



# Horizon 2020

## Work programme 2018-2020

Health, demographic change & well-being

### EU support for Innovation Procurement:

- Rules & format of EU-funded PCP/PPI actions
- **New call:** Large scale implementation of digital innovation for health and care in an ageing society

Orestis Kalliantzidis

DG Connect – H3: eHealth, Well-being & Ageing

Vienna, 27 November 2018

This presentation will cover:

### **PCPs & PPIs**

eligible activities

rules

format

proposal template

### **Funding opportunities**

**PPI Call: SC1-DTH-05-2019**

Large scale  
implementation  
of digital innovation  
for health and care  
in an ageing society

# PCP and PPI actions - Eligible activities



## ❑ Preparation stage

- Preparation of **one joint** PCP procurement per PCP action or **one joint or several separate but coordinated** PPI procurements per PPI action
- Open market consultation /verification of market readiness to meet procurement need
- Outcome
  - Agreed common tender specifications + Procurement agreement
  - Confirmation of availability of financial commitments to start PCP/PPI

## ❑ Execution stage

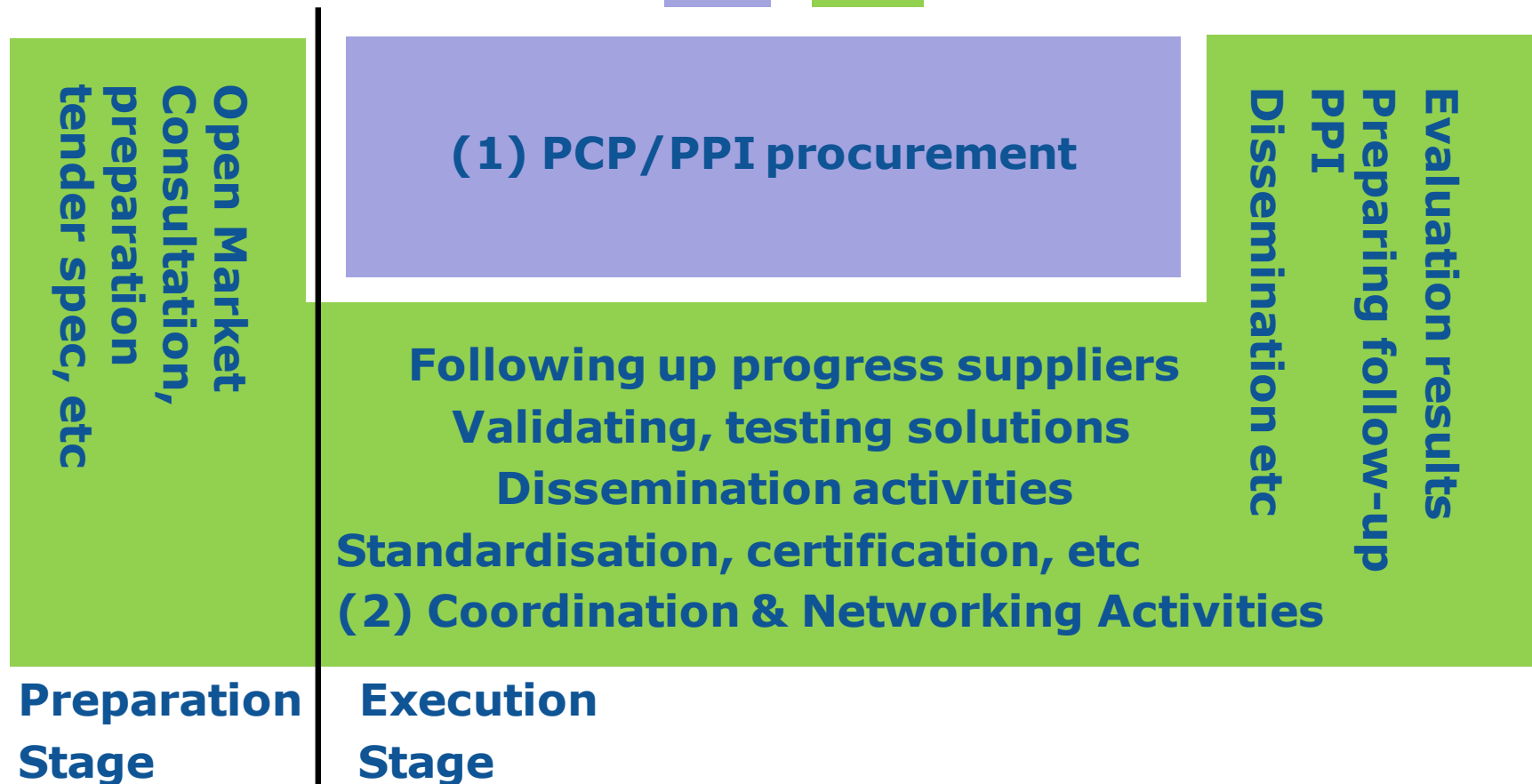
- Procurement of the R&D services (PCP) or innovative solutions (PPI)
- Follow-up of suppliers and validation of results
  - PCP: Validation/comparison of the performance of the competing PCP solutions against jointly defined criteria in real-life operational conditions
  - PPI: Evaluation of results of deploying and operating the procured solutions in real-life operating conditions
- Dissemination/exploitation of results

Other coordination/networking activities relevant to the action (e.g. preparation of follow-up PPI, contribution to standardisation / regulation / certification)

# PCP and PPI actions – What is covered



## PCP/PPI actions co-finance (1) + (2)



Every project goes through a preparation stage and an execution stage

# PCP and PPI actions – EU contribution



- ❑ **Reimbursement rate direct costs: Max 90% respectively 35% of eligible costs for PCP actions respectively PPI actions**
  - Eligible direct costs to carry out eligible activities defined in WP include:
    - Price of the R&D services (PCP) or innovative solutions (PPI) procured (if procurement conducted in compliance with requirements in Annex E WP)
    - Eligible coordination and networking activities
    - May include in-kind contributions (e.g. third parties putting resources at disposal of beneficiaries e.g. for testing of solutions)
    - VAT is an eligible cost unless for beneficiaries that can deduct it
  - Requested reimbursement for coordination and networking activities can comprise max 30% (for PCP) / max 50% (for PPI) of total requested grant
- ❑ **Plus 25% for indirect costs.** But, no indirect costs on the price of the PCP/PPI procurement or on 3<sup>rd</sup> party resources not used at the beneficiary premises
- ❑ **Pre-financing:** Yes, 1<sup>st</sup> pre-financing at start project for costs for preparation stage, 2<sup>nd</sup> pre-financing before execution stage for rest of costs (incl. call for tender)

# One joint PCP coordinated by the lead procurer



- In their proposal, consortium shall have already identified one concrete procurement need as proposed focus for the PCP that is identified as a **common challenge** in the innovation plans of the buyers group and requires R&D!
- One joint call for tender published EU wide
  - One joint evaluation of offers based on common tender specs
  - One lead procurer awarding all contracts in the name and on behalf of all procurers in buyers group
    - Each winning tenderer gets: 1 framework agreement to participate in the PCP + one specific contract per PCP phase (solution design, prototyping, testing)
  - One joint total budget (grouping financial commitments of all procurers in buyers group) from which all R&D providers are paid
- But, actual payments can be carried out centralised or distributed
    - Either all R&D providers paid by the lead procurer
    - Or each R&D provider paid pro rata by each procurer in the buyers group according to the share of each procurer's contribution to the common pot
  - Also supervising suppliers and testing of solutions can be centralised or distributed
    - Choice between testing all solutions of all R&D providers in 1 procurers site or on several sites procurers sites etc

