Final Report of Action Group 1

Outside-IN Innovation to foster healthy ageing

TITTAN
Interreg Europe

Translation, Innovation and Technology Transfer in Ageing Network

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A. Executive Summary

Rationale

The main goal of this document is to present the results achieved in the framework of the Action Group 1. On one hand, it summarizes the SWOT analysis carried out during the first interregional workshop "Outside-In Innovation" of the project. On the other hand, the report provides an overview of the policy analysis carried out during the *In-situ* Visits organized in the framework of the Action Group 1.

Expected Outcome

The Final Report elaborated by the Action Group 1 will serve as a basis for the Action Plan of each partner, by providing details on how lessons learned in the implementation of the good practices can be improved while implementing the good practices in other regions.

B. Members of Action Group 1

Action Group 1
Partners involved: All
Coordinated by: ACIS & BIOEF

C. Good practices presented during 1st Workshop - SWOT analysis

Title of the good practice
ARCA model as developer and promoter within the territory of Lombardy Region of innovative procurement tools and practices.
Name of the organization in charge
ARCA (Azienda Regionale Centrale Acquisti S.p.a) - Regional Procurement Agency

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Dedicated manage specialists • 3,4 € billion in tenders • Easy market consultancy	• Tender specifications in contracting set • Complex procedure to be implemented • Adaptability for highly
Opportunities	**Threats**
• Reduction of time and price • generate economies of scale • More resources for other procedures	• Refusal from other organizations • Big and not personalized services

Title of the good practice
Sintel Platform for e-procurement procedures
Name of the organization in charge
ARCA (Azienda Regionale Centrale Acquisti S.p.a) - Regional Procurement Agency

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• ARCA can extend more new "standard requirements" with low-cost activities of software maintenance. • The platform is completely free of charge for the public entities and for the economic operators. • The platform can be extended to all types of tenders (not only for the standardised ones)	• ARCA is not a "Policy maker" and changes in the legislation can hamper the whole process. • For a correct implementation of the tender procedures there is a need to be always aligned with the relevant legislation
Opportunities	**Threats**
• Using a centralized solution, it is possible to spread in all the public entities some good practices, reducing "no added value" activities. Somebody else does the "dirty work".	• Often Public Operators are "lazy people"…It needs an active campaign for involving procurers and spread the concept of "competition" also in ICT markets to reduce lock-in effect. • Lack of IT skills among public operators might represent a barrier to the full exploitation of the platform.

Title of the good practice
Group Purchasing Organizations gain popularity in Lower Silesia
Name of the organization in charge
Marshal Office and A. Falkiewicz Specialist Hospital

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Experience gained during the development of this good practice	• Administrative constraints in terms of hiring and tenders launching.

• Channel additional resources to R&D&I and make the whole industrial sector more competitive	• Legal terms for managing PCP are not cost-effective. In PCP procedures only 40% is co-funded. • Constraints in terms of tender execution, specially related to the novelty of the solution.
Opportunities	**Threats**
• To connect the PCP with the strategy of the region of Lombardy and make it an effective tool for the realisation of the strategy • Possibility to connect several Instruments to support the PCP (National and European level).	• The need of a very accurate specification of the challenge and the need. • Requirement of a through planning process in terms of time and human resources. • People from different departments in the organization need to be trained in PCP procedures.

Title of the good practice
INNOSASUN Programme
Name of the organization in charge
BIOEF (Basque Foundation for Health Innovation and Research)(Public Administration)

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Healthcare System integrated in the regional Science and Technology Network • Capacities and collaborative attitude of healthcare professionals • Good coordination and workflow of the network • Osakidetza, Basque Public Health System, is in the centre of the network	• Supported by Public Funding • Lack of recognition of the participation of healthcare professionals in R&D&I activities • Atomization of the Basque Public Health System into several managing teams
Opportunities	**Threats**
• Direct involvement of regional policy makers • Clinicians can participate in validation studies and test innovations • Interaction with Innovation	• Healthcare professional mainly oriented to assistance activities. • Managing people (How to motivate them?) • Loss of support from the Ministry for

Procurement Office • Human health and Life sciences as a RIS3 priority • Progressive growth of regional business sector focused on health	Health due to other priorities.

Title of the good practice
Scottish Government 'Innovation in Health' programme- Health Innovation Assessment Portal
Name of the organization in charge
Scottish Government

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Policy support & commitment at Scottish Government level to support innovation in the NHS in Scotland • Health Innovation Assessment Portal (HIAP) provides a single initial point of contact, information, advice and assessment for new products and technologies for consideration by NHS • More transparent and standardised the assessment process, levels and types of evidence (and their sources) and feedback to developers of new technologies and ideas.	• Lack of dedicated resources to support the innovation programme beyond initial innovation seed-funding of £100,000 • No clear integration with other innovation funds or national programmes (e.g Technology Enabled Care programme) • Lack of general awareness of the Health and Social Care Innovation Fund among stakeholders, possibly due to limited resources to support innovation projects
Opportunities	**Threats**
• Health Innovation Assessment Portal provides a direct innovation pathway in NHS for industry suppliers which permits to avoid or minimise later regulatory or integration hurdles • Increase the participation of commercial and industry partners to innovation in the NHS	• Unclear whether the Health and Social Care Innovation Fund will be sustained in future or superseded by larger innovation programme (e.g Technology Enabled Care programme)

Title of the good practice
Technology Enabled Care (TEC) programme
Name of the organization in charge
Scottish Government. The Programme itself is overseen by an independent Programme Board, and is delivered in conjunction with the Scottish Centre for Telehealth & Telecare (SCTT) and NHS National Services Scotland.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Nationwide programme with clear direction and support from Scottish Government and a detailed action plan with specific key performance indicators to ensure implementation across Scottish health boards and care partners. • Large amount of funding is set aside for the TEC programme with a clear 2020 agenda. • Urban and rural area alike are supported to implement technology enabled care. • Promotes living well in the community.	• Major challenges surrounding data sharing. However, government is taking the steps to make data sharing citizen centred through DHI's simulation environment as well as the Health and Social care Portal. • Change management is a challenge worldwide with large programmes such as TEC. • Evaluation of a large programme such as this can in some ways be complex. • Standardisation of approaches to allow the successes to be duplicated is sometimes difficult to create but the TEC programme promotes a 'once for Scotland approach' to address this.
Opportunities	**Threats**
• Lessons have been learned over the course of this nationwide programme and will continue to be recorded so that scalability of technology enabled care will be successful across Scotland. • Opportunity to make use of aggregated population data to inform our services going forward. • Scalability – there is a great opportunity to scale this programme in mainstream delivery of health and care if the conditions are right.	• Technological change is so fast that we must future proof services now. This involves vision, planning and interoperating services. • If infrastructure such as legacy systems take time to be over-written and innovated, this could delay the interoperability of new TEC systems.

Title of the good practice
Conectapeme (Connecting SMEs)
Name of the organization in charge
Galician Innovation Agency, GAIN.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Strong commitment of the Public Administration with this kind of collaboration.	• Galicia does not have yet a tradition of real partnership between companies and research centers.
Opportunities	**Threats**
• This kind of collaboration allows the consortiums to be prepared to get more demanding and difficult calls at both, national and international level.	• The possibility that the relationship established between the partners ends once the project is finished.

Title of the good practice
Bio Investor Program & BioSpeed Dating
Name of the organization in charge
Galician Life Sciences Technology Cluster.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• High number of projects developed and presented to the Program • Support received from Public Administration • Increase of the entrepreneurship culture in the region • Connect the different stakeholders of biotech sector by 1-to-1 meetings	• Lack of commercial potential of some the projects presented.
Opportunities	**Threats**
• To foster the network between company-research & company-company (for Biospeed Dating)	• The lack of time for the interview could make you “bet” for a bad/quick decision (for Biospeed Dating)

• To adapt the business plan of projects in early stage for the new biotech companies (for BioInvestor) • To facilitate entrepreneurs and companies the access to Investors. • To bring closer the capital risk entities and its work methodology to the entrepreneurs. • To share successful project experiences which have previously obtained financing. • To promote an effective networking between entrepreneurs & investors.	

