

SEACW DELIVERABLE D.2.2

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"Statistical Methodology Guide"

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0	04/02/2013	Definition of objectives for the impact measurement of the project
0.1	11/02/2013	Definition of indicators for measurement
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1	01/03/2013	Elaboration of questionnaires
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2.2	02/06/2013	Final version







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Abstract

This document aims to constitute the guidelines that the consortium will take into consideration in order to apply statistical measurements on the following project's deliverables:

- D2.1: State of the Art
- ➡ D2.4: Functional Requirements Report
- ➡ D8.5 Report on social, cultural and market impact of the project

Part of this guide might be subjected to possible updates regarding some indicators proposed for the deliverable D8.5, in order to provide the best value for the project's impact measurement. However, for deliverables D2.1 and D2.4, methodology is already concluded.

Task 2.4 *Fieldwork*, within Deliverable 2.2 *Statistical Methodology Guide*, is not only related with the methodological guide, but also concerns the analysis of user requirements.

During the methodology design, and after the first conclusions of the State of the Art, it has been evidenced that, in order to achieve a better perception of the user's requirements and to add more value to the whole deliverable 2.4, some part of the *fieldwork* task will be moved to month 8. The design of the mentioned fieldwork is already prepared and explained in this Guide. Once the final conclusions of the State of the Art are established, the fieldwork and its results will allow us to accomplish a better alignment of the user requirements, regarding both the EU policies and the technical requirements to be delivered at 8th month of the project. Due to this reason, fieldwork will be done during the four subsequent months from deliverable 2.2, getting linked with 2.4.

Hereby, the present document aims to provide the guide for the statistical methodology of the project. In addition, although it is not strictly statistical measurement, the methodology followed for developing the State of the Art has been included among the following paragraphs, so that the documental analysis and the steps followed to elaborate the mentioned State of the Art, gets both justified and clarified.







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1 State of the Art: methodology

The aim of the present document is to explore the main issues that have changed the contemporary landscape of our lives, and which motivates the existence of our project. We will analyse the most remarkable demographic, technological and sociological shifts, trying to emphasize on the priorities on which to focus the efforts of the Social Ecosystem development process. For such a goal, we will account the ICT development routes, as the existing relevant websites that include some of the SEACW's objectives. However, no digital platform close to what SEACW aims to become does actually exist: the mentioned websites do offer different services and tools, but they remain far from being a social ecosystem regarding AHA and ICTs usage, which is a unique and innovator idea as a whole.

Thus, the final purpose of this paperwork is to do an exhaustive Sate-of-the-Art review so that the objectives, commitments and the added value of the project remain clear, justified and valuable.

This Deliverable is composed by three tasks: Objectives and Expected results definition, documental analysis and secondary sources analysis.

Specific methodology of Áliad Conocimiento y Servicio S.L. has been applied on the State of the Art development. It includes four phases:

- ➡ Study planning
- Documental phase
- Empirical phase (where surveys have been transferred to D2.4)
- Analytical phase

The next chart shows this general methodology:







Figure 1: General methodology for the State of the Art

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1.1 State Of The Art: Identification of Reference Framework

Beyond the technological part of the State of the Art, on which to base future contents of SEACW, the whole document has focused on providing an exhaustive analysis of three basic issues for both understanding the need of a project like SEACW, and for guiding its development process. These issues had been:

- The two main sociological shifts affecting contemporary societies (the arrival of Information Society and the population ageing)
- The policy responses from the European Union
- The existing websites and initiatives sharing part of SEACW's contents.

Getting back to the technological section of the State of the Art, the very first challenge was to deal with the vast amount of information found available. In order to avoid the emergence of the gap between the existing information and the needed information, methodological tools have been designed in order to set the reference framework. Specifically, the settlement of objectives and the review and validation by the Experts Committee of the list of sources included in Annex VII gave the consortium the access to the information needed to accomplish the study.



Figure 2: General framework of tools designed for the State of the Art







2 Functional Requirements Contribution Methodology

The functional requirements report (D1.4) integrates user's needs and requirements for the Ecosystem and tools. In order to do a prior approach to user's requirements, both quantitative and qualitative methods have been designed. Specifically, three questionnaires and one focus group.

2.1 Quantitative Methods: Delphi and Questionnaires

The management of all these questionnaires and focus group will be conducted by Áliad Conocimiento y Servicio S.L.; all questionnaires have been reviewed by the Expert Committee and partners of the project in order to validate them.

Regarding questionnaires, these are the following:

Delphi questionnaire for experts; in order to identify future trends concerning ICTs, Active and Healthy Ageing, world of work, etc. This questionnaire will provide the point of view of international experts in several disciplines (medicine, sociology, ICT, demographics, etc...) to the project, allowing the consortium to identify possible tools for the Ecosystem interesting in a near future. This questionnaire is included in Annex I.

A social inclusion agent's questionnaire; through this questionnaire the consortium will identify the interests and needs of social inclusion agents concerning important and useful tools for the Ecosystem, that will help them, improving their employability and tasks development. This questionnaire is included in Annex II.