# One joint PPI or several coordinated PPIs coordinated by the lead procurer



- In their proposal, consortium shall have already identified one concrete procurement need as proposed focus for the PPI that is identified as a **common challenge** in the innovation plans of the buyers group and requires innovative solutions!
- EU wide publication of **one joint or several separate call for tender(s)** that are coordinated based on common tender specifications (If PPI procures a limited set of prototypes / test products developed in a preceding PCP, then negotiated procedure without publication foreseen in EU public procurement directives is possible)
- Evaluation of offers based on common tender specs (**same core functionality** and performance characteristics for solutions procured by all procurers, but possible **additional local functionality** for each procurer)
- But contract award can be centralised or distributed
  - In case of 1 Joint procurement:
    - Either one lead procurer awarding all contracts to all suppliers on behalf of all procurers in the buyers group
    - Or one lead procurer only awarding a framework contract with lots to each supplier (e.g. lot per procurer), and each procurer awarding (a) specific contract(s) for his lot(s) to the supplier(s) delivering the solution(s) he buys
  - In case of several separate but coordinated procurements:
    - Each procurer awarding his own contract(s) directly himself
- Also supervising suppliers and payments can be centralised or distributed



# Proposal Template PCP-PPI actions

Proposal Template in pdf format (for consultation) under topic conditions and docs on the topic page or on the how to participate/reference docs page on the participant portal

Editable word version of Proposal Template: downloadable after you log in to submission system to submit a proposal for a specific topic



# Proposal template PCP/PPI actions

## Structure according to evaluation criteria



- Cover page
- 1. Excellence
  - Progress beyond state of the art
  - Clarity & pertinence of objective of the PCP/PPI–common challenge
  - Credibility of the proposed approach
- 2. Impact
  - Expected impacts
  - Measures to maximise impact
- 3. Implementation
  - Project Plan: work plan, work packages, deliverables, milestones
  - Management structure and decision making procedures
  - Consortium as a whole
  - Resources to be committed
- 4. Consortium Members
  - Participants and third parties
- 5. Ethics and security (optional)

*Page limit: max 70 pages  
For sections 1, 2, and 3 together*

This presentation will cover:

## **PCPs & PPIs**

eligible activities

rules

format

proposal template

## **Funding opportunities**

**PPI Call: SC1-DTH-05-2019**

Large scale  
implementation  
of digital innovation  
for health and care  
in an ageing society

# The challenge

- Ageing population increasing **demand-side** pressures on EU public health & social care providers as well as long-term sustainability of existing models for delivering care services.
- **Limited large-scale, cross-border** deployment of digital health and care solutions & innovation.
- Lack of collaborative efforts (**engaging demand & supply**) in public purchasing of innovative ICT-based solutions for active and healthy ageing.
- Not effective aggregation of demand, cost reduction, risk sharing.

# The ambition

## Scope

- **Specify, purchase and deploy** ICT based solutions for active and healthy ageing in the health and care field.
- Target **large-scale deployment** of digital health and care solutions across different regions in Europe.
- Contribute to the **Scaling-Up Strategy of EIP AHA** and Reference Sites.
- Engage **public and/or private procurers** that have responsibilities and budget control in the relevant area of care or supply of services.

## Expected impact

- **Growing awareness** on the successful use of public procurement to boost ICT innovation applied to active and healthy ageing, ultimately benefiting the growing ageing population across Europe.
- Contribution with data and experiences to **addressing potential barriers** (regulatory and other) to procurement of innovative solutions for active and healthy ageing.
- Support forward-looking, concerted **public-sector investment strategies**

# SC1-DTH-05- 2019: The Call

Type of action: **PPI – Public Procurement of Innovative Solutions**

Opening: 16/10/2018

**Deadline: 24/04/2019**

Total budget: €10 M

**Indicative** EU contribution/proposal: €2-5 M

**Funding rate** for PPI actions is limited to **35%** of the total eligible costs to leverage co-financing from the procurers in this specific case.

\*US legal entities allowed to receive funding.

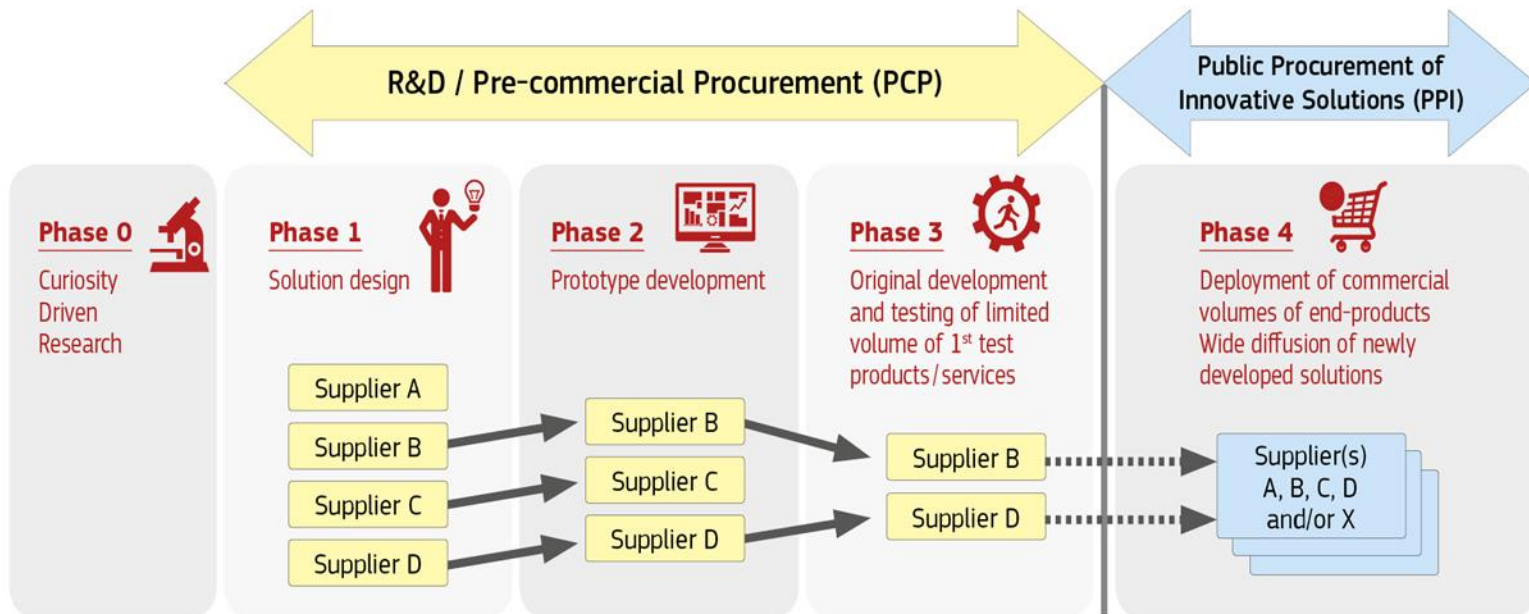
\*Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

## The requirements

- Have clearly identified their **procurement needs** (taking into account users, care providers)
- Support sustainable deployment of new or improved **person-centred and outcome-based services**
- Be based on a complete set of **common specs** for end to end services
- Ensure sustainability of solutions **beyond project lifespan**
- Contribute to the creation of **scalable markets across Europe**
- Contribute to **national strategies** on Innovation Procurement as well as **interoperability & standardization** initiatives
- Safeguard **H2020 principles**: ethics, privacy, gender dimension