Title of the good practice
Joint Research Units
Name of the organization in charge
Galician Innovation Agency, GAIN.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Previous relationship with Roche • Common objectives for both the research Group and Roche • The research Group is placed at the Hospital • Legal framework	• Difficult to find companies which believe in this model
Opportunities	**Threats**
• New collaborations between Roche and the research groups • Expertise exchange between Roche and the research groups	• Bureaucracy

Title of the good practice
CivTech® Innovation Flow
Name of the organization in charge
Scottish Government

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Government funded accelerator for better digital public services, with health one of the strategic priority, including Information Services Division (ISD) priority challenge of looking for improved ways of organising data and providing data access tools and products that can facilitate addressing the needs of individual clinicians in a bespoke / tailored way. • Overwhelming response from private sector during the pilot period.	• Initially launched as a pilot programme
Opportunities	**Threats**
• Opportunities for companies to provide industry solutions to complex public services / health challenges (see ISD challenge above) • Opportunities for companies to pitch their solutions to stakeholders at dedicated 'challenge day' events *https://civtech.atlassian.net/wiki/display/CIV/THE+CHALLENGES+TO+BE+SOLVED*	• Scottish Government chose to sustain the CivTech initiative at the end of the pilot phase (January 2017) but long-term financial sustainability is currently uncertain

Title of the good practice
Flex-MED (Ideation / Idea competition)
Name of the organization in charge
Embedded in the project flex+: The project is coordinated by Fraunhofer FEP and Fraunhofer IAP, in collaboration with Organic Electronics Saxony (OES)

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Quick connection with the market • Promotion of new technologies in the health sector, namely flexible electronics • Achievement of better products and services through higher competitiveness	• No specific support from the Regional Government • To reach a broad public, including specialists • To find original, revolutionary and suitable ideas for the medical sector that, at the same time, are feasible
Opportunities	**Threats**
• Good ecosystem • Connect health challenges and business promotion through innovation • Smooth transformation of innovative ideas into tangible projects with the help of experts • Possibility for anyone interested to get involved in the improvement of the healthcare system	• To achieve the necessary investment for transforming the final projects into products. • An often missing marketability of the products slow down the interest of possible investors.

Title of the good practice
Innovate UK- SBRI Research & Development Funding for Innovation in Technology and Services for Older Adults
Name of the organization in charge
Innovate UK (Public Organisation – State funded) https://www.gov.uk/government/organisations/innovate-uk **Innovate UK** (formally the Technology Strategy Board) is the UK's innovation agency with a remit to fund research and development opportunities in science and technology developments which will drive future economic growth across the UK. Part of Innovate UK, the **Small Business Research Initiative (SBRI)** is an established process to connect public sector challenges with innovative ideas from industry, supporting companies to generate economic growth and enabling improvement in achieving government objectives.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Innovate UK promotes collaborative research and development between public services, higher education and research institutions, business and industry • Funding programme can be substantial, with additional partner match-funding (e.g. Delivering Assisted Living Lifestyle at Scale programme, £37 million including match funding from partners, such as Scottish Government participation of £5 million)	• Innovate UK funding spans all domains of R&D and technologies, so this is not a funding stream solely dedicated to health technologies and applications • This is a competitive UK-wide scheme so there are no guarantees that innovation programmes are necessarily funded or taking place in Scotland • Partnership model requires major role for industry and businesses in R&D programmes which may not necessarily align with NHS priorities (e.g. commercial priorities vs. care provision) and this was a limitation identified in the Delivering Assisted Living Lifestyle at Scale programme: *https://academic.oup.com/jamia/article-lookup/doi/10.1093/jamia/ocv097*
Opportunities	**Threats**
• Targeted to health challenges • Promotes collaborations between NHS, public services, local authorities and industry, with SBRI in particular focusing on SMEs leading R&D projects	• Current political uncertainty in UK means that the sustainability of previous European and UK-wide funding schemes may become subject to future political negotiations and in the 'worth-case scenario' discontinued.

Title of the good practice
Outcome Oriented Finance (OOF)
Name of the organization in charge
City of Almere

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Clarity about societal outcome, results and expectations between the Municipality (the city) and it's (contracted) partners (the financed	• Uncertainty of the choices and priorities among the societal partners

organizations) • Room for own initiative of the societal partners.	
Opportunities	**Threats**
• Develop next stage of OOF where contracts (results) with different partners become more integrated towards societal outcomes	• OOF may be considered too open and the city may return to a system of output rather than outcome • Partners may become uncertain about how to contribute to the societal outcome and develop a fear of making priority choices • Measurability of societal outcome can be questioned

Title of the good practice
Horizontal Accountability (HA)
Name of the organization in charge
City of Almere

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Not just the city decides what is right but it is a joint responsibility of all societal partners	• Responsibility of all can be perceived as “no-one’s” responsibility
Opportunities	**Threats**
• Next step may be to also involve the end-user, the citizen in this system of HA, thus making it a closed circle of policy, execution, end-user, evaluation and policy again.	• Measurability of societal outcome can be questioned, how is “proof” of societal outcome delivered? • Too many views on “good” outcomes can slow down decisiveness and decision-making

Title of the good practice
Public Procurement of Innovation in Health Sector
Name of the organization in charge
ACIS, Health Knowledge Agency and Galician Public Healthcare System.

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• High amount of funding received. • Well-coordinated structure of all the departments involved.	• Administrative constraints in terms of hiring and tenders launching. • Legal terms for managing PPI are not cost-effective. In PPI procedures only 40% is co-funded. • Constraints in terms of tender execution, specially related to the novelty of the solution.
Opportunities	**Threats**
• Role of the Health System as a leader organization of the economy in the region. • Several Instruments to support the PPI (National and European level).	• The need of a very accurate specification of the challenge and the need. • Requirement of a through planning process in terms of time and human resources. • People from different departments in the organization need to be trained in PPI procedures.

Title of the good practice
Innovative public procurement office
Name of the organization in charge
Osakidetza- Servicio Vasco de Salud (Public administration)

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Strategic priority of the Basque Health System.	• Lack of experience • Administrative constraints in terms of hiring and tenders launching. • Legal terms for managing PPI are not cost-effective. In PPI procedures only 40%

	is co-funded. • Constraints in terms of tender execution, specially related to the novelty of the solution.
Opportunities	**Threats**
• Role of the Health System as a leader organization of the economy in the region. • Several Instruments to support the PPI (National and European level).	• The need of a very accurate specification of the challenge and the need. • Requirement of a through planning process in terms of time and human resources. • People from different departments in the organization need to be trained in PPI procedures.

Title of the good practice
Pre- Commercial procurement Niguarda
Name of the organization in charge
ARCA - ASST Niguarda – DG Research, University and Open Innovation

SWOT Analysis performed during the Workshop	
Strengths	**Weaknesses**
• Experience gained during the development of this good practice.	• Administrative constraints in terms of hiring and tenders launching. • Legal terms for managing PPI are not cost-effective. In PPI procedures only 40% is co-funded. • Constraints in terms of tender execution, specially related to the novelty of the solution.
Opportunities	**Threats**
• To connect the PPI with the strategy of the region of Lombardy. • Several Instruments to support the PPI (National and European level).	• The need of a very accurate specification of the challenge and the need. • Requirement of a through planning process in terms of time and human resources. • People from different departments in the organization need to be trained in PPI procedures.