An elderly questionnaire; in order to identify their perception of ICTs, frequency of use, usage of ICTs, interest of using ICTs and interest in tools for health and well-being. This questionnaire is included in Annex III.

2.1.1 Sampling for the survey

Two groups are considered for the surveys: social inclusion agents and elderly. Taking into consideration that this is not a research project, but a project that intends to provide a commercial solution, it is impossible to design a representative survey that covers both groups all over Europe. Universe for both groups is too big for the budget assigned to SEACW.

However, and in order to maintain scientifically value for the project, sample size has been set through the following criteria:

Alpha level	0,5
Level of acceptable error	5%
Standard deviation of the scale	5
Nº	384

Table	1:	Sam	ole	size
TUNIC	- •	Juni	SIC	3120

Therefore, the consortium will undertake two surveys, at least 384 elderly and 384 social inclusion agents. Both surveys will be conducted in the countries where the consortium has any representation: Spain, Italy, France, Bulgaria, and Malta.

Individual's method selection will not be probabilistic due to time constriction. However, with surveys the consortium will collect interesting information for the Ecosystem and tools





Report:



development.

2.1.2 Sampling for the Delphi

Concerning the Delphi, at least 50 international experts are expected to participate.

2.1.3 Data collection

The Delphi and the surveys for social inclusion agents will be done online with Lime Survey application. The elderly will do the surveys on print questionnaires.

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2.1.4 Data analysis

All data collected will be analysed with SPSS Statistics of IBM. Specific Syntaxes will be designed in order to create tables and figures in the shorter time as possible. Tables and figures will be designed with Excel to provide the best visualization quality of results.

2.1.5 Empirical and analytical phases:

In order to provide an added value for the functional requirements of the Ecosystem, surveys intended for the State of the Art have been transferred to the Deliverable D1.9.

2.2 Focus Groups

Two focus groups are intended to improve the functional requirements definition. This qualitative methodology will support the data collected, increasing the knowledge for Technological partners that will design the Ecosystem and tools.

2.2.1 Selection of participants

The focus group will be integrated by 8 participants. A broad spectre of users will be taken in consideration in order to cover the maximum representation of the target groups. The participants integrating the focus groups will be composed by: one representative of a social inclusion organization, a social inclusion agent, a representative of an elderly association, an elder with ICT knowledge, an elder with no ICT knowledge, one ICT expert and one sociologist who will guide the activity.

2.2.2 During the Focus Group

During the focus group, the moderator will work with participants to find out their reactions to the Ecosystem and tools. The moderator may ask individual questions to participants to introduce them to new products and find out what they like and dislike about an existing product.

2.2.3 Analysing the Results

The process will be recorded, previous allowance of participants, in order to analyse all the discussion. Speeches will be analysed taking into consideration the important issues and conclusions of participants.







3 Report on Social, Cultural and Market Impact of the Project

This report aims to provide how the Ecosystem has changed several aspects of the e-inclusion and quality of life of participants in the Ecosystem. Before explaining those indicators and measurement methodology it is important to describe the quality criteria of them.

3.1 Quality criteria: questions, indicators and data

A distinction will be drawn between the quality criteria that apply to the indicators (and the portfolios of indicators), those relating to the questions (and the portfolios of questions) and those relating to the data. This distinction is crucial for understanding the interrelationship between the various quality criteria. It will be assumed that the quality criteria for an item, whatever it may be (questions, indicators, data, etc.), refer to its expected use (suitability for the objective pursued) or potential use (intrinsic contribution), its ease of use, or the cost of obtaining it or the ease with which it can be obtained.

There are accordingly four aspects to be considered in analysing the quality of the questions, indicators or data:

- ➡ Do they achieve what is expected of them (are they suited to the objective pursued)?
- In more general terms, what unique contribution do they make (their intrinsic contribution)?
- Are they easy to use (from the point of view of the user)?
- Are they costly/difficult to obtain (costs of obtaining them)?









Figure 3: Summary of the qualities of the indicators, questions and data

3.2 Synthesis tools

In order to measure the impact of the Ecosystem, synthesis tools have been designed to facilitate the path from statistical data (quantitative and qualitative, measured according to a specific scale) to knowledge in the strict sense of the word, linked to the action to be taken.

Indicators allows the possibility of establish comparisons at various points in time (analysing trends), between geographical areas and between participants in the Ecosystem and not participants (control group), allowing the consortium to identify if the Ecosystem and tools have had any meaning importance for social inclusion agents and elderly employability, e-inclusion and quality of life.

Comparisons over time will be included, which can give an idea of the trends. This can be cross-referenced with the level of users' acceptability, making easier to see which aspects of the Ecosystem are satisfactory, and which are becoming consolidated, which are unsatisfactory but are slowly improving and which are unsatisfactory and deteriorating still further. Other comparisons and cross-references can help identify causes, or at least give some clues as to possible causes.

Analysing the data in this way should therefore lead to an understanding of the situation which







will identify the dynamic aspects such as trends, weak points, thresholds reached, any gaps and discrepancies between situations and actions, making possible to set objectives, prioritise and draw up a strategy for action, etc.