## PPI: The instrument

- Solutions are **close to the market** and would be provided if clear, sufficient demand expressed by the market. Can be on the market in small quantity (not widely commercially available yet) but not meeting requirements for large scale deployment yet.
- Incremental/non-R&D innovation can deliver required quality/price (product adaptation, integration, scaling up production, service innovation): **no need to procure R&D**.
- PPI to act as launching customer** / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



## SC1-DTH-05- 2019: Reference documents

### **MUST**

- **Call-specific documents:** <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-dth-05-2019>
- **PPI actions under this WP:**  
[http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga_en.pdf) (Annex E - but do read all annexes)

### **RECOMMENDED**

- European Scaling-up Strategy in active & healthy ageing:  
[http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/scaling\\_up\\_strategy.pdf](http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/scaling_up_strategy.pdf)
- Methodology (EIP AHA) for measuring the impact of outcome-based practices:  
[www.mafeip.eu](http://www.mafeip.eu)
- Principles of green public procurement:  
[http://ec.europa.eu/environment/gpp/index\\_en.htm](http://ec.europa.eu/environment/gpp/index_en.htm)





## PCP/PPI library: general reference documents

- ❑ Work Programs pro <https://ec.europa.eu/programmes/horizon2020/en/what-work-programme>
- ❑ More info on Innovation Procurement (news, upcoming events and info days, case examples): <http://ec.europa.eu/digital-agenda/en/innovation-procurement>
- ❑ Ongoing PCP/PPI projects in ICT (and other) domains:  
<https://ec.europa.eu/digital-single-market/en/eu-funded-projects>
- ❑ Overview ppts and FAQs on H2020 funding for innovation procurement:  
<https://ec.europa.eu/digital-single-market/en/news/calls-eu-funding-opportunities-pre-commercial-procurement-and-public-procurement-innovative>
- ❑ Horizon 2020 online manual about innovation procurement:  
[http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/innovation-procurement\\_en.htm](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/innovation-procurement_en.htm)
- ❑ Info about scope of each call topic, online drafting and submission of proposals on H2020 participants portal:  
[http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/search/search\\_topics.html](http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/search/search_topics.html)

**Do you have further questions?**

**Please contact:** [CNECT-H3-H2020-TOPICS@ec.europa.eu](mailto:CNECT-H3-H2020-TOPICS@ec.europa.eu)

Disclaimer:

**The official work programme text is the only legally binding source of information on topic SC1-DTH-05- 2019.**

**Thank you!**

# Background information

*Additional rules and obligations for PCP/PPI project implementation*

# Specific requirements PCP procedure (Annex E WP)



- ❑ Procedure: Compliance with applicable national procurement rules + compliance with additional specific requirements
  - Definition PCP (Horizon 2020 RfP and PCP communication)
  - EU-wide published open market dialogue and call for tender
  - PCP call for tender open for at least 60 days
  - Same objective evaluation criteria
  - Functional / performance based specifications
  - Best value for money award criteria
  - Majority of R&D activities performed in MS/AS
  
- ❑ IPR arrangements for PCP
  - R&D providers generating results in PCP shall own attached IPRs
  - Procurers shall enjoy royalty-free access rights to use R&D results for own use
  - Procurers shall also enjoy the right to grant or to require participating R&D providers to grant non-exclusive licenses to third parties to exploit the results under fair and reasonable market conditions without any right to sublicense

# Specific requirements PPI procedure (Annex E WP)



- Procedure: Compliance with applicable national procurement rules + compliance with additional specific requirements

Unless PPI limited to prototypes,  
test-products developed during  
pre-ceding PCP action

- Definition PPI (Horizon 2020 RfP). Choice between procurement procedures covered by procurement directives that do not include procurement of R&D
- EU wide publication of open market consultation, early announcement of target date for launching the PPI open market consultation and call for tender(s)
- PPI call for tender(s) open for at least 60 days
- PPI call for tender(s) open to tenderers from EU Member States and H2020 associated countries + (if applicable) additional countries that ratified WTO GPA
- Possibility of conformance testing before contract award
- Same objective evaluation criteria
- Functional / performance based specifications
- Best value for money award criteria

- IPR arrangements for PPI

- IPRs attached to results generated during PPI shall be owned by the party that generated the results, unless duly justified cases (e.g. party generating results is not able to exploit IPRs)

# Other obligations related to implementation of call



- Beneficiaries must ensure wide publication for open market consultation & contract notice, unless for PPI procuring PCP results
  - At least via H2020 sites and NCPs (encourage also via relevant brochures, specialised press, relevant major events, mailing lists relevant industry/research associations etc)
- The beneficiaries must formally notify the Commission:
  - 5 days before publication in OJEU: copy of PIN open market consultation
  - 30 days before publication in OJEU: copy of contract notice & its contents
- Open market consultation to be announced well in advance to market
  - Min 2 months in advance via publication of PIN in OJEU (except for PPIs limited to procuring limited set of prototypes/first test products that are outcomes of PCP actions)
- Joint call for tender shall remain open
  - At least 60 days: for PCP and PPI

# EURIPHI - CSA

**Innovative Procurement of Health & Care**

27 November 2018

# Challenges the EU aims to address\*

- I. **Respond to changing health and care organization and support the transition towards a patient-centered integrated model with triple aim :**
  - Better care experiences
  - Better care outcomes
  - More efficient care
  
- II. **Ensure timely diagnosis of infectious diseases by usage of innovative rapid diagnostics in care pathway and support appropriate antimicrobial drug use reducing unnecessary prescriptions**
  - Facilitate uptake of rapid diagnostics tests (Point of Care) throughout Europe

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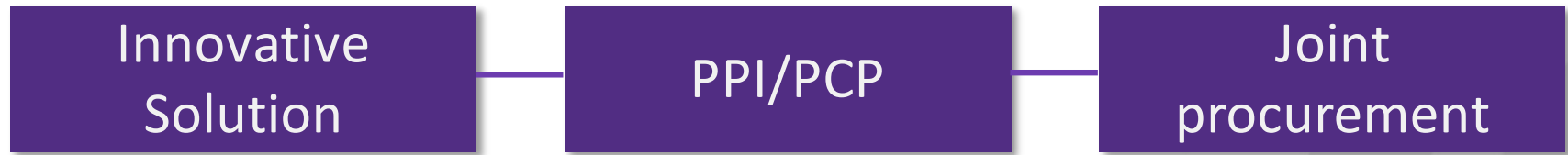
*To respond to the clinical / public health need and facilitate uptake, authorities must act together to create demand for innovations through joint public procurement*

