-				-			_		_		
142 Yield Lab Europe	https://yieldlab.ie/	Galway	Ireland		x	x				×	-					x								+		-	x	+	+			-	+		Europe					
143 Hardware Club	https://www.hardwareclu		France		×	-				1	-		-			x	x									-	x	-	-			-	-	x x	Global	_		_		Augme
144 Cavallo Ventures	https://cavallovc.com/	San Francisco	USA		-		-		*	-	-		-	-		x	x		-	-			_	-		-	~	+	-			-	x	<u> </u>	0.0001	-				Taran
145 Lifeline Ventures		Helsinki	Finland		×	-		x	^	-	-		-	-		x	x		-	-			-	-		-	×		×			x	~	x x	-	-		_		ICEYE
146 Tesi		Helsinki	Finland			×	-			-	-		-	-		<u> </u>	1 î			-				+		-	x	-	+^			<u></u>	_	x		-		_		ICEYE
147 Tabard Venture Capital	https://www.tabardvc.com		USA		- î		×					-	-			×	×									-	- Î	-	-			-	-1	1		-		_		TOLTE
148 United Ventures	https://unitedventures.co		Italy		×	++	^	-	-	+	-		-	+		÷.	+^		-	-			_	+		-	<u> </u>	+	+			-	+	13	Global	-		_		xFarm
149 Syngenta Ventures	https://www.syngentaver		Switzerland			-		-		+	-	-	-	-		^			-					-		-	~	+	-			-	×	x	Global	-				Plane
149 Syngenta Ventures 150 Venture Kick	https://www.syngentaver		Switzerland		×	×			^	-			-	-		+	×			-						-	-	×				~	^	^	Switzerland	-		-		riane
151 Fresco Capital			USA		×	×		x			-		-		-	×	~		-				_			-	x	×	×			×	-	,	Global	-		_		Spire
	https://fresco.vc/ https://lemnos.vc/	San Francisco San Francisco	USA		×			×					+	-			×		-	-				-		-		-	-			-	+	x x	Global	-		-		Spire,
152 Lemnos					X			×		-	-	+	-		-	XX	-						_	-		-	x	×	-			-	_	-		-				spire,
153 Noosphere Ventures		Menio Park	USA		-	-	-	-	×	-	-	\vdash	-	-	-	-	x		x					-		-	×	-	1			-	-	x x		_		_		-
154 General Catalyst	https://www.generalcata		USA		x	$ \rightarrow $				-			-	-		x	X	X	X	X X			_			-						-	-)	Clabel					
155 Centrica		Windsor	UK		-		_		x	-	-	\vdash	-	-	-	-	-		_	-	-	$ \rightarrow $	_	-	-	-	-	X	+			-	-	-	Global	_		_		<u>+</u>
156 Contrarian Ventures	https://cventures.vc/	Vilnius	Lithuania		X	x							-			X	x			X						-		X	-				-							4
157												\square							_				_			\rightarrow						_								$ \longrightarrow $
158																																								4
Sheet1 Sheet2 (+)					-		_			-	-			_	- 1									-			-1	-	-			_	_							
Sheet1 Sheet2 (+)																				4																				Þ

Figure 5: Documentation and mapping of identified sources of investment and funding

4 INVESTMENT AND FUNDING LANDSCAPE NAVIGATOR

The Investment and Funding Landscape Navigator is composed of a database of investors and funding instruments as well as a user interface to navigate these. It is openly available via the online presence of the Sustainability Booster under https://sustainability.e-shape.eu/investment-funding/. It has been implemented as a website based on the Content Management System WordPress which, through its backend, allows entering new "investor" datasets as well as maintaining and updating existing datasets. Selected plugins enable the definition of these custom post types, views, and desired functions.

Following an analysis of investment and funding taxonomies and user needs in the context of e-shape, information structure and user interface have been defined with the help of a usability expert. A number of mockups have been created prior to finalisation of layout and implementation.

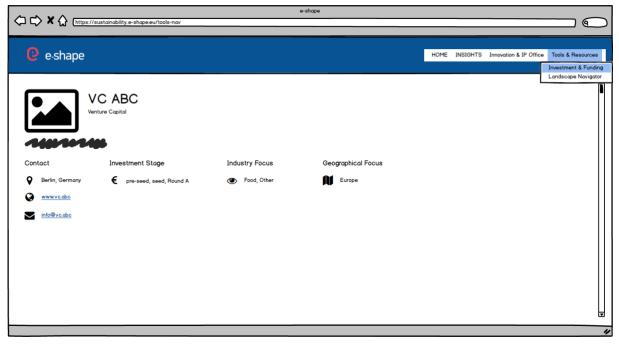


Figure 6: Early mockup investor view

The following screenshots present different views in both, backend and frontend of the implementation.