D. *In-Situ* Visits performed in the framework of the Action Group 1

Learner Partner	Mentor Partner	Good practice/s	Date
LSV	**FRRB**	• ARCA model • Sintel platform	16,17-Jan-2017
CAL BIOEF	**ACIS**	• PPI model	18,19-Jan-2017
BIOEF	**DHI**	• Technology Enabled Care (TEC) programme	17-Feb-2017
DHI HS FRRB ACIS	**BIOEF**	• INNOSASUN	22,23-Feb-2017
ACIS	**DHI**	• CivTech	25,26-June-2018

E. Policy analysis of the good practices with *In-Situ* visits

I. ARCA model as developer and promoter within the territory of Lombardy Region of innovative procurement tools and practices

Policy analysis (by Mentor)
Name of the organization in charge
ARCA (Azienda Regionale Centrale Acquisti S.p.a) - Regional Procurement Agency
Summary of the good practice
ARCA- Azienda Regionale Centrale Acquisti S.p.A. is an entity totally controlled by Lombardy Region which acts under its direct control and coordination. The agency provides the Lombardy Region, to the other regional entities and regional public administrations the support tools to improve the efficiency, efficacy and economicity of the public procurement, working as central purchasing body through innovative negotiations systems as well as the management, development and promotion of e-procurement platforms. ***CENTRAL PURCHASING BODY AND UNIQUE CONTRACTING AUTHORITY*** • Manages and grants centralized public procurement tenders with the aim to finalize and sign agreements for the procurement of goods and services. • Manages public tenders on behalf of single public bodies and bodies governed by public law. **PROCUREMENT TECHNICAL COMMITTEE** • Manages procurement processes related to specific product category. • Coordinates the purchasing plan for goods and services of the regional entities. **E-PROCUREMENT PROMOTION** • Develops and disseminates technological tools to support the purchases of the public administration in a totally digitized manner (**SINTEL** platform and Electronic negotiation NECA) **TECHNICAL CONSULTANCIES** • Supports Public Administration entities with professional consultancies to prepare of their public tenders and disseminates e-procurement within the PA entities
1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.
The activities of ARCA are assessed against two main KPIs: • Tenders: Minimum threshold of aggregated tenders launched; • E-procurement: increase (in percentage) of local entities which use the e-platform Sintel for the launch and management of tenders.

2.How much did the implementation of the program take?
N/A
3.Describe the relationship (if any) between your good practice and your RIS3
ARCA is a policy actor in the design and implementation of Pre-Commercial Procurement. PCP is listed within the RIS3 of the Lombardy Region.
4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
ARCA has been established by the regional Government with the Regional Law 33/2007. During the implementation of their activities they liaise with all the relevant DG involved in the survey of the need.
5.How have you organized the local stakeholders involvement to define the challenges the program tackle?
ARCA has organised the connection with local stakeholders through the so called territorial reference people who are people in constant contact with local administrations with the scope survey their need and support them in the use of the ARCA's procurement tools.
6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program
In 2017 i.e. 3 Million € have been allocated on the PCP from structural funds. The phase of the needs Assessment has just started.

Policy analysis (by Learner)
Name of the organization
Lower Silesia
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
Regional research and innovation strategies for smart specialization (RIS3), are based on integration, locally defined economic transformation programs that meet important criteria. Arca make it possible to focus on support for policy and investment on key regional priorities, challenges and needs in knowledge-based development, including ICT-related activities; It allows to use the strengths and competitive advantages of the region and its potential to achieve excellence;
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The main goal of Lower Silesia region is to improve the efficiency, efficacy and economicity of the public procurement. From October 2018 all procurement procedures will be conducted on Electronic platforms.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
All healthcare units are obligated to use electronic platforms for public procurements.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
The Health care units can modify their procurement procedures using the ERDF funds
5.Describe the barriers to the implementation of the program you could encounter and how

you would dealt with it
The main barrier of Arca implementation is lack of Polish law regulations.
6.Benefits you could obtain and lessons learned
Arca model as developer and promoter of innovative procurement tools and practices allow the reduction of time and price of innovation implementation. It can generate economies of scaling up.

II. Sintel Platform for e-procurement procedures

Policy analysis (by Mentor)
Name of the organization in charge
ARCA (Azienda Regionale Centrale Acquisti S.p.a) - Regional Procurement Agency
Summary of the good practice
Sintel is the regional e-procurement platform, established with aim to realize a system able to support the Lombardy public administrations in the management of their tender procedures. Sintel gives to the public entities the capacity to set up and manage public tenders in full autonomy and without costs on line and with the possibility to use professional help.
1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.
The main KPI is the number of entities which use the e-procurement tools
2.How much did the implementation of the program take?
NA
3.Describe the relationship (if any) between your good practice and your RIS3
None
4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The main regional bodies involved in the establishment of the Sintel Platform is the "Struttura Rapporti con gli enti territoriali e riorganizzazione dei processi amministrativi nelle autonomie locali.", the "Area Relazioni esterne, territoriali, internazionali e comunicazione"and the "D.G. Welfare".
5.How have you organized the local stakeholders involvement to define the challenges the program tackle?
For what concerns the Sintel Platform, the liaison with local stakeholder (all the regional public entities), is organised in a vary operative way by the ARCA local reference people which deliver the specific training, support and free of charge advisory services.
6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program
The costs of management of the Sintel Platform are a part of the management costs of ARCA and come from regional budget.

Policy analysis (by Learner)
Name of the organization
Lower Silesia
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**

Sintel is the regional e-procurement platform, established with aim to realize a system able to support the public administrations in the integration and management of their tender procedures. Regional research and innovation strategies for smart specialization (RIS3), are based on integration, locally defined economic transformation programs.
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
Sintel gives to the public entities the capacity to set up and manage public tenders in full autonomy and without costs on line and with the possibility to use professional help.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
The main goal of Lower Silesia region is to improve the efficiency, efficacy and economicity of the public procurement. From October 2018 all procurement procedures have to be conducted on Electronic platforms.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
The costs of management of the Sintel Platform will be a part of the costs management of regional agencies and should come from regional budget or ERDF funds.
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
The main barrier of this system is lack of Polish version.
6.Benefits you could obtain and lessons learned
Lessons learned come from knowledge of whole procedure of public procurement. It will support us in the implementation of silar system in Lower Silesia region.

III. INNOSASUN Programme

Policy analysis (by Mentor)
Name of the organization in charge
BIOEF (Basque Foundation for Health Innovation and Research)(Public Administration)
Summary of the good practice
In 2016, Research and Innovation Strategy in Health 2020 of Basque Government was presented, aiming to achieve the greatest impact of the activities of R&D&I developed by the health system, both internally and in collaboration with third parties (Industry, Research Centers and others technological and educational agents). This impact should be translated into an improvement of citizen's health and an upgrade of the system itself in socioeconomic terms, linked to the Research and Innovation Strategy for Smart Specialization (RIS3). One of the main actions in this regard is the implementation of INNOSASUN Programme, which was started at the end of 2014. INNOSASUN Programme is a support mechanism to articulate interaction between Basque Public Health System and business sector, meeting needs of both sides and providing an *ad hoc* support. This activity is enabled by Health System's capacities, know-how and its extensive and collaborative network, working as innovation ecosystem and living lab. INNOSASUN Programme is coordinated by the Unit of Relationship with Third Parties within BIOEF, providing support and expertise from the Health Research and Innovation network, which comprises Basque Ministry for Health, Basque Public Health System (Osakidetza), Health Research Institutes, Osatek, Kronikgune and socio-sanitary space. Attending to outside-in innovation, INNOSASUN plays an important role because the interaction of companies and technological agents with the health system facilitates the search for technological partners which have innovative solutions to the needs arising from the Healthcare System. Therefore, INNOSASUN provides adapted support to those unmet needs and ideas born within the Healthcare System working in transferring these needs and ideas to the industries and research center of the region to try to engage them in order to provide innovative solutions in a win-win scenario. REHAND Project is an emblematic example of outside-in innovation coordinated by INNOSASUN Programme and related to Active and Healthy Ageing. There was a need to improve care for patients in rehabilitation by using new technologies in a sustainable way. At the same time, a Basque SME that had developed a robotized system for assisted rehabilitation of upper limb (a limitation that affects specially to elderly people) contacted the INNOSASUN program. As a result, healthcare professionals from Osakidetza are collaborating in the project with that company with the main objective of evaluating the effectiveness of the new system. The assessment of the effectiveness, efficiency and acceptance of the new product in the health sector will help, on the one hand to the company in the implementation of the new product in

the market (commercialized by a Basque SME), and in the other hand, to the Health System in its subsequent decision of inclusion of this product in the portfolio of services.