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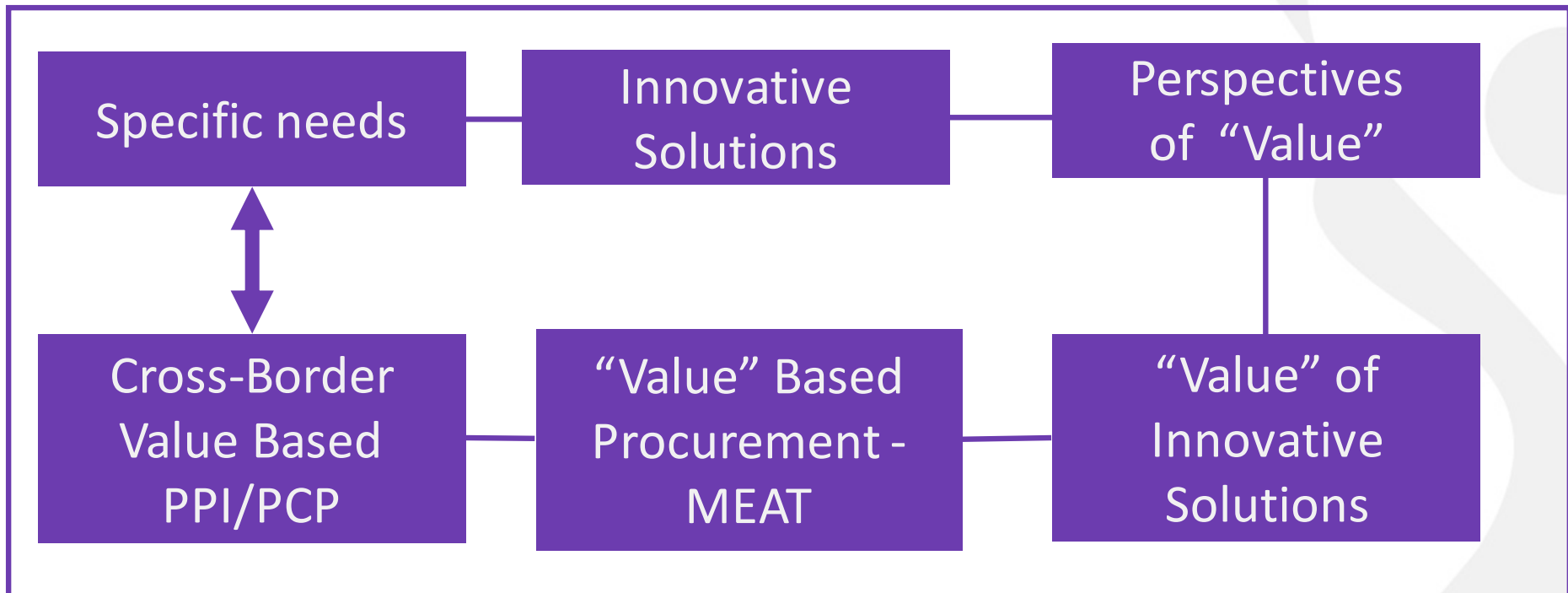
**Cross-border cooperation between health and care procurers/providers (CSA)**  
**Investment in innovative solutions (PPI/PCP)**



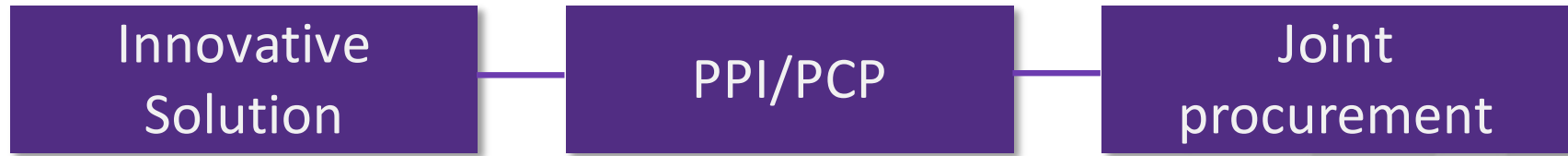
# Innovative Procurement of Solutions in Health and Care



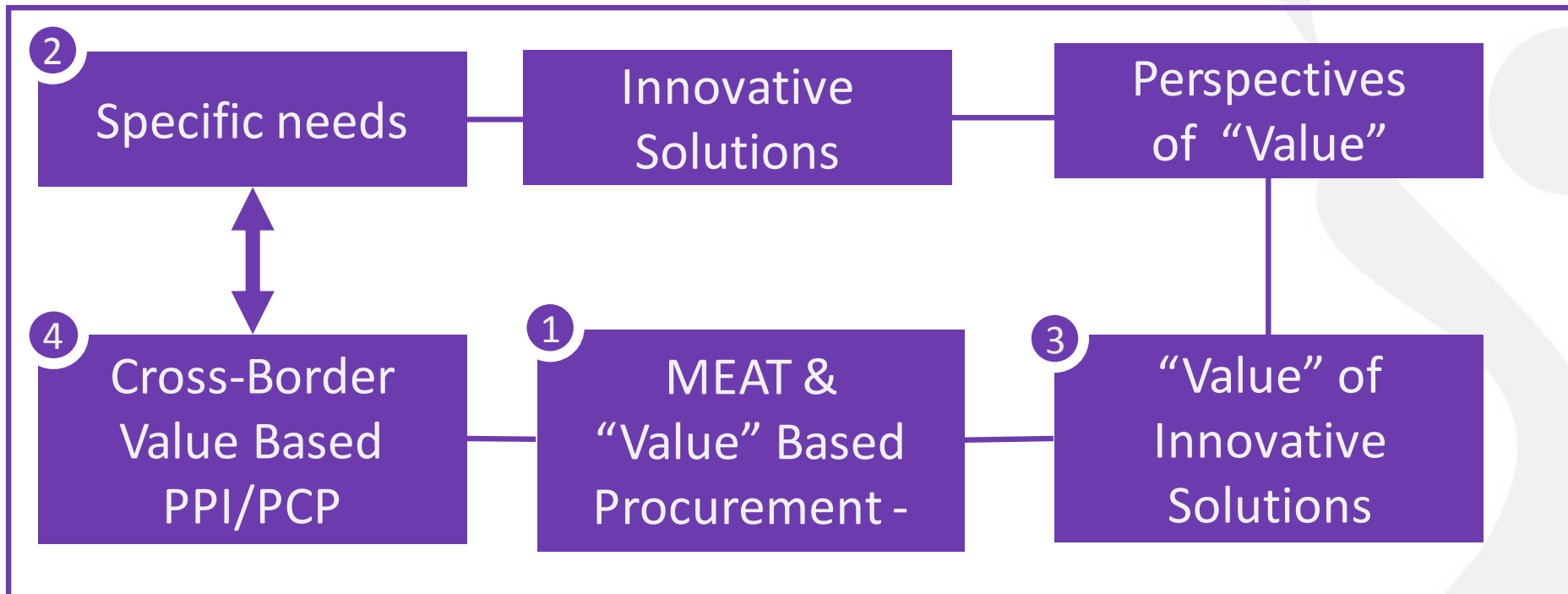
**EURIPHI – H2020**



# Innovative Procurement of Solutions in Health and Care



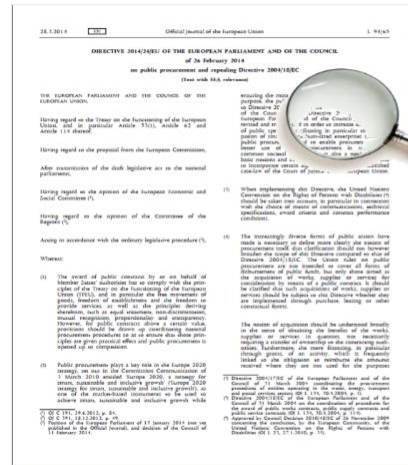
EURIPHI – H2020



# 1 Most Economic Advantageous Tendering (MEAT)

## DIRECTIVE 2014/24/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

26 February 2014 on public procurement



### Article 67 Contract award criteria

**M.E.A.T.: Most economically advantageous tender**

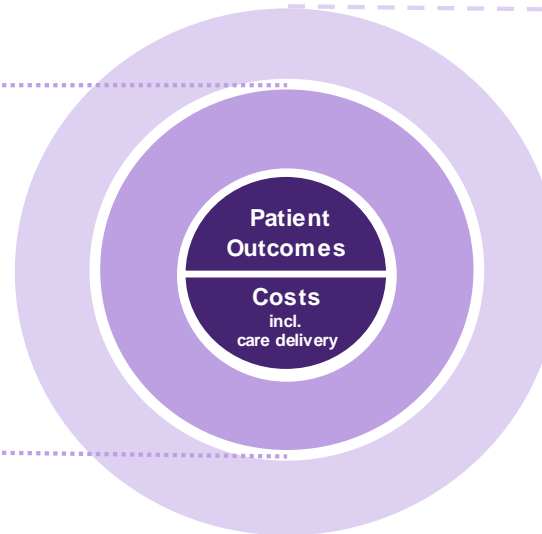
2. The **most economically advantageous tender** from the point of view of the contracting authority shall be identified on the basis of the **price or cost**, using a cost-effectiveness approach, such as **life-cycle costing** in accordance with Article 68, and may include the **best price-quality ratio**, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked to the subject-matter of the public contract in question. Such criteria may comprise, for instance:

Art. 68: [excerpt] Life-cycle costs, incl.  
i. costs relating to acquisition,  
ii. costs of use, such as consumption of energy and other resources, maintenance costs,  
iii. end of life costs, such as collection and recycling costs,  
v. costs imputed to environmental externalities linked to the product, service or works during its life cycle

Point. (96): [excerpt]  
**Common methodologies should be developed at Union level for the calculation of life-cycle costs for specific categories of supplies or services.** Where such common methodologies are developed, their use should be made compulsory.

## 1 In Health and Care Value Based Procurement

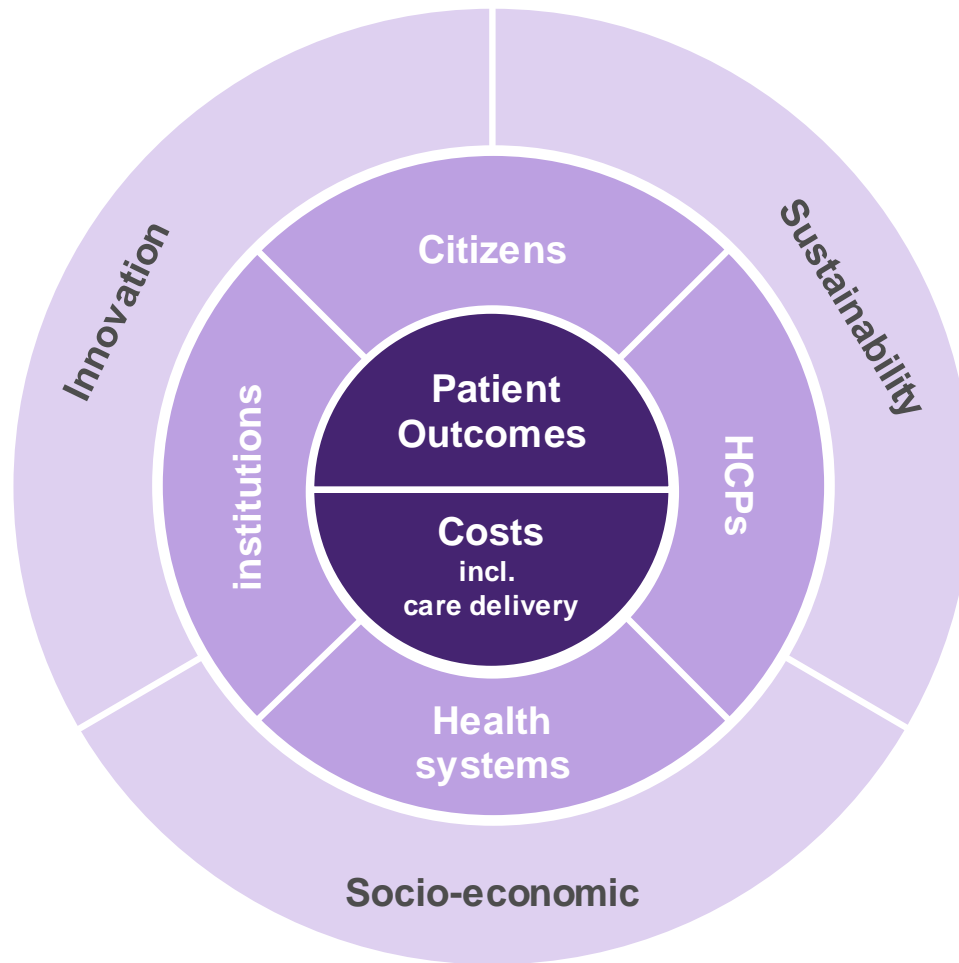
Other benefits to healthcare actors and systems



Boarder impact on society and economy (policy layer)