(←) → C ^a	A https://sustainability.e-shape.eu/wp-admin/post-new.php?post_type=investors	□ … ⊠ ☆ ⊻	In 🗈 📽 🛆 😈	o 😁 🕯	¥ =
🔞 💣 e-shape Sustaina	ility & Upscaling 📀 7 🔎 11 🕂 New Maintenance is Off UpdraftPlus			Hi, Nico Thom	
Dashboard	Add New Investor		Screen Options 🔻	Help 🔻	
✤ Posts ♀ Media	There is an update available for: <u>Contract Form 7</u> . Regin.updating.gbugin [Climins: this.notice			٥	
 Pages Portfolio Comments 10 	Want to help make Ultimate Addons for Elementor even more awesome? Allow us to collect non-sensitive diagnostic data and usage information. <u>Know More.</u>			0	
 Popup Maker (1) GDPR Cookie Consent 	Please adjusts your copy of the Ultimate Addons for Elementor to get update notifications, access to support features & other resources!				
🖈 Investors 🔷 🔸	Warning: You have less than 35 MB of free disk space on the disk which UpdraftPlus is configured to use to create backups. UpdraftPlus could well run out of space. Contact your the operato	r of your server (e.g. your web hosting compar	ny) to resolve this issue.		
All Investors Add New Investor	(Add title		Publish	~ ~ *	
Contact			Save Draft	Preview	J
Elementor	Edit with Elementer		 Status: Draft Edit Visibility: Public Edit 		
🚔 Templates			Publish immediately Edit		
C Crocoblock	Essential Grid	^ Y *	Duplicate This		
🔊 Appearance	Settings	^ 🔅 *			-
🖆 Plugins 🌀				Publish	
🚢 Users	Name Name name		Post Attributes	~ × •	
Y Smart Filters					
 Tools WPBakery Page Builder 	Link Name link		Template Default template		
5 Settings	Description				
Slider Revolution	Name_description				

Figure 7: WordPress backend, entering new dataset

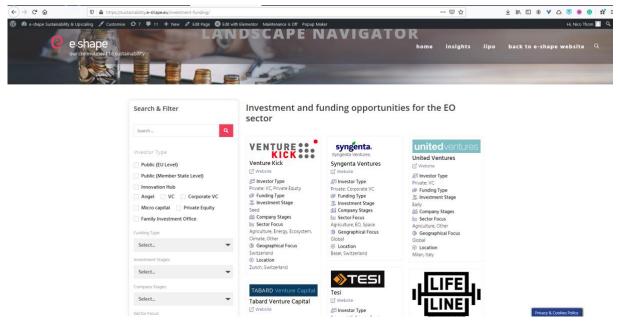


Figure 8: Landing page Investment and Funding Landscape Navigator

6	D5.6 – Investment and Funding Landscape Navigator
← → C ŵ 🛛 🖉 A https://sustainability.e-shape.eu/investors/venture-kick/	© ☆ ± M D © ¥ C 3 0 0 11 :
10 da e-shape Sustainability & Upscaling	Popup Maker H, Nico Thom 📕 Q home insights lipo back to e-shape website Q
INVESTOR DETAILS C Back to Investment & Funding Database VENTURE C C C C C C C C C C C C C C C C C C C	Set Investor Type Private VC, Private Equity P Funding Type Investment Stage Seed All Company Stages Im Sector Focus Apriculture, Energy, Ecosystem, Climate, Other Geographical Focus Switzerland © Location Zurich, Switzerland

Figure 9: Detailed investor view

5 GUIDANCE

The Investment and Funding Landscape Navigator is a tool enabling e-shape Pilots and other users to browse preselected sources of finance on their own with options to narrow these down to those matching their focus and stage. Consultations are offered to support Pilots in their self-assessment (actual stage, investment needs, etc.) and eventually selecting those to approach. The tool is the basis for a number of concrete services in the context of the Investment Readiness Support.

6 LIMITATIONS AND NEXT STEPS

In its initial version, the Investment and Funding Landscape Navigator presents a mix of public and private finance with sectoral focus across the e-shape Showcases. The entities listed in the database have a track record of investment or funding in the sectors that the e-shape Showcases represent, and / or space sector or EO solutions, and / or technologies that are typically applied by EO solutions. Filtering and search enables users such as the e-shape Pilots to narrow down options based on their strategy or market readiness. Yet, guidance may be needed, and more specific and targeted results could be expected in the search for the most suitable investor.

Thus, consultations with all Pilots will be held during Q1 2021 where they will:

- Assess usability of the present version of the Investment and Funding Landscape Navigator and its content;
- Reveal their user perspective as regards information and support needs;
- Discuss their current status of investment readiness and needs.

The feedback received will be used to:

- Further improve usability of the Investment and Funding Landscape Navigator (navigation, content);
- Tailor the investment readiness support services to context and needs of each Pilot.

The Investment and Funding Landscape Navigator will be dynamically growing in content. From its launch, it will be continuously updated with additional sources as well as updated with richer information. This will include a glossary providing definitions of e.g., different types of investors or funding rounds. Based on feedback from Pilots, the user interface will be adapted.

	2019	2020	2021	2022	2023
Investment and Funding Landscape Navigator					
Consultations with Pilots		Launch			
Coaching & Mentoring					
Pitch Training	Pitch Deck	Template –			
Investment Readiness Training					
			w l	/ebinar	

Figure 10: Investment Readiness Support timeline

The tool will be actively promoted among the e-shape Pilots to raise their awareness about the Investment Readiness Support offering:

Pitch deck

A (neutrally branded) template will be provided including examples and guidance to create a simple, very visual and minimal pitch deck including slides about:

- Mission/vision
- USP (Unique Selling Proposition)
- team/key players
- competition
- strategy
- achievements
- risks
- business model
- investment requirements

Pilots will receive feedback for improvements of their pitch deck.

Pitch training

Webinars and sessions during e-shape events will be organised, where Pilots can

- Present their pitch deck,
- Rehearse scenarios with video recording,
- Learn about top mistakes, best practices, general presentation skills.



These sessions will be offered throughout the lifetime of the project, with different Pilots expected to reach investment readiness at different points in time.

Webinars

Further webinars will be offered on topics such as

- Introduction to attracting investors,
- understanding term-sheets,
- defining a strategy,
- staging equity investments.

Up to four such webinars will be pre-recorded and made available online.

Mentoring

On-demand coaching sessions will be offered on issues related to attending accelerators/ incubators, raising capital, offering stock options to senior employees etc.

All these elements underpin the comprehensive Investment Readiness Support offered by WP5 to the e-shape pilots, and where appropriate, to the greater EuroGEO community.