Moreover, INNOSASUN works with research centers and industries in reducing the gap between research and market by offering several services to third parties according to the next main activities:

- Advice and guidance in the development of new products/services, acting as facilitator in connecting company and clinicians' point-of-view.
- Coordination and management of demonstration clinical studies, validation and/or cost-effectiveness studies.
- Supply of biological samples, through the Basque Biobank for biomedical research projects.
- Provision of data for market research or other analysis.
- Channeling of needs and/or proposals to other mechanism.

WID Varstiff Project, recently ended, is an emblematic example of inside–out innovation related to active and healthy ageing coordinated by INNOSASUN. In this project, a smart new material was presented at Gorliz Hospital by a Basque technology center in the frame of the INNOSASUN Programme. This new material, called Varstiff®, can be either flexible or rigid depending on controllable parameters. However, there was not a clear functionality for this new material. As a result of several brainstorming sessions in the hospital with the participation of a multidisciplinary team, they concluded that this material would be useful in some unmet needs in their daily routines with patients in wheelchair, in particular, at reaching trunk control. During 2 years, a selected research team worked on the design of the device, the clinical protocol and its clinical validation. Nowadays, the device has demonstrated to be highly beneficial for these patients in different ways, it is being already used by healthcare professionals and is being commercialized by a new spin-off set up by the technology center as a consequence of this project.

INNOSASUN works in close collaboration with the Technology Transfer Office (TTO), which is also part of BIOEF, which manages the relationship of the Health System with the companies and other socio-economic agents related to the transfer of research results.

Since its implementation, INNOSASUN has received 175 requests for support from 64 entities located in the Basque Country and has created 7 Special Interest Groups (SIGs) in the following areas: rehabilitation, hepatology, oncology, maxillofacial surgery, rheumatology, additive manufacturing and alergology/otolaryngology. In addition, 8 clinical studies with innovative technologies are being carried out focused on diagnosis, new therapies, monitoring therapies, rehabilitation, orthoprosthesis, software development, additive manufacturing and equipment for health environment. Each of them includes a multidisciplinary working team.

1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.

- Activity indicators:

Number and type of entities helped

Requests attended and feedback received Third parties and healthcare professionals involved Establishment of multidisciplinary groups to best attend third parties and Health System needs - Impact indicators: Improve portfolio: more competitive products/companies Increase market of the companies *In situ* evidence for the Health System Patients directly benefited from innovations
2.How much did the implementation of the program take?
The Innosasun program was implemented in one year, starting in 2014.
3.Describe the relationship (if any) between your good practice and your RIS3
As previously mentioned, the Ministry for Health of the Basque Country is leading one of the three priorities identified within our regional RIS3 strategy, the priority Biosciences-Health. In this sense, INNOSASUN Program is an initiative of this Ministry to achieve some of the objectives of this priority area.
4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The INNOSASUN program is a strategic instrument directly launched by the Ministry for Health within the Strategy for Research and Innovation in Health 2020 of its Directorate for Health Research and Innovation. Biosciences-Health was one of the three priorities identified by the Basque Government in the frame of its RIS3 Strategy. This priority is lead by the Ministry for Health and, among its objectives, it aims at fostering collaboration between the Basque Public Health System and third parties to contribute to the socioeconomic development of the region. Thus, the key of the INNOSASUN program is that it was directly created by policy makers to accomplish this objective.
5.How have you organized the local stakeholders involvement to define the challenges the program tackle?
BIOEF, as coordinator of INNOSASUN, has started working in close collaboration with the Basque Health Cluster. This private association gathers more than 30 biotech SME and large companies, including the most powerful companies of the region. BIOEF has also established stronger links with public regional bioincubators, to be named BIC Bizkaia, BIC Gipuzkoa and BIC Araba. They act as facilitators in the process of creating new, innovative start-ups, as well as as active agents in the support and promotion of entrepreneurial culture in the Basque Country. Finally, *in situ* visits to local SMEs, technology centres, research centres and other private and public third parties have been carried out to introduce and contrast INNOSASUN.
6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program
The Ministry for Health is providing structural funding to support human resources working in the coordination of the Program. Additionally, INNOSASUN itself has obtained funds in regional, national and European competitive calls to finance one of the core activities of the Program, the development of clinical studies within the Basque Public Health System. Some of these studies have been directly financed by companies.

Policy analysis (by Learner)
Name of the organization
DHI
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
Scotland's RIS3 includes the Scotland Can Do strategy which is a vision whereby Scotland is a world-leading entrepreneurial and innovative nation. With this strategy, Scotland has an action plan to leverage RIS3 and become a world-leading entrepreneurial and innovative nation. As part of Scotland's RIS3, the Innovation Centres program was created by Scottish Funding Council in 2012 whereby £110m is invested over 6 years creating 2000 jobs over the next 5 years. The programmes are industry led in collaboration with academia. This strategy links well with Innosasun as this best practice links industry and academia by working with important third parties to ultimately promote economic growth as set out in the Horizon 2020 strategy.
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
This would involve approaching the Technology enabled care division within the Scottish Government who would oversee the approval and launch of the new project.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
We will be able to use our national networks from within the Technology enabled care group to pull together the right stakeholders.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
The funds would come from the Scottish government directly.
5.Describe the barriers to the implementation of the program you could encounter and how you would deal with it
The major barrier would be approval of this best practice because te Scottish landscape is already saturated with organisations working in this space. Therefore, achieving funding would be difficult.
6.Benefits you could obtain, and lessons learned
The benefit would be increased exposure to European networks and opportunities that come with this.

Policy analysis (by Learner)
Name of the organization
H. Saxony
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
Actually there is no comparable initiative that could help the promotion of innovation from the demand side, through the purchase of products or services that do not exist in the market. Currently our regional cluster landscape is very sector-specific. However HS tries to work across these borders of clusters. A program like INNOSASUN could be a helpful tool for interaction of all sectors (healthcare sector, industry sector and others). Our regional RIS3 provides following priority areas which are suitable for such a program: - Creation of innovation-friendly framework conditions (Incentives / commitments for cooperation between science and regional economy; less bureaucracy of innovation-

relevant policy and processes; etc.) - Remodeling of Economic Development into innovation support (support of the transfer process science - economy; support of market launch; etc.)
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
HS has to provide a document setting out facts and aspects of interest for Saxon State Ministry of Social Affairs and Consumer Protection as well as the Ministry of Economy and Labor: providing structural funding to support human resources working for coordination of such a program
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
HEALTHY SAXONY provides a constructive local relationship and regional collaboration in order to facilitate broader stakeholder meetings.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
Setting up a structure like INNOSASUN would be possible using ERDF or other European funding, however, operational expenses need to be covered through regular regional or state funding as HS is a non-profit organisation lacking the necessary financial background and revenues.
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
Barriers lie within the bottom-up vs. top-down approach. Since INNOSASUN as a typical top-down approach derives its foremost advantages from being top-down, it needs to be considered whether implementing a program like INNOSASUN bottom-up would create a comparable outcome quality.
6.Benefits you could obtain and lessons learned
The program could be a centralized instrument of the ministry in addition to the existing cluster landscape: - Data delivery for market research - Channeling ideas and suggestions - Consulting for the development of new products - translating innovative demands and ideas into products and/or tenders