# MEAT value-based procurement

Value delivered is shared interest for all stakeholders



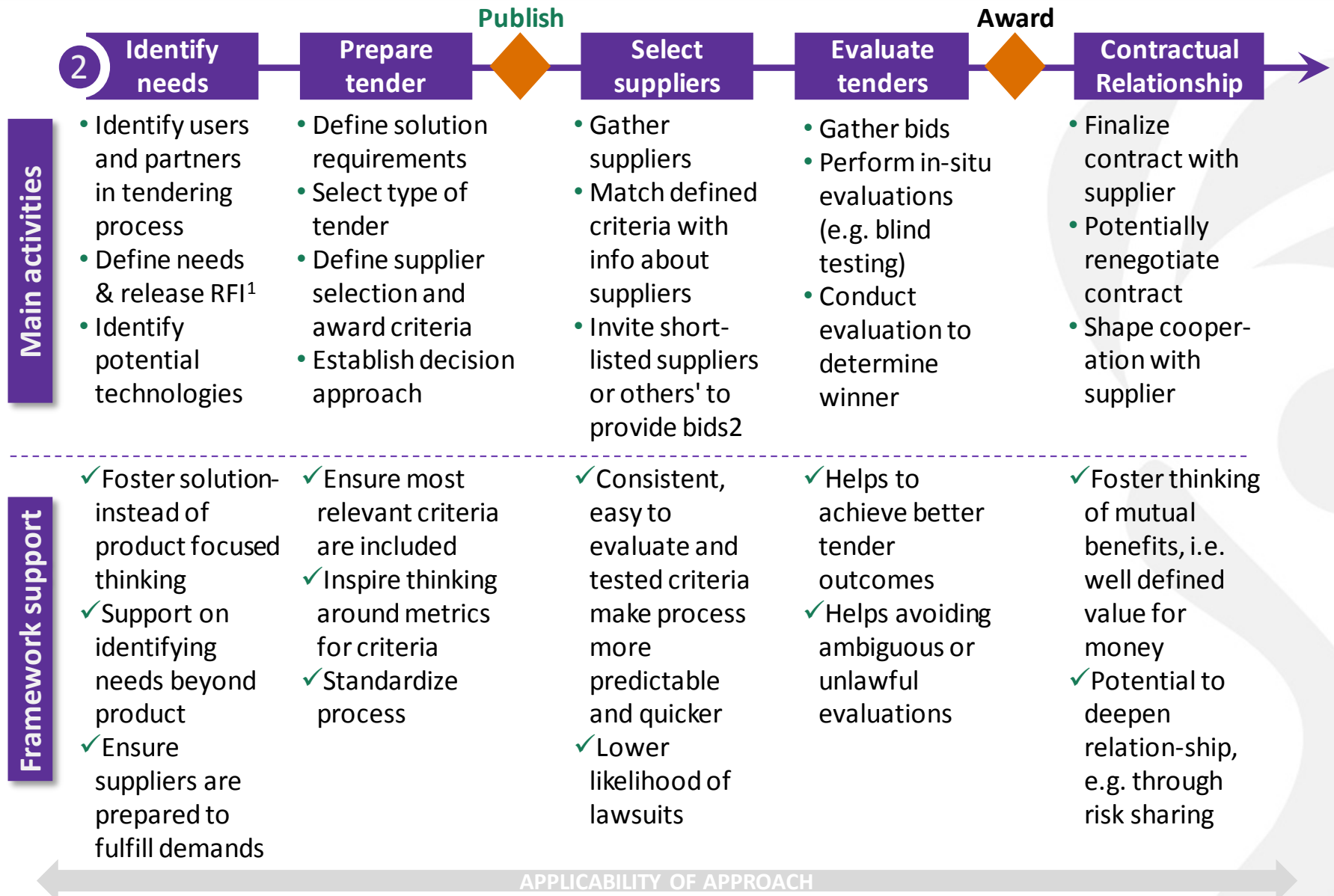
**Core value: outcomes  
vs costs**

**Other benefits for key  
stakeholders**

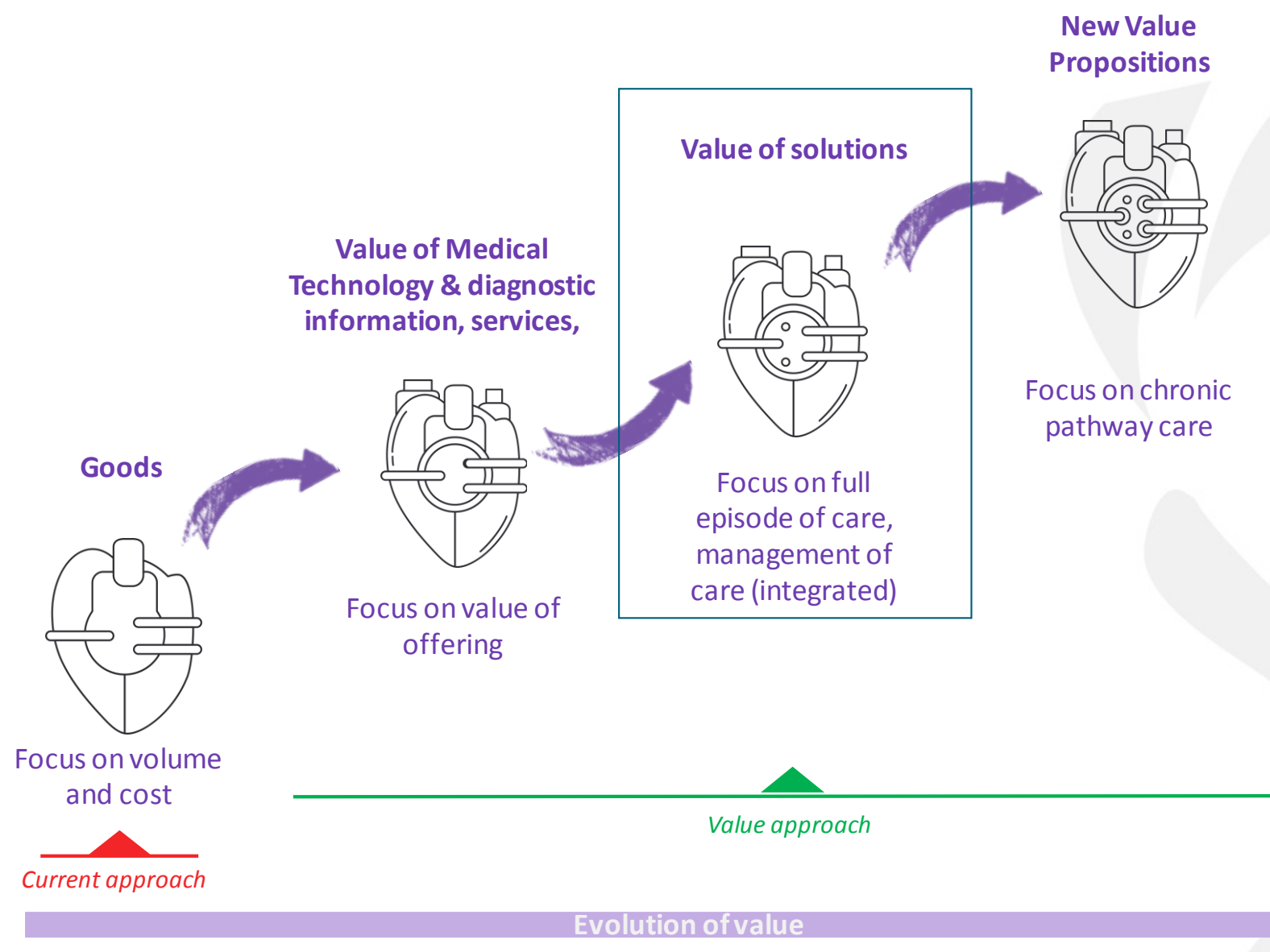
**Broader impact on  
society – policy**

**Importance**

# Value Based Procurement throughout Process



# 3 The Evolving Landscape – “Value Propositions”



## 4 EURIPHI CSA - Partners



■ Private company

■ Association and networks

■ Research organisation

■ Procurement organization and service providers

### Advisory Committee

Antonio Rosato (CORIS)  
 Catherine M. Fuhre (Sykehusinnkjop)  
 Dr H.G.M Niester (U. Groningen)  
 J.A Bax (Bax Procurement)  
 Peter Bottelberghs (U. Antwerp)  
 Roberto Zuffada (Funka)

## 4 EURIPHI CSA Deliverables I

### 1. Build an ecosystem

- EURIPHI **Procurement Community of Practice** – “Value” based
- EURIPHI **Regional Network of Health Authorities/Payers** willing to invest in innovative solution for integrated care and rapid diagnostics tests for infectious diseases

- Implement **Value based procurement of innovative solutions** (Value Based PPI/PCP) - **Most Economic Advantageous Tender** (BCG, PPO)
- Apply **a legal basis for Value driven cross-border procurement** with local decision making and contracting (CMS, PPO)



## 4 EURIPHI CSA Deliverables II

### 3. Deployment of cross-border PPI learning experience

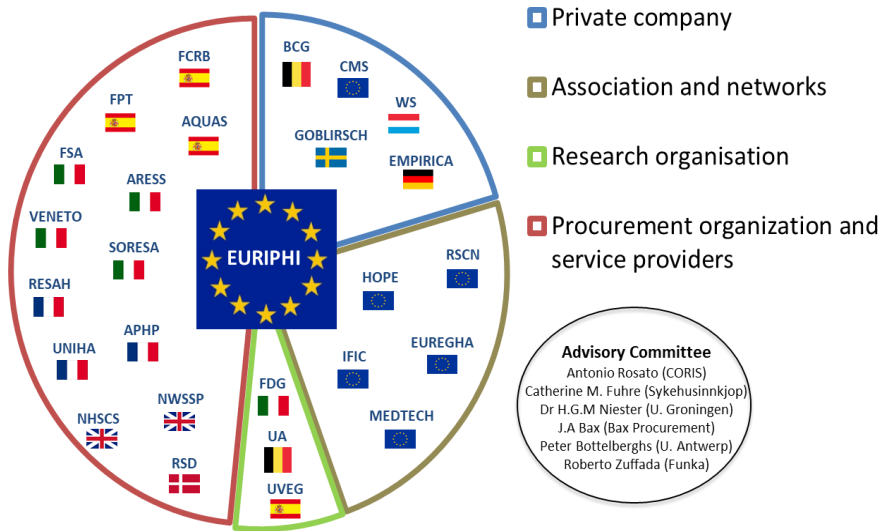
Implement Value Based Procurement processes and deploy value based PPI, informing future EU PPI/PCP calls