3.3 Methods and tools for analysing general trends in the Ecosystem

This level includes determining general trends and defining an initial order of action priorities. By using data collected on different dates, it is possible to spot the indicators for which the trend is positive and those where it is negative. If the trend is positive, there would seem to be no need for further action, at least in the short term. However, where it is negative, joint action must be taken, and priorities must be set.

A first stage will therefore be to produce a comparative table of trends for each of the indicators, making possible to establish an order of priority.

Then comparisons between countries and regions will provide additional information helping to give a clearer picture of the influence of the specific context of each country.

None the less, at this stage the knowledge acquired merely enables identification of those elements which require action, without entering into causal relationships and, hence, without being able to specify what action should be taken.

The full list of indicators is included in Annex IV.

3.4 Methods and tools for analysing e-inclusion and quality of life through the Ecosystem usage

In order to measure the social impact of the project, our consortium will develop a methodology for impact assessment based on randomized control trial methodology. Methodology for impact measurement will be based on a statistical analysis of the results of two surveys conducted before and after the pilots in order to evaluate the impact of the project. The survey will be based on similar surveys of the European Union (i.e. Community survey on the ICT usage in households and by individuals), and will be conducted by participants in pilots (elderly, social inclusion agents and population in general) and also by a control group, in this case people who have never attended SEACW pilots. This method will enable us to compare how our pilots and project have changed users' perceptions of ICT's.

The groups will be evaluated before and after the pilots in order to measure the impact of the Ecosystem.

The two main principal's indicators taken into account will be **e-inclusion** (Annex V) and **quality of life** (Annex VI), which is advancement in the measurement and analysis of the difference between different ageing groups in the Information Society. Its application will allow us to a) make inter-gender comparisons, determined by their degree of e-equity; b) make inter-age groups comparisons; and c) contextualize the results obtained from the different contexts and regions of Europe. Furthermore, this transnational analytical perspective is specified in the ranking of countries that is used to establish the five categories classifying the levels of ICT use. The value of the e-inclusion indicator will depend of the frequencies of the following indicators:

The second level involves analysing the various types of public action in relation to the dimension of quality of life. The objective is to determine the relevance and lasting nature of the action taken and to identify areas in which additional measures or new policy directions are needed.

There are a number of tools needed at this level of evaluation in order to be able to:









- Correlate action indicators and well-being indicators (to identify the causal relationships and pinpoint the relevant fields of action).
- Compare situations at various dates in order to assess trends and accordingly shed further light on cause and effect.
- Carry out comparative analyses giving a clear insight into the relationships between different actions, which is crucial for drawing up a strategy.

At this level, analysing the data in such a way and identifying the strategy lines which will serve as references for the different users within a geographical area. Proposed indicators at this moment of the project are included in Annexes v and VI.







4 Annexes

4.1 Annex I: Delphi questionnaire

DELPHI – QUESTIONNAIRE

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Information of the DELPHI's objectives

This survey is framed within SEACW's European project, whose objectives include the extension of information technologies in society, trying to minimize the digital divide. With this questionnaire, we wish to obtain an expert vision on how a technologic tool that promotes an active and healthy ageing should be. Thank you for your participation.

Instructions

Please:

- 1. Mark with an X the answer option that better suits your opinion.
- 2. The answer options with a box \Box can only be marked with one answer. The ones with a square O can be marked with several answers to the same question.

Thank you very much for your collaboration

Questionnaire

The European Union has the objective of increasing the healthy lifespan of European population in two years, before 2020:

1. When do you think that objective will be accomplished?:

Before 2020

	Between	2020	and
203	80		

2020 and After 2030

Never

Which means will be necessary to accomplish that objective?

Which will be the limitations?:







Taking the previous answer into account, and that the emergence of age-related dysfunctions is going to delay progressively:

2. Indicate the three medical specialties that will have a stronger impact in the accomplishment of this objective:

1		
2		
3		

3. Indicate the three medical research areas that will have a stronger impact in the accomplishment of this objective:

1		
2		
3		

4. Indicate the three technological research areas that will have a stronger impact in the accomplishment of this objective:

1		
2		
3		

5. On the basis of the technological advances you have indicated, how much do you think that the following age-related dysfunctions can be delayed?:

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Not at all 2.A little	3. Some	4. A lot
--------------------------	---------	----------

Auditory	1	2	3	4
Visual	1	2	3	4
Cognitive	1	2	3	4
Psychomotor	1	2	3	4
Others	1	2	3	4







6. Which do you think that will be the three most negative life habits for health in 2030?

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Sedentary lifestyle	
Alcoholism	
Smoking	
Nutrition habits	
Substance consume	
Others:	

7. In your opinion, which will be the three most extended chronic diseases among population?

1		
r		
2		
3		

8. European workforce is going to be among the most aged ones worldwide, evaluate your level of agreement with the following statements:

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Don't agree at all	2. Slightly agree	3. Agree	4.Totally agree
-----------------------	-------------------	----------	-----------------