Policy analysis (by Learner)
Name of the organization
FRRB
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
There exists a direct with Lombardy RIS3 – Priority Area 5 – Health Industries
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The programme represents a unique support for Life Sciences and Health Tech Industries. The GDs involved would be DG Welfare, Dg research of the Government
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
We will leverage on the Lombardy Technological Clusters (Lombardy Life Sciences, Technologies

for Living Environments) top reach the research, innovation and industrial communities
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
There would be a mix of National, regional and ESIF funds, depending on the different pillars for the implementation of the programme
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
Organizational and Financial above all. A new instrument would be needed and specific legislative pathways will have to be defined.
6.Benefits you could obtain and lessons learned
Huge benefits for the whole health industry and specifically for SMEs, that will have access to tailored support for the development of their innovation

Policy analysis (by Learner)
Name of the organization
ACIS
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
One priority of our RIS3 proposed in the framework of Smart Specialisation Strategy of Galicia (RIS3) is 'Galicia as the leading region in Southern Europe in the implementation of new technologies in the field of active ageing and healthy living and the promotion of personal autonomy'. The good practice INNOSASUN could be related to Galician RIS3, mainly regarding Challenge 3, “New healthy lifestyle model based on active ageing of population”, since many products could arise from the collaboration between the private and the public sector.
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The INNOSASUN program is a strategic instrument directly launched by the Basque Ministry for Health. A bigger program, similar to INNOSASUN could be possibly launched by ACIS, with the approval of the regional healthcare government. With the purpose of getting the right support for transfer this Good Practise, it would be necessary to building a flexible and constructive central-local relationship and regional collaborations: elaborating and defining a strategic Action Plan involving different Regional Departments (i.e. Legal Advice, Civil Service & Public administration Departments,...) and local authorities regarding many topics such as governance structure, transfer technology, logistics, etc. The Galician Ministry for Health is elaborating this Action Plan which is called “Plan Galicia Innova 2020”. It includes the Living Lab as an aim for next years (a Living Lab that could works with the same model as INNOSASUN). Galician Innovation Agency (GAIN) is supporting this initiative due to the importance of introducing the industry in the health sector. The project management structure could be developed on three levels, from top to bottom: 1) Galician Health Regional Service - defines the strategic lines and promotes infrastructure and resources. 2) ACIS – acts as a nucleating agent of the ecosystem to promotes an ecosystem of knowledge and innovation in health in Galicia and ACIS also supports the Hospital Management. 3) The Ourense University Hospital Management coordinates of resources and control the progression of the ongoing projects.

In Galicia, at least some INNOSASUN measures could complement the Living Lab initiative in order to transfer the technology from the market to the public system such as share the employees know-how, possibility of testing innovative technologies/products in the Living Lab, etc.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
Within the innovation ecosystem in Galicia, Galician Innovation Agency is key in order to share their knowledge and expertise because they have the relevant skills and know-how for designing, execution and/or validation, and co-development of innovation projects that can add significant value working in collaboration and strengthening the link between public and private sectors, contributing to the socioeconomic development of the region. In order to organize the program, all stakeholders should be involved to ensure the feasibility of the project. Stakeholders (the Galician Biomedical Foundations, SME's and big companies, research groups, clusters, universities, etc.) should be considered to the design of the project in order to correctly identify the benefits they could obtain and to the implementation.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
This would ideally be funded for our Regional Health Minister through structural ERDF funds. If we would not get any funds, it would be solved looking for offering different services to the companies, in research and innovation such as clinical trials, use clinical samples, providing data, etc. to become a sustainable model. The living lab facilities have been already built within the framework of Hospital 2050 (H2050), cofunded with ERDF funds. The Health Regional Service aims to capitalise the facilities to create an environment for co-creation and experimentation with the active participation of final users and industry. In the case of some stakeholders such as the biomedical fundations; the resources could be obtained from the own funds. Besides, these entities could apply for funds in specific calls, if any.
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
The contexts in Basque Country and Galicia have a lot of similarities. As consequence, some barriers in Galicia are the same such as: - *Healthcare professionals resistance or leaving the program: w*e should gather enough number of professionals. - *Capacity*: the professionals may lack some capacity to evaluate projects from the industry. Specific training could be provided
6.Benefits you could obtain and lessons learned
Benefits: - Increase the network of SME's . Multidisciplinary and cross-collaboration. Innovation ecosystem build to enrich the final design of the innovative product/technology. - Get in touch clinicians and industry, that could be a clear advantage for future calls and projects, specially for public-private calls - Interaction of companies and technological agents with the Health System facilitates/resources - Canalize needs and/or proposals. Build innovative solutions to “real needs” of the Health

System
- Patients and clinicians feedback even form early TRLs of the projects
Lessons learned:
- Collaborative projects are specially interesting for our sector and must have the approval and involvement of all stakeholders.
- The collaboration between Public Health System and business sector and their support has to be adapted to each project/idea in order to establish a win-win scenario between both sides.

IV. Public Procurement of Innovation in Health Sector in Galicia

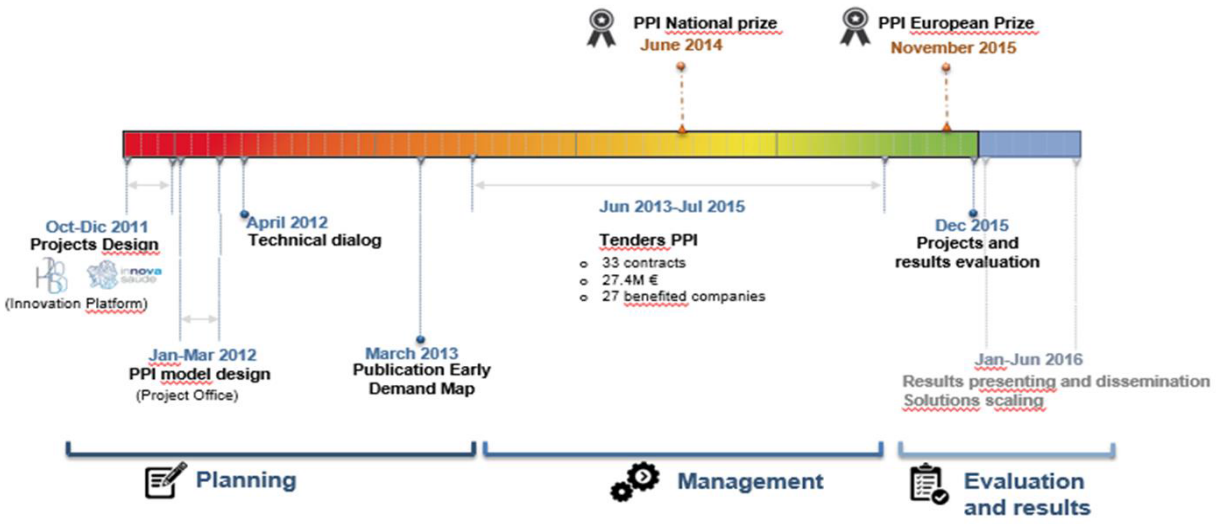
Policy analysis (by Mentor)
Name of the organization in charge
ACIS, Health Knowledge Agency and Galician Public Healthcare System.
Summary of the good practice
First experience with PPI involved was the implementation of the plans **Innovasaúde** and **H2050** in order to foster innovation through Public Procurement of Innovation (PPI), an instrument of innovation policy whose ultimate goal is to boost innovation and internationalisation through the establishment and reinforcement of technological demand. PPI has become a driver for healthcare innovation and the generation of new products and services that help the business sector compete at the international level. Both plans were established through an agreement with the Ministry of Economy and Competitiveness in which SERGAS is the beneficiary of a public grant provided by the EDRF funds in the frame of the R&D Operational Plan to benefit companies, Technological fund 2007-2013, with a total amount of 90 M€ (80% co-funding). Innovasaúde objectives: • PATIENT–CENTRED Healthcare: Development of new offshore tools (telehealth, tele monitoring, 2.0 websites for patients, etc.) • SAFE AND FAST Healthcare: Development of safer and faster and communication systems. • INTELLIGENT Healthcare: optimal delivery of quality and safe services. Within Innovasaúde, 14 sub-projects were developed: Mobile diagnostic-therapeutic healthcare point, Medical imaging centre, Hospital at home, Multi speciality telecare products, Patient expert in 2.0, Smart multilevel alert system, Advanced medical simulation centre Computer-aided diagnosis systems, Professionals 3.0, Innovation space for healthcare services, Integrated information and management system for clinical and epidemiological data for research, Transfer of the results of research and innovative healthcare projects, Integrated system for digitalisation, indexation, custody and management of clinical information. H2050 objectives: • Safe hospital: safe, effective and efficient assistance. • Green hospital: efficient use water and energy, integral management of solid and liquid waste, management of chemical substances among other while fulfilling the current regulation. • Sustainable and efficient hospital: integrated into the environment and open to the rational use of new technologies. Within H2050, 8 sub-projects were developed: Smart management system in emergency services, Integrated traceability system for patients and resources, Hospital robotics, Self-sustainable hospital, New 2050 integrated management system, Smart ward, Experimental hospitalization H2050, Secure digital hospital, Preservation of clinical information. The successful experience gained within the implementation of the aforementioned plans has allow ACIS to coordinate the largest PCP project of the H2020, the **EMPATTICS** project with 5 M€ and 7 partners involved. EMPATTICS was launched in February, 2016 with the main objective of supporting patients to become active self-managers. The project aims the development of technologies to empower chronic patients and to tackle the need of patient´s adherence. The