- Rapid diagnostics for hospital acquired infectious respiratory diseases (UA, PPO)
- Patient-centered integrated care model (IFIC, PPO)
- PPI/PCP calls input (AQUAS)

### 4. Dissemination and exploitation

- Cooperation, co-creation, application, learning and business cases communicated by EURIPHI partners European networks to all HC actors (EUREGHA, RSCN, HOPE, ALL)
- Exploitation of EURIPHI Results, building out the EURIPHI Value Based Community of practice throughout Europe ready to guide future PPI/PCP EU Calls transforming healthcare (EURIPHI)

## 4 EURIPHI – Leaders in Innovative Procurement



**Pioneering cross-border value  
Based Procurement of  
Innovative solutions  
transforming health and care  
delivery**

### France

UniHA  
 RESAH - Réseau des Acheteurs Hospitaliers  
 APHP - Assistance Publique – Hôpitaux de Paris

### Italy

VENET- Centro Veneto Ricerca e Innovazione per la Sanità Digitale  
 SORESA Società Regionale per la Sanità  
 FSA: Federsanità Servizi SRL  
 ARESS: Agenzia Sanitaria Regione Puglia

### Denmark

RSD: Region Syddanmark

### UK

NHSCS - Surrey and Borders Partnership NHS  
 Foundation Trust  
 NWSSP Velindre National Health Service Trust

### Spain

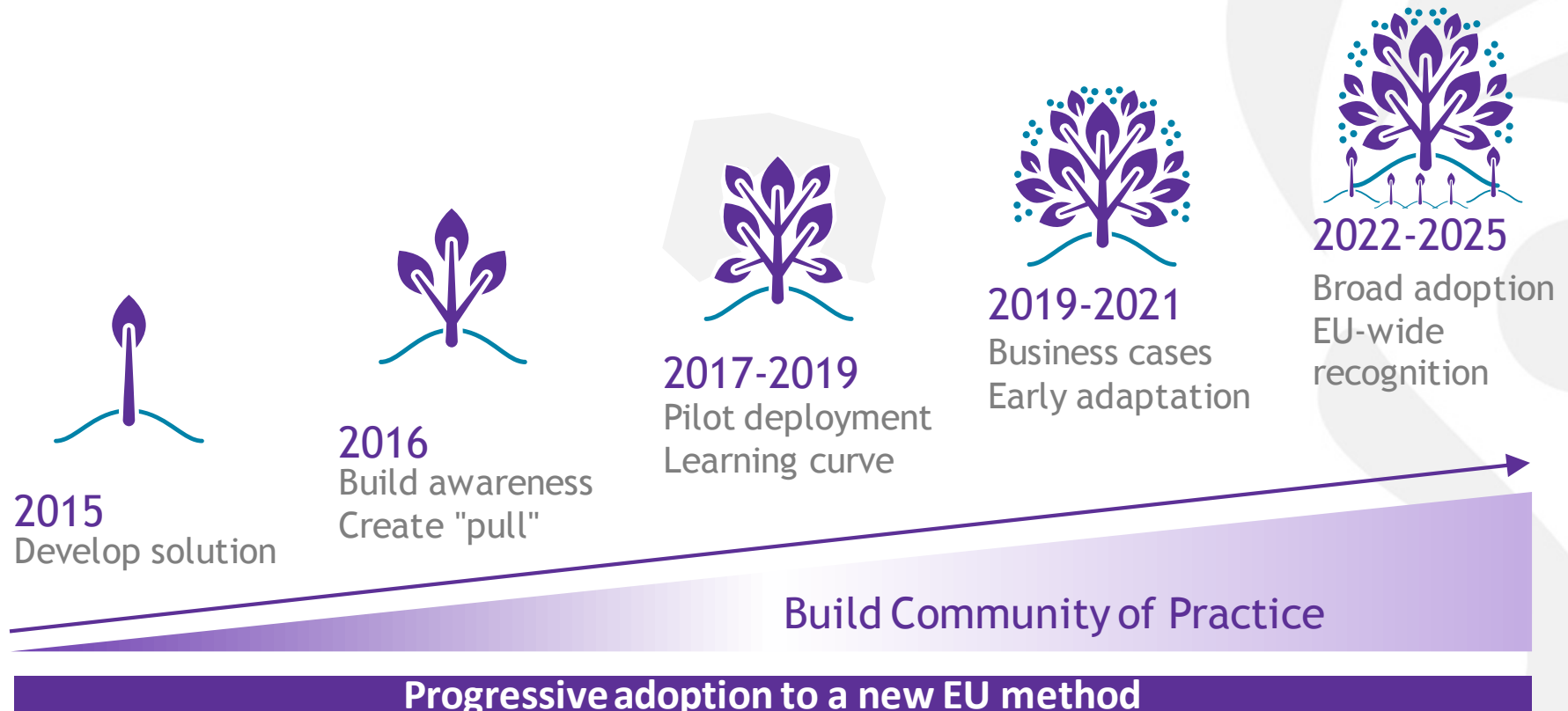
AQUAS - Agència de Qualitat i Avaluació Sanitàries  
 de Catalunya  
 FCRB - Fundació Privada Clínic per a la Recerca  
 Biomèdica  
 FPT: Fundació Privada Clínic per a la Recerca  
 Biomèdica

## ④ EURIPHI to foster a change in practice ...



**A Value Driven Approach to procure innovative solution for integrated care and Point of Care testing in infectious diseases**

# EURIPHI to accelerate Value Based Procurement Journey



Thank you!



## Yves Verboven

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**MedTechEurope**

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**Phone: +32 (479) 07 94 14**



#InvestEUresearch

# Horizon 2020 Work Programme for Research & Innovation 2018-2020

## Pre-Commercial Procurement of Next Generation Sequencing for routine diagnosis

Ecovation 2018, Vienna

Laszlo Helmle, Strategy Unit

Health Directorate, European Commission

Research and  
Innovation

# SC1-BHC-10-2019 Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis

## Specific challenge

- Shift to NGS approach in diagnostics
- NGS allows to simultaneously identify different actionable mutations
- Introduction of NGS in clinical practice is hampered by
  - its cost
  - availability of proper tests
  - insufficient quality assurance
  - technological bias
  - complex interpretation of data

# SC1-BHC-10-2019 Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis

## Scope

- Implement NGS in routine diagnosis for personalised medicine and scale up demand-driven innovation for health care systems
  - organisational
  - economical
  - technical and
  - clinical aspects
- It should lead to NGS tests with
  - clinically validated procedures
  - quality assurance schemes, tools and methods for data collection, management, analysis and interpretation
  - foster medical research and innovation



# **SC1-BHC-10-2019 Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis**

## Expected impact

- New NGS platforms for diagnosis
- European standards and quality assurance schemes
- Implementation of personalised medicine
- Sustainability of healthcare systems
- Benefit to European industry, in particular SMEs