Europe will lose economic potential due to workforce ageing in comparison with other younger states	1	2	3	4
Workforce ageing will affect negatively to the sphere of technological innovation	1	2	3	4
Knowledge transmission can be affected by professionals obsolescence	1	2	3	4
An aged workforce won't be updated in e-skills	1	2	ß	4
The possible e-skills' loss will bring about a delay in technologic innovation	1	2	3	4

9. Online training systems will be the usual learning mode:

Yes, before 2020

2050

Yes, between 2030 and No, classroom-based training will always have a stronger presence than virtual training







10. According to the Digital Agenda, the future economy will be a network-based knowledge economy with the Internet as its centre. How much do you agree with the following statements?:

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Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Don't agree at all	2. Slightly agree	3. Agree	4. Totally agree
-----------------------	-------------------	----------	------------------

Digital inclusion will be an indispensable condition for social inclusion	1	2	3	4
In 2030, factors as age, gender or educational level, will have influence on the exclusion of certain collectives	1	2	3	4

11. For the European Commission, the extended use of digital tools will be an essential factor for the increase of healthy life expectancy. Which of them do you think that will have a stronger influence in this sense?

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. No influence	2. Little influence	3. Certain influence	4. Much influence
-----------------	---------------------	----------------------	-------------------

Use of social networks/platforms	1	2	3	4
Use of specific applications for each collective	1	2	3	4
Tele-assistance and tele-medicine services	1	2	3	4
Motivation systems based on the recognition of emotional states	1	2	3	4
Access to health training	1	2	3	4
Access to health information	1	2	3	4
Health monitoring applications	1	2	3	4
Ubiquitous communication systems with health services	1	2	3	4
Others	1	2	3	4

12. Do you think that a professional specialization for social inclusion agents, that unites digital inclusion and AHA, could be developed?



No





(If your answer has been affirmative)

13. Which competences do you think this specialization should have?:

Medical competences:

Digital competences:

Social assistance competences:

14.Which do you think that will be the predominant familiar model in the coming decades? (please, mark two options):

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O A model where the elders at home need minimum care

- O A model where healthier people look after the elder
- O A model with technological assistance at home
- O A model with geriatric assistance at specialized centres
- O There will be no significant changes

15. How much do you agree with the following statements?:

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Don't agree at all 2. Slightly agree	3. Agree	4. Totally agree
---	----------	------------------

Training in new technologies could be affected by the knowledge obsolescence of the non-technologically native teaching personnel	1	2	3	4
That obsolescence will affect negatively to the acquisition of innovative digital skills by young Europeans	1	2	3	4
Specific training programs (e-skills) should be created for the renewal of non-technologically native trainers	1	2	3	4







4.2 Annex II: Elders questionnaire

SEACW – ELDERS QUESTIONNAIRE

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Information of the survey's objectives

This survey is framed within SEACW's European project, whose objectives include the extension of information technologies (Internet) in society, favouring population's active and healthy ageing. With this questionnaire, we wish to obtain information about your use of digital tools (computer, tablet, smartphone, Internet, applications, social networks, etc.) in your private life. Thank you for your participation.

	Plea	se:		Instru	ictions					
		3. Mark	k with an X the ans	wer option that	better suits	your opinion.				
	 The answer options with a box □ can only be marked with one answer. The ones with a square O can be marked with several answers to the same question. 									
	Thank you very much for your collaboration									
	Questionnaire									
	1.	Sex:	Male	Female	5					
	2.	Age	: [] 60-64	 65-74			'5			
	3. mar	Do y k those y	ou have a high-d ou consider appro	egree of any d priate):	isability of	the following	g types? (please	,		
O Visua	al	С) Psychomotor	O Auditory	0,	Auditory	O None			
	4. \	Which is	your formal educa	tional level?:						
		None			Lower	level professio	onal education			
		Primary	education or equiv	alent	Higher	level professi	onal education			
		General	secondary educatio	on	Univer	sity graduate o	or higher			
	5.	Are you	currently working	?: Yes		No				
	6. ((If you a working	affirmed that you as	were working	in the prev	<i>v</i> ious questio	n) If so, are you	1		
		🗌 Emp	loyer	Employ	vee		olunteer			
	×									



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7. Which would you say that is your purchasing power?	
High Medium-High Medium Medium-Low Low	
8. Are you an Internet user?: Yes (Go on to question 11) No	
9. Why don't you use Internet? (mark those you consider appropriate):	
O High cost O Lack of knowledge to use it	
O Lack of time O Fear of being deceived	
O Lack of interest O Lack of people who teach me	
10. Would you be willing to use Internet?	
Yes (please, go on to question 17)	
11. How long have you been using Internet? Less than six months ago Between 6 months and 1 year Between 1 and 3 years More than 3 years 12. How have you learnt to use Internet?	
On my own With my relatives' help O	thers
13. How do you usually access the Internet?	
On mi own	
14.Do you have Internet connection at home?: Yes No	
15. How often do you access the Internet?	
At least once a week At least once a month	
cip corrections and invosion corrections and invosion access and provides	* *** * ***