plan of the Galician Public Health System for the 2016-2020 period, **CODIGO100** is a new innovation plan funded with 13 M€ by EDRF funds. It involves 3 lines of action:
- Promotion of personalized therapies, devices, services and protocols.
- Promotion of patient empowerment technologies.
- Promotion of training, communication and technologies to empower Health professionals.

1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.

	DEFINITION	CALCULATION METHOD	UNIT OF MEASUREMENT
Number of R&D&I projects	Number of projects carried out which can be defined as R&D&I	Number of projects carried out in *N* Phase with consideration of R&D&I project	Projects
Associated employment. Number of participants in the projects	Employment associated. Number of participants in projects funded by the H2050 project	Number of participants in projects funded by the H2050 project in *N* Phase	Employments
Associated employment. Number of women participating in the projects	Employment associated. Number of women participating in projects funded by the H2050 project	Number of participants in projects funded by the H2050 project in *N* Phase	Female employments
Induced private investment	Amount of investment from the private sector invested because of the existence of the H2050 project	Amount of investment by companies participating in the H2050 project in *N* Phase	Euros
Investment in innovative purchase	Amount of investment made which can be encompassed in the definition of innovative public procurement	Number of contracts financed by the H2050 project in the form of innovative public procurement in *N* Phase	Euros
Number of cooperation projects between companies and research centers	Number of cooperation projects between companies and research centers funded by the H2050 project	Number of cooperation projects between companies and research centers funded by H2050 project in *N* Phase	Projects
Number of recipient companies	Number of companies that have been involved in developing the H2050 project	Number of enterprises with contracts financed with funds from the H2050 project in *N* Phase	Business
Gross employment created	Number of gross employments created as a result of the actions of the H2050 project	Number of contracts for staff working on projects funded by the H2050 project in *N* Phase	Employments
Creation of new businesses	Number of companies created on the occasion of the H2050 project	Number of new companies that have bid for tenders funded by H2050 project in *N* Phase	Business
Companies that have benefited Environmental Management Systems ISO 14001 and / or EMAS	Number of companies benefiting from the actions of the H2050 project that have Environmental Management Systems ISO 14001certificate and / or EMAS	Number of companies with contracts financed by the H2050 project that that have Environmental Management Systems ISO 14001certificate and / or EMAS in the *N* Phase	Business

2.How much did the implementation of the program take?



3.Describe the relationship (if any) between your good practice and your RIS3

To launch a PPI programme the prioritization of sectors should reflect the country socio-economic challenges: health, education, environmental sustainability, etc. In this regard, the alignment of these challenges with the national and regional research and innovation strategies for smart specialization (RIS3 strategies) implemented by Member States and EU regions should be emphasized.

RIS 3, Challenge 3: New Healthy Lifestyle Model Based on Active Ageing of Population. The main objective is to position Galician in 2020 as a lead region in Southern Europe that offers knowledge intensive products and services linked to a healthy lifestyle model: active ageing, therapeutic application of fresh and marine water resources and functional nutrition.

4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?

In the leading countries in the field of the PPI, leadership has come from the hand of agencies or ministries responsible for innovation policy, which in many cases are those responsible for economic policy. In some cases, this leadership has also had political backing at the highest level or a parliamentary mandate. At European level, we see many development initiatives and promotion of PPI: the EAFIP (European Assistance for Innovation Procurement) initiative for promotion, training and local support for public purchasers in Europe who are interested in implementing some innovative public procurement; the funding opportunities for projects in the PPI Horizon 2020 and the new EU Directive 2014/24 which regulates public procurement is a specific PPI procedure In the case of Spain, the Ministry of Economy and Competitiveness (MINECO) and in Galicia the Galician Innovation Agency (GAIN) are playing a key role in promoting PPI. Also noteworthy is the work of the Observatory of Public Procurement (ObCP) committed to the goal of introducing a new culture of public procurement and which disseminates all relevant information on the PPI at national and international levels. In this sense, the implementation of the instrument must also involve the leadership of the organization that will implement it so more guarantees of success can be offered.

Messages to motivate Public Entities:

- Indicate that the PPI offers the possibility to have a positive impact on creating innovative strategic markets that can improve the competitiveness of their region. Example: *in the US the development of PPI programs in the Defense area led to the development of the American semiconductor industry in the 60s.*
- *The PPI allows Public Entities to meet their long-term technological needs through innovation, ensuring a better service to the citizen, as a recipient of these innovative public services.* Example: *in Belgium 85% soot emissions was reduced through the development of carbon filters for public transport buses.*
- *It allows public entities to provide a systematic procedure for identifying new needs and improvement opportunities that affect optimizing their procurement processes.* Example: *In Spain, the Galician Public Healthcare Services, launched an ambitious PPI program in April 2012 in which a Technical Dialogue pioneer in Spain was held. A total of 307 innovative solution ideas was received for a total of 23 challenges. From these proposals, 236 were received from private companies and 71 from research institutions. The final result was that more than 53% of the received ideas were considered of interest and were transferred to contract specifications. With this practice, they obtained the second place and an honourable mention in the Procurement of Innovation 2015 award of the EU.*
- *It favours the creation of technology companies competitive at an international level.* Example: *South Korea has favored the consolidation of technological SMEs through the guarantee scheme of new technologies purchase, which requires the conditional purchase of R&D to SMEs; acquiring a pre-purchase commitment once created the good or service.*
- Both companies and organizations that offer solutions, can find investors to finance their development.

5.How have you organized the local stakeholders involvement to define the challenges the program tackle?

In order to facilitate involvement and fluid communication with stakeholders, both internal and external, a centralized management leading figure through a Management Committee was established.

6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program

In order to modernize and improve the quality and safety of the state conventional medical model of Galicia, the Galician Public Healthcare Services (SERGAS) launched two health innovation plans, in 2011 through a cooperation agreement with the Ministry of Economy and Competitiveness (MINECO) in which SERGAS was the beneficiary of a grant for PPI R&D&I with an investment of more than 90M €, under the Operative R&D&I Program by and for businesses, funded with ERDF (European Regional Development Fund.) funds.