# SC1-BHC-10-2019 Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis

Type of action

- Pre-commercial procurement

Opening

- 26 July 2018

Deadline for submission

- 16 April 2019

Total budget

- € 30 M

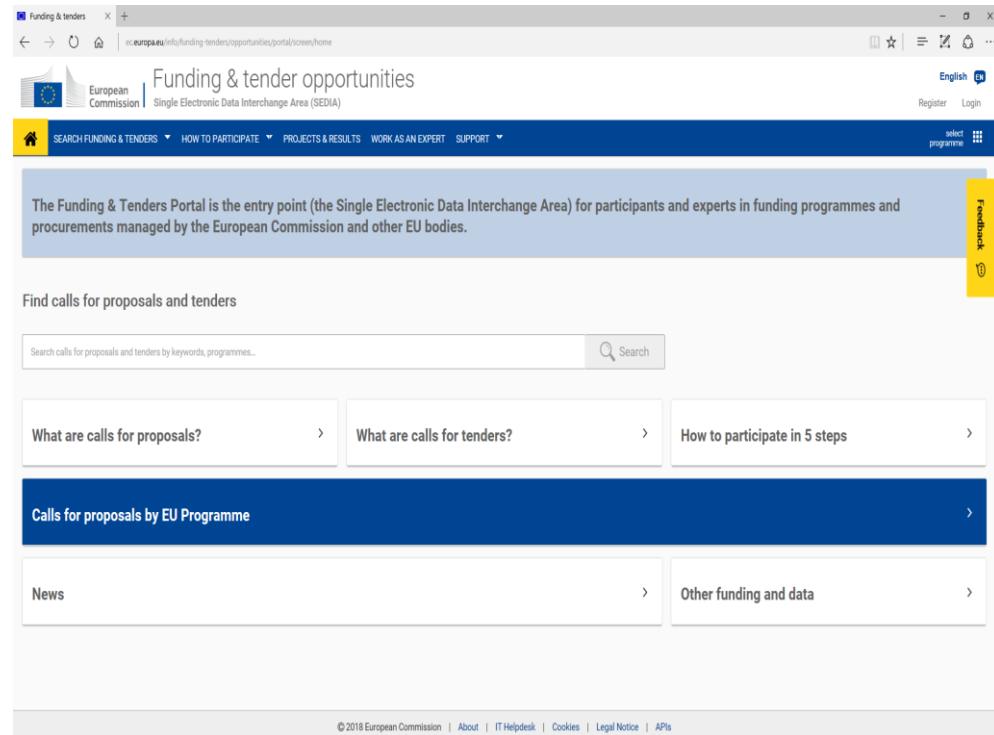
Indicative EU contribution /  
proposal

- € 9-11 M



# Funding & Tenders Portal: one-stop shop

- Call topics + all related documents
- Legal & guidance documents
- National Contact Points
- FAQs
- Access to proposal submission system
- Expert registration



<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

# Thank you!

@EUScienceInnov

**#InvestEUresearch**

**#EUHealthResearch**

<http://ec.europa.eu/research/health>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

# Innovation Procurement in Health and Active Ageing – Our Experience!

**Julie-Ann Walkden**

Small Business Research Initiative Executive  
Business Services Organisation

Belfast

MAGIC-PCP Co-ordinator

27th November 2018

***julie-ann.walkden@hscni.net***



- Mobile Assistance for Groups & Individuals within the Community – Stroke Rehabilitation
- Horizon 2020 - PHC-27 PCP call – “Self-Management of Health & Disease & Patient Empowerment Supported by ICT”

<http://magic-pcp.eu>

This Project has received funding from the *European Union's Horizon 2020 Research and Innovation Programme* under grant agreement No 687228



## What is MAGIC?

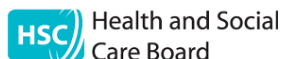
MAGIC – Mobile Assistance for Groups & Individuals in the Community.

MAGIC is a European wide Pre-Commercial Procurement (PCP) focused upon creating innovative technology;

Transforming services for people post stroke to improve physical function and personal independence



### Buyers Group



### Project support



### Observer states



Project funded in the framework of Horizon 2020  
DG for Communications Networks, Content and Technology  
Sustainable and Secure Society - Health and Well-being -

# Our Goal...

- To develop new, innovative technology based solutions that **improve physical function and thus personal independence, within the first six months following the onset of stroke.**

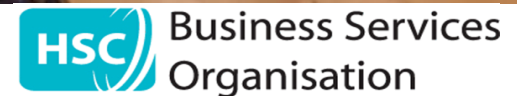
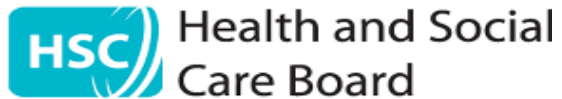




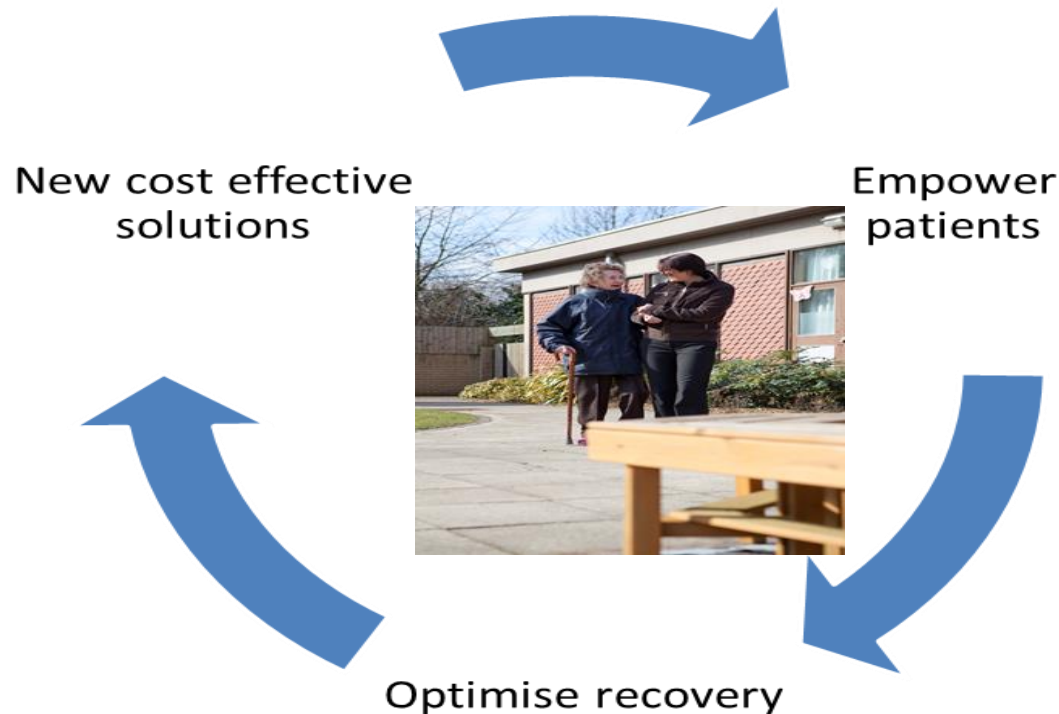
# Our Consortium...



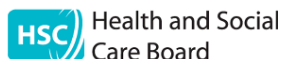
# Our Buyers Group



# What impact does MAGIC aim to achieve?



## Buyers Group



## Project support



## Observer states

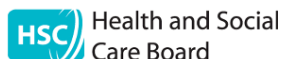


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Sustainable and Secure Society - Health and Well-being -

# How will MAGIC achieve this?



## Buyers Group



## Project support



## Observer states



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## R&D / Pre-commercial Procurement (PCP)

## Public Procurement of Innovative Solutions (PPI)

### Phase 0



Curiosity  
Driven  
Research

### Phase 1



Solution design

### Phase 2



Prototype development

### Phase 3



Original development  
and testing of limited  
volume of 1<sup>st</sup> test  
products/services

### Phase 4



Deployment of commercial  
volumes of end-products  
Wide diffusion of newly  
developed solutions

Supplier A

Supplier B

Supplier C

Supplier D

Supplier B

Supplier C

Supplier D

Supplier B

Supplier D