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At least once every three months
16. Which devices do you use to access the Internet? Computer Mobile phone SmartTV Don't know
17. Which of the following statements do you feel more identified with?
 I love technology and I am aware of the advances in the market Technology helps me in many things but is difficult to use Technology is not for me

18. How much do you agree with the following statements? Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Totally agree	2. Agree	3. Disagree	4. Totally disagree
1.0	0	0	, ,

Internet makes my life easier	1	2	3	4
Thanks to Internet I can live with more independence and autonomy	1	2	3	4
Internet can help me to have an active position in society	1	2	3	4
Internet helps me to look after my health	1	2	3	4
Technology is going to increase citizens´ life expectancy	1	2	3	4
Currently, technologies are adapted to my characteristics	1	2	3	4







19. Which is your level of interest in the following Internet functions?

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Very interesting	2. Interesting	3. Not very	4. Not interesting at all
		interesting	

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Communicate with friends and relatives that live far from me	1	2	3	4
Save time and avoid going out to do shopping and/or bureaucratic formalities	1	2	3	4
Access to the information that is interesting for me	1	2	3	4
Communicate with the doctor from home	1	2	3	4
Follow-up of my medication	1	2	3	4
Follow-up of my daily tasks	1	2	3	4
Acquire training to improve my health	1	2	3	4

If you wish to make any comment or suggestion, please indicate it:







4.3 Annex III: Social Inclusion Agents questionnaire

STATE OF THE ART – SURVEY

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SOCIAL INCLUSION AGENTS

Information of the survey's objectives

This survey is framed within SEACW's European project, whose objectives include the extension of information technologies in society, trying to minimize the digital divide. With this questionnaire, we wish to obtain information about your use of digital tools (computer, tablet, smartphone, Internet, applications, social networks, etc.) in your private life and at your work with collectives at risk of social inclusion. Thank you for your participation.

Please:

Instructions

- 5. Mark with an X the answer option that better suits your opinion.
- 6. The answer options with a box □ can only be marked with one answer. The ones with a square O can be marked with several answers to the same question.

Thank you very much for your collaboration

Questionnaire

16. Sex: Male Fer	nale					
17. Age: 18-24 25-3	Age: 18-24 25-34 35-44 45-54 55-64 + 65					
18. Salaried V	/olunteer					
19. Which is your forma	l educational level?					
Primary education or equiva	lent 🗌 Higher le	evel professional education				
General secondary education University graduate						
Lower level professional education University postgraduate						
20. Which of the follow working with? (marking with?)	wing collectives at risk of social (those you consider appropriate)	inclusion are you currently				
O Elderly	O Young	${\sf O}$ People older than 45 years old				
O People with disabilities	${\sf O}$ Unemployed people	O Other				
O Immigrants	O Chronically ill people					

21. How long have you been working with people/collectives at risk of social exclusion?



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	 Less than 1 y More than 5 	year [years [Between 1 ar	nd 3 years	Between 3 and 5 yea	ars
	22.Do yo netwo	ou use digital tools (co orks, etc.) in your pers	omputer, tablet, sonal life?	smartphone, Inte	ernet, applications, social	
	Not at all	Once a	month	Once a week	🗌 Everyday	
	23.In ger	neral, which would yo	u say is your kn	owledge level in t	he use of digital tools?	
	🗌 High	Medium-High	🗌 Medium	🗌 Medi	um-Low 🗌 Low	
	24. Does colle	s your organization unclives/people at risk of	use supporting of social inclusion	digital tools to ir on?	mprove the situation of	
	Yes, everyda	ay 🗌 Yes, oc	casionally	Not very ofte	en 🗌 Not at all	
	25. If so colle exclu	o, which kind of dia ctives/people at risk usion? (mark those yo	gital tools doe of social inclus u find appropria	s your organizat ion to work with ate)	tion use to work with people at risk of social	
	O Platforms spe	ecifically adapted to th	ne collectives yo	u work with		
	O Online traini	ng and information pla	atforms			
	O Tele-assistan	ce and Tele-medicine	programmes			
	O Social Netwo	orks				
	O Websites and	d platforms for job sea	arch and employ	ability improveme	nt	
	O Mobile appli	cations specialized in h	nealth / monitor	ing of their users		
	O Users' manag	gement and administra	ation software			
	O Others			-		
	26. Do y exclu	you use any of the f usion?	following device	es to work with	people at risk of social	
	Computer	Smartphone	Tablet	🗌 Interr	net Others	
	27. In ge the c	eneral, ¿which would collectives you work w	you say is the l ⁄ith?	nowledge and us	e level in digital tools of	
	High	Medium-High	Medium	🗌 Mediu	um-Low 🗌 Low	
	28. As fa of yo	ar as you are concern our sector to work wit	ed, are digital t h these collectiv	ools generally use ves?	ed in other organizations	
	Yes, it is a m	ain work line	Yes, o	occasionally	Not very often	
cir	Competitivenes and innovation					****



29. How much do you agree with the following statements?

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Totally agree	2. Agree	3. Disagree	4. Totally disagree

Digital tools knowledge can improve my labour competences with people/collectives at risk of social exclusion	1	2	3	4
Digital tools knowledge can improve my employability	1	2	3	4
In the short term, social inclusion agents will use digital tools as an usual working tool with their collectives			3	4
Digital tools can improve people's life quality	1	2	3	4
Digital inclusion contributes to social inclusion	1	2	3	4

30.If a digital platform (website) was created specifically for your occupation, how much would you be interested in the following contents?