Policy analysis (by Learner)
Name of the organization
BIOEF
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
Public Procurement of Innovation is a strategical initiative that is being developed within the Regional RIS3
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The program is on-going, mainly with the Basque Public Health System´s, Basque Regional Govern´s and BIOEF´s resources
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
BIOEF has developed an initiative (INNOSASUN), that could help the promotion of innovation from the demand side, through the purchase of products or services that do not exist in the market and that require a co-design process between buyer and supplier European project calls could also help to define the challenges to be tackled.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
Mainly from regional funds, but also looking for ERDF, H2020…
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
The main barriers on the deployment and development of this initiative at the Basque regional level have been the IPR management and funding. TITTAN project has allowed to benchmark this initiative with more advanced regions in this regard, so that we have been able to get some tips for its implementation.
6.Benefits you could obtain and lessons learned
We got inputs about the prioritization of detected needs, IPR management and process indicators for the PPI, from more advanced regions in this regard.

Policy analysis (by Learner)
Name of the organization
CAL (City of Almere)
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
In Almere we have a very different system for of procurement of health services and products than in Galicia. Also, Almere operates at a local level rather than a regional level. This makes the scale of procurement very different. Innovations are not invested in by local government so much. The role that the Region of Galicia has in PPI is one that is carried out by national government in the Netherlands rather than by local or regional. The city's system of procurement is aimed at tendering the services that the citizens are entitled to.
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
This is not up to local government in the NL. Cities have some freedom to choose their local suppliers of health and care services (social care rather than cure!). Cure is not a responsibility of local or regional government in the NL. It is the domain of national government, health

insurers and hospitals. Any significant change is this area would have to be agreed upon by the government and included in national legislature.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
This can not be solved locally
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
N/A
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
Change in this area would take place on a national government level in the NL. Mid level local government (like Almere) can influence this via the Association of Dutch Municipalities by lobbying on the national political level.
6.Benefits you could obtain and lessons learned
We set out to find out whether PPI would be a systematic that we could implement in our specific context. Our conclusion was, that it is not at this time.

V. Technology Enabled Care (TEC) programme

Policy analysis (by Mentor)
Name of the organization in charge
Scottish Government. The Programme itself is overseen by an independent Programme Board, and is delivered in conjunction with the Scottish Centre for Telehealth & Telecare (SCTT) and NHS National Services Scotland.
Summary of the good practice
The Technology Enabled Care (TEC) Programme was launched in 2014 as a three-year £30 million Scotland-wide Programme. For the purposes of this programme, Technology-Enabled Care is defined as: where outcomes for individuals in home or community settings are improved through the application of technology as an integral part of quality cost-effective care and support. This includes, but is not limited to, the use of telecare, telehealth, video conferencing (VC) and mobile health & wellbeing (mHealth). Local areas were expected to be cognisant of them whilst specifically demonstrating how they would contribute to the overall aim of the Programme, which is about significantly up scaling tried and tested approaches.
1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.
A report providing an assessment of the Critical Success Factors for Mainstream Adoption of Technology-Enabled Care in Scotland. Within the TEC Programme, the 18 Critical Success Factors for Mainstreaming Telemedicine Deployment in Daily Practice, along with its Self-Readiness Assessment toolkit, have already been adapted into a Readiness Assessment to support the implementation of TEC within local partnerships. This 'Scottish version' (adapted from the European MOMENTUM project – www.telemedicine-momentum.eu) was also influenced by work previously carried out by the JIT on the Readiness for Integration self-assessment. The workstreams include: • Expansion of home health monitoring as part of integrated care plans to move beyond the small/medium scale initiatives that have been introduced in a small number of areas to substantial programmes across Scotland, building on the United4Health programme. This is being led by the Scottish Centre for Telehealth & Telecare (SCTT); • Expanding the use of video conferencing through using the experience of the NHS video conferencing systems to enable partner organisations across all health and social care sectors to participate and benefit, as well as growing its use for clinical/practitioner consultations. This is being led by the eHealth Division, and builds on the National Standards already agreed for public sector VC; • Creating a national digital platform framework, learning from, and potentially building on, national initiatives and learnings such as Living it Up and ALISS to expand supported self-management information, products and services for Scottish citizens. This is being led by the eHealth Division, and initially involves a scoping piece looking at what we mean by a

digital platform building and folding in key learning from Living it Up and ALISS; • Expanding the take up of Telecare**,** with a particular focus on upstream prevention, support for people at transitions points of care and people with dementia and their carers. This is being led by the JIT and is the most advanced of the workstreams in terms of existing local activity, developing. • Exploring the scope and benefits of switching current provision of Telecare from analogue to digital telecare (this is a nationally commissioned area of research and analysis) as part of a 5 year plan.
2.How much did the implementation of the program take?
£30 million - £10 million each year for 3 years
3.Describe the relationship (if any) between your good practice and your RIS3
All tech work packages link closely with Scotland's economic development agencies and economic development impacts, which creates the robust engagement for industry to engage.
4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
The **overall aim** of the TEC programme is aligned with the existing National Telehealth & Telecare Delivery Plan. This group sets out the national work programme on Telehealth and Telecare over the next few years, and part of that involves the JIT actively supporting partnerships to move this agenda forward locally.
5.How have you organized the local stakeholders involvement to define the challenges the program tackle?
The development and expansion of telehealth and telecare (or telehealthcare) has been actively championed by the Scottish Government, COSLA and NHSScotland across a wide range of policy portfolios for a number of years. These groups have a national reach to bring together many different stakeholders.
6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program
eHealth department of Scottish Government provided the funds for this programme.

Policy analysis (by Learner)
Name of the organization
BIOEF
1.**Describe the relationship (if any) between the good practice analyzed and your RIS3**
EHealth, ICTs and equipment, components and supplies are considered as priority areas in the current regional RIS3
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
Through the provision of impetus and recognition for the mission, building a flexible and constructive central-local relationship, and regional collaboration
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?

Making them participate in the co-design processes has shown to engage them in the development ecosystem.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
ERDF (RIS 3) and European project funds mainly.
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
Possible barriers: Procurement and supplier issues, connectivity issues PPI processes could help to adapt the offer and needs regarding this area; eHealth, Telecare… etc. Interoperability is also an area to be taken into account. Developing together common projects among different stakeholders (such as EU funded C3-CLOUD or ACT@Scale projects, EIPonAHA…) help to reach common goals in connectivity issues.
6.Benefits you could obtain and lessons learned
Sharing experiences has let us know the above mentioned barriers and facilitators that could make its implementation easier.

VI. CivTech® innovation Flow

Policy analysis (by Mentor)
Name of the organization in charge
Scottish Government
Summary of the good practice
The CivTech® pilot is harnessing new technologies to drive daring and innovation in the public sector. It brings together private sector innovation, public sector organisations and citizens to develop more efficient and effective products and services, which will translate to new, better, faster and easier experiences for everyone. Backed by the Scottish Government, it is providing an unprecedented route for entrepreneurs, start-ups, SMEs and other businesses to develop the benefits of digital transformation in the public sector. The CivTech® pilot has been designed to explore a number of hypotheses, including: • The kinds of stimulus and benefits the private sector has experienced through the digital revolution can be replicated in the public sector, if the same kind of tech creativity and innovation is unleashed • There is a huge resource of tech creativity and innovation in the nation that could be applied to help solves societal challenges • Much of this creativity and innovation is in parts of the private sector that the public sector rarely engages with – for example, SMEs and micro- businesses • With the right kind of offer, these SMEs and micro-businesses could be encouraged to engage • That putting different teams in the room, solving different Challenges with different approaches and tech, will drive a 'cross-pollination' innovation stimulus (for more on 'innovation at the intersection' read the *Medici Effect* by Frans Johansson). • It is possible to build a new model of engagement which would incorporate the best parts of the private sector 'innovation model' – for example, challenges and accelerators – and make the public sector journey – including procurement – as straightforward as possible. • That the societal challenges the CivTech® pilot is seeking to find solutions for are not confined to Scotland, and as a result the solutions have worldwide commercial potential. • In solving these problems, the CivTech® pilot has the potential not only to improve public services, but also to provide a real stimulus for Scotland's emerging and vibrant tech sector The CivTech® pilot has also been designed to engage many parts of the Scotland ecosystem, including: • The public sector, and public sector organisations • The private sector: all sizes and stages of companies including SMEs and micro-

businesses, entrepreneurs, pre-starts, start-ups and established businesses

- Both public sector and private sector investment sectors; eg the Scottish Investment Bank and angels respectively:
  - Innovation centres
  - Academia and researchers
  - The Citizen and citizen groups

The CivTech® Innovation Flow

At the heart of the CivTech® pilot is the CivTech® Innovation Flow - a process that takes problems identified by public sector organisations and goes through a number of stages to deliver solutions.

(see Appendix 3.1.3. for further details about the **CivTech® Innovation Flow**).

1.Describe which are the Key Performance indicators you have set, against which you assess the performance of the program.

Not known

2.How much did the implementation of the program take?

Not known

3.Describe the relationship (if any) between your good practice and your RIS3

Not known

4.How have you involved the Relevant Regional Departments (DGs, etc) to get the program approved and launched?

The CivTech pilot was initially funded and is currently sustained by the Scottish Government.

5.How have you organized the local stakeholders involvement to define the challenges the program tackle?

As part of the initial CivTech pilot, 6 public services digital innovation priorities were identified, 2 of which were directly related to the use and presentation of public health data from the Information Services Division (ISD) and NHS National Services Scotland:

https://civtech.atlassian.net/wiki/display/CIV/THE+CHALLENGES+TO+BE+SOLVED

Industry providers were subsequently invited to pitch their proposed solutions to the challenges at specific challenge day events.

6.Describe in which way and from which funds (ERDF, National, other) you have managed to allocate financial resources on this program

As above, The CivTech pilot was initially funded and is currently sustained by the Scottish Government.

Policy analysis (by Learner)
Name of the organization
Galician Health Knowledge Agency ACIS
1.Describe the relationship (if any) between the good practice analyzed and your RIS3
This good practice CivTech is in line with the Challenge3 of the RIS3 in Galicia, a new healthy lifestyle model based on active ageing. The main target is to convert Galicia into a leading region in the south of Europe in the application of new technologies to the field of active ageing and personal autonomy, especially in benefit of the elderly affected by some kind of disability. This target is fully reflected in the CivTech innovation flow, takes problems identified by public sector organisations and goes through a number of stages to deliver solutions. It brings together private sector innovation, public sector organisations and citizens to develop more efficient and effective products and services.
2.How would you involve the Relevant Regional Departments (DGs, etc) to get the program approved and launched?
ACIS, as the public agency responsible for the health knowledge and innovation in Galicia, could have a key role based on identifying, managing and adding value to the projects, in close cooperation with the Public Healthcare Provider (Servizo Galego de Saúde) and the three Galician Biomedical Foundations. Moreover, since early 2011, the Ministry and the Public Healthcare Provider (Servizo Galego de Saúde), have promoted several PPI initiatives which include Public Procurement of Technology and Pre-commercial Public Procurement of technology, under the Innova-saúde and Hospital 2050 innovation plans. In addition, ACIS leads projects with aspects in common with CivTech, such as the PRIS programme, a pre-commercial development of research results from the Galician Public Health System and the EMPATTICS project a pre-commercial procurement cofound action of the Horizon 2020 built upon an international partnership formed by 7 entities from 5 different European countries.
3.How would you organize the local stakeholders involvement to define the challenges the program tackle?
The CivTech innovation flow, should be open to the entire health system and to all technologies with the collaboration of the Galician Innovation Agency GAIN, a key stakeholder in order to share their knowledge and expertise in designing, execution and/or validation, and co-development of innovation projects that can add significant value working in collaboration with public and private sector. The three Galician Biomedical Foundations could be involved by identifying the most relevant research projects in their areas.
4.Describe in which way and from which funds (ERDF, National, other) you would manage to allocate financial resources on this program
Our Regional Health Minister would ideally fund these programmes through structural ERDF

funds. However, other possibilities are to finance it through the Horizon 2020 as in the EMPATTICS project.
5.Describe the barriers to the implementation of the program you could encounter and how you would dealt with it
The context of the Scottish and Galician PPI and PCP projects have a lot of similarities, therefore, some of the barriers to the implementation are the same: -Lack of investors and reluctant to invest in R&D -Some projects end with a patent but without enough interest in the industry -Administrative constraints faced by the Public Administration in terms of hiring and tenders launching.
6.Benefits you could obtain and lessons learned
Benefits: -Check and compare different methodologies -Future/possible collaborations <u>Lessons</u> learned: -The CivTech innovation flow: it combines PCP and PPI process together -Importance of collaboration with different stakeholders/ agents -Management structure: 8 staff members, -18 challenges have commercial value and interest to the Health System (after a pre-selection between 40 challenges) -Max. funding of 250.000 – interest mainly of SMEs -Private sponsorship -Demo day to present the results of their time through the CivTech accelerator

F. Summary of the 1st Interregional Workshop in Santiago de Compostela (Galicia)

Partner-Host	Date(s)	Nº Workshop	Participants	Main outputs:
ACIS (Galicia) City: Santiago de Compostela	5/09/16 6/09/16 7/09/16	Workshop 1/1 of TA1	***Total: 29*** Nerea Alonso Sousa, Ana Muñoz Espadín, Beatriz Gil de Araujo (**FBGS**) Mabel Sampedro Parada, Pablo Mosquera Martínez (**FRD**) Graciela Fdez Arrojo (**FPNS**) Gisela García Álvarez (**CSG**) Roberto Alonso, Sergio Camiña (**CLUSAGA**) Manuel Paris (**GAIN**) Javier Quiles (**Servizo Galego de Saúde**) Domenico Tinelli (**Devalar**) Sergio Figueiras, Susana Fdez Nocelo, Cristina Seren Trasorras, Sonia Martinez (**ACIS**). Sergio Cardoso, Itziar Acha Andres (**BIOEF**) Mª Natividad Ortiz Ruiz (**Osakidetza**) Sara Ponce (**Kronikgune**) Gregory Hill O´conor (**ALLIANCE**). Gary Robinson, Kara McKenzie (**DHI**) Olaf Müller, Sophia Mittelstadt (**HS**) Antoni Zwiefka (**LSVMO**) Gianni D´errico, Carmen de Francesco (**FRRB**) Valentina Mariani (**ARCA**)	During 6, 7 and 8 of September, Compostela hosted the first Interregional Workshop, under the leadership of ACIS. The main aim of the workshop was to exchange and benchmark policy experiences in the field of health within the fist Thematic Area (Outside-In Innovation) in order to facilitate the transfer of knowledge, products and technological developments in the private sector towards the public health systems. A total of 13 GPs were discussed. They focused on promoting PCP & PPI and uptaking of innovative solutions by the public administrations, through a direct collaborative dialogue with companies during the workshop. Moreover, during this workshop, the partners had the opportunity to visit the case study of H.U. Álvaro Cunqueiro. Experts shared innovative initiatives between public and private sector that have been successfully implemented on their own regions by making a clear benefit to patients and health systems. Particular emphasis was put on promoting "new" methodologies of Innovative Public Procurement, not only from a theoretical point of view but also from a practical point of view. The strategy is to influence users/citizens, companies, researchers and clinicians about the importance of innovation to improve the quality of life and lifespan of elder people. SWOT analysis were carried out during the first and second session. After the Workshop, the first Action Group was established in order to organize *in situ* visit to get a deeper knowledge of those practices with potential to be incorporated in the different regions of the consortium. It will be coordinated by ACIS and BIOEF, that will be in charge of the organization of the *in situ* visits.