Please, evaluate the following questions, marking the boxes with an X, in accordance with the legend:

1. Very interested	2. Interested	3. Not very	4. Not interested at all
		interested	

Certified training in the use of information technologies	1	2	3	4
Certified training in my specialty (health, social integration, etc.)	1	2	3	4
Share experiences in networks with other professionals of my sector	1	2	3	4
Tools to monitor my users (nutrition, sleep, sports)	1	2	3	4
Digital communication tools (videoconferences) with my users	1	2	3	4
Others	1	2	3	4

If you wish to make any comment or suggestion, please indicate it:





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(\bigcirc) 4.4 Annex IV: Trends Ecosystem indicators

Indicator	Relating to which project objective / expected result?	Indicator	Method of measurement	Expected progress year 1	Expected progress year 2
1	Usage of ecosystem by Elderly	Number of registered participants older than 65	Records of the platform	500	5000
2	Usage of ecosystem by Social inclusion agents	Number of registered participants	Records of the platform	500	5000
3	Usage of ecosystem by citizens	Number of registered participants	Records of the platform	500	5000
4	Tools	Number of delivered tools	Publications in the ecosystem	3	10
5	Training contents reusable health	Number of different training courses	lssued (approved) by experts committee	5	25
6	Training contents reusable digital literacy	Number of different training courses	lssued (approved) by experts committee	5	25
7	Pilot training success	Number of people trained	Participants records	0	15.000
8	Participant regions success	Number of regions participating	Participants records	0	15
9	European balance	Number of countries participating in pilot experience	Participants records	6	7 (partners plus UK)
10	Successful training social inclusion agents	Number of certificates delivered to successful participants	Training records	0	80% 4.000
11	Contribute to active and healthy aging	Number of visits to AHA part of Ecosystem	Records of the platform	1.000	10.000

Table 2. List of trends indicators of the Ecosystem







Indicator	Relating to which project objective / expected result?	Indicator	Method of measurement	Expected progress year 1	Expected progress year 2
12		Number of downloaded AHA tools or apps	Records of the platform	500	5.000
13	Contribute to Information Society	Number of new silver surfers between elderly participants	Records of the platform	0	1000
14		Number of new on line (e-learning) participants	Records of the platform	0	1000
15	Contribute to employability of social inclusion agents	Number of social inclusion agents getting a job	Advisors or inquires	0	250
16	Contribute to employability of elderly	Number of elderly people getting a job	Advisors or inquires	0	150
17	Digital agenda for Europe : regular use of internet by elderly	Number of elderly people connecting at least once a week	Records of the platform	0	150
18	accelerating the wider uptake and best use of innovative digital technologies	Evolution of monthly number of connection (visits) by different people	Records of the platform	200 more each month	
19	Development of high growth businesses, notably SMEs, in this field.	Number of collaborating SME in ecosystem (visiting, asking for workers, sending pupils, willing to participate)	contacting forms	50	150

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Indicator	Relating to which project objective / expected result?	Indicator	Method of measurement	Expected progress year 1	Expected progress year 2
20	foster the development of EU-wide markets for innovations enabling every company in Europe to benefit from the largest internal market in the world	Number of collaborating SME in ecosystem (visiting, asking for workers, sending pupils , willing to participate) from countries not participating in the consortium	contacting forms	25	75
21	Triple win for Europe: • improving the sustainability and efficiency of health care and social systems;	Lower pressure on health care resources (visit to doctor, call for medical consulting): estimated spared euros	Survey	30.000	300.000
22	triple win for Europe: foster conditions to make possible more EU citizens to lead healthy, active and independent lives while ageing;	Number of elderly people undertaking independent new activities based on ICT due to ecosystem	Advisors or inquires	50	300
23	Focus and outcomes The tools and cooperation developed by the pilot should be re-usable	Reusability : number of times that a product of the ecosystem have been given or sold to other entities outside the consortium	Direct information	10	30

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Indicator	Relating to which project objective / expected result?	Indicator	Method of measurement	Expected progress year 1	Expected progress year 2
24	Expected impact evidence on the return of investment for digital skills acquisition and capacity building of "Social inclusion agents".	Number of spin off projects due to the ecosystem	Advisors or inquires	3	12
25		Number of trained people getting and ICT based job	Advisors or inquires	10	50







4.5 Annex V: E-inclusion indicator

Dimension	Variable	Indicator		
Intensity of use of computer:	Last use of computer	% Use of Computer in last 3 months		
	Frequency of computer use	% Of daily computer use		
E-intensity:	Last use of the Internet	% Of use of the Internet in last 3 months		
	Frequency of Internet use	% of daily use of the internet		
	Mail	% Use of e-mail - send / receive		
Generic uses:	Finding information about goods and services	% Search usage- for information about goods and services		
	Employment	% Search usage- for job search or job application		
Uses of social welfare	Health	% Search usage- for information on health issues		
	Education and training	% Used for training and education		
	Trips	% Use of services related to travel and accommodation		
Leisure uses	Software	% Use of store-bought software		
	Press	% Use of online journals		
	Radio, TV	% Use of radio and TV on the web		
	Information by government	% Of communication with general government for information on the web		
Related uses Public Administration (AAPP)	Download forms of general government	% Of communication with a government agency to download official forms		
	Fill / submit forms of AAPP	% Of communication with a government agency to send completed forms		
	Banking	% Use of electronic banking or financial activities		
Banking and electronic commerce	Sales	% Use of electronic banking or financial activities		
	Purchases	% Use for the sale of goods or services		



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4.6 Annex VI: Quality of life indicator

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Table 4. Quality of life questionnaire

	SOCIAL INCLUSION AGENTS:	
•	Dissemination of the tool: the Ecosystem had	
٠	A good dissemination between the staff of my organization	1 2 3 4 5
•	A good dissemination between the elderly people	1 2 3 4 5
•	Perception of the tool: the Ecosystem	
•	has improved my digital skills	1 2 3 4 5
•	has improved my knowledge on active and healthy aging	1 2 3 4 5
•	I have received a certificate that I can use to find a job	1 2 3 4 5
•	has improved my daily work with elderly people	1 2 3 4 5
•	has improved my communication with other professionals	1 2 3 4 5
•	mobile applications provides me a good daily monitoring of elderly people	1 2 3 4 5
•	Is useful for my work as social inclusion agent	1 2 3 4 5
•	Has generated social initiatives in my environment	1 2 3 4 5
•	In my opinion, will improve the future tools for social inclusion	1 2 3 4 5
	ELDERLY PEOPLE	
•	Quality of life: The Ecosystem	
•	Has reduced my visits to health care authorities	1 2 3 4 5
٠	Provides content which improves my quality of life	1 2 3 4 5
•	Isolation reduction: The Ecosystem	
•	Has fostered my communication with relatives	1 2 3 4 5
•	Has fostered my job opportunities	1 2 3 4 5







•	Has allowed me to meet new people	•	1	2	3	4	5	
Perception of the Ecosystem: The Ecosystem								
•	has improved my digital skills	•	1	2	3	4	5	
٠	has improved my knowledge on active and healthy aging	•	1	2	3	4	5	
•	Is adapted to my needs	•	1	2	3	4	5	
•	Provides an easy usage of the ICT's	•	1	2	3	4	5	
•	Has changed my perception of ICT's	•	1	2	3	4	5	
	POPULATION IN GENERAL							
•	Perception of the Ecosystem: The Ecosystem.							
•	has improved my understanding of the social importance of ICTs	•	1	2	3	4	5	
•	has improved my knowledge on active and healthy aging	•	1	2	3	4	5	
•	has improved my understanding of aging and elderly people	•	1	2	3	4	5	
•	has generated initiatives in my social work or family environment	•	1	2	3	4	5	
•	In my opinion, will improve the future of active and healthy aging	•	1	2	3	4	5]







4.7 Annex VII: List of Sources for the State of the Art

Table 5. List of sources of the State of the Art

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SEC	ONDARY SOURCES	
1	EUROSTAT	http://epp.eurostat.ec.europa.eu
2	OECD	http://www.oecd.org/statistics/
3	National Statistical Institute of Spain	www.ine.es
4	National Statistical Institute of Bulgaria	http://www.nsi.bg/indexen.php
5	National Statistical Institute of Italy	http://en.istat.it/
6	National Statistical Institute of France	http://www.insee.fr/en/
7	National Statistical Institute of Malta	http://www.nso.gov.mt/site/page.aspx
8	WHO	http://www.who.int/research/es/
9	Central Intelligence Agency	https://www.cia.gov/index.html
10	World Economic Forum	www.weforum.org
11	World Report	wwww.worldreport-int.com
12	United Nations statistics	www.unstats.ur.org
13	International Statistics	www.census.gov
14	World Trade Organization	www.wto.org
15	Geohive	www.geohive.com
16	Gapmidner	http://www.gapminder.org/
17	Worldometers.	wwww.worldometers.info
18	Internert World stats	www.internetworldstats.com
19	Nation Master	www.nationmaster.com
20	world statistics pocket book (ONU)	unstats.un.org/unsd/pocketbook
INT	ERNATIONAL AUTHORITIES	
21	European Commission	http://ec.europa.eu/index_en.htm
22	International Telecommunication Union	http://www.itu.int/en/Pages/default.aspx
23	The European Economic and Social Committee and The Committee of The Regions	http://europa.eu/about-eu/institutions- bodies/ecosoc/
24	AGE platform Europe	http://www.age-platform.eu/en
25	European Agency for Development of Special Needs on Education	http://www.european-agency.org/
26	Digital Europe	http://www.digitaleurope.org/
27	Joint Research Centre	http://ec.europa.eu/dgs/jrc/index.cfm
28	Centre for eHealth Innovation	http://ehealthinnovation.org/







29	international council on Active Aging	www.icaa.cc
30	The European e-Skills Association	http://eskillsassociation.eu/
31	National Institute of Adult Continuing Education	http://www.niace.org.uk/
32	International Association For Medical Education In Europe	www.amee.org
33	World Congress On Active Aging 2012	www.Wcaa2012.com
34	the learning network for active aging	www.lnactiveaging.org
35	European Schoolnet	http://www.eun.org/
36	European Institute of Innovation and Technology	www.idi.mineco. gob.es
37	AMETIC	www.ametic.es
38	ISPO: information society promotion office	www.europa.eu.int/ispo
39	CEDEFOP	www.cedefop.europa.eu
40	Europass	www.europas.cedefop.europa.eu.es
41	Older People	http://www.ag.gov.au
42	Active Aging Online	www.activeagingonline.com
43	European Committee of Normalization	www.cen.eu
44	European Innovation Partnership on Active and Healthy Ageing	http://ec.europa.eu/research/innovation-union
44 POL	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT	http://ec.europa.eu/research/innovation-union
44 POL 44	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm
44 POL 44 45	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union
44 POL 44 45 46	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/
44 POL 44 45 46 47	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing
44 POL 44 45 46 47 48	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society
44 POL 44 45 46 47 48 49	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/
44 POL 44 45 46 47 48 49 50	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf
44 POL 44 45 46 47 48 49 50 51	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging Social Inclusion Division	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf www.socialinclusion.ie
44 POL 44 45 46 47 48 49 50 51 THI	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging Social Inclusion Division	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf www.socialinclusion.ie
44 44 45 46 47 48 49 50 51 THII 52	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging Social Inclusion Division NK TANKS AND PLATFORMS London School of Economics and Political Science	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf www.socialinclusion.ie http://www2.lse.ac.uk/home.aspx
44 POL 44 45 46 47 48 49 50 51 THI 52 53	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging Social Inclusion Division NK TANKS AND PLATFORMS London School of Economics and Political Science The Royal Society	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf www.socialinclusion.ie http://www2.lse.ac.uk/home.aspx http://royalsociety.org/
44 POL 44 45 46 47 48 49 50 51 THI 52 53 54	European Innovation Partnership on Active and Healthy Ageing ICIES ON AHA AND ICT Europe 2020 Innovation Union Digital Agenda WHO European i2010 initiative on e-Inclusion Ambient Assisted Living Eurobarometer report on Active Aging Social Inclusion Division NK TANKS AND PLATFORMS London School of Economics and Political Science The Royal Society Fundación Telefónica	http://ec.europa.eu/research/innovation-union http://ec.europa.eu/europe2020/index_en.htm http://ec.europa.eu/research/innovation-union http://ec.europa.eu/digital-agenda/ http://www.who.int/ageing http://ec.europa.eu/information_society http://www.aal-europe.eu/ ec.europa.eu/public_opinion/archives7ebs/ebs _378_en.pdf www.socialinclusion.ie http://www2.lse.ac.uk/home.aspx http://royalsociety.org/ http://www.fundacion.telefonica.com/es/index .htm







56	The Phillips Centre for Health and Well- Being	http://www.philips-thecenter.org/		
57	The International Longevity Centre	http://www.ilcuk.org.uk/		
58	National Council on Ageing	http://www.ncoa.org/		
59	International Ageing Research	http://agingportfolio.org/		
60	Centro documentación europea univ. Valladolid.	www.cdoce.uva.es		
61	Centro documentación europea univ. Salamanca	www.cde.usal.europa		
62	Bill and Melinda Gates Foundation	gatesfoundation.org		
63	Observatorio e-Igualdad	http://www.e-igualdad.net/		
JOU	RNALS			
64	Journal of Medical Internet Research	http://www.jmir.org/		
65	Science Direct	http://www.sciencedirect.com/		
66	Oxford Journals	http://ageing.oxfordjournals.org/		
68	Social Inclusion Week	http://www.socialinclusionweek.com.au/		
69	European Journal of Preventive Cardiology	http://www.escardio.org/journals		
70	Spanish Journal of Sociological Research	http://www.reis.cis.es/REIS/html/index.html		
OTH	IER RELATED PROJECTS			
71	ICT & Ageing – European Study on Users, Markets and Technologies	http://www.ict-ageing.eu/		
72	Carer +	http://www.carerplusproject.eu/		
73	Measures for the Social Inclusion of the Elderly	www.eurofound.europa.eu/pubdoc		
74	SeniorWatch 2007: Assessment of the Senior Market for ICT - Progress and Development	http://www.seniorwatch.eu/		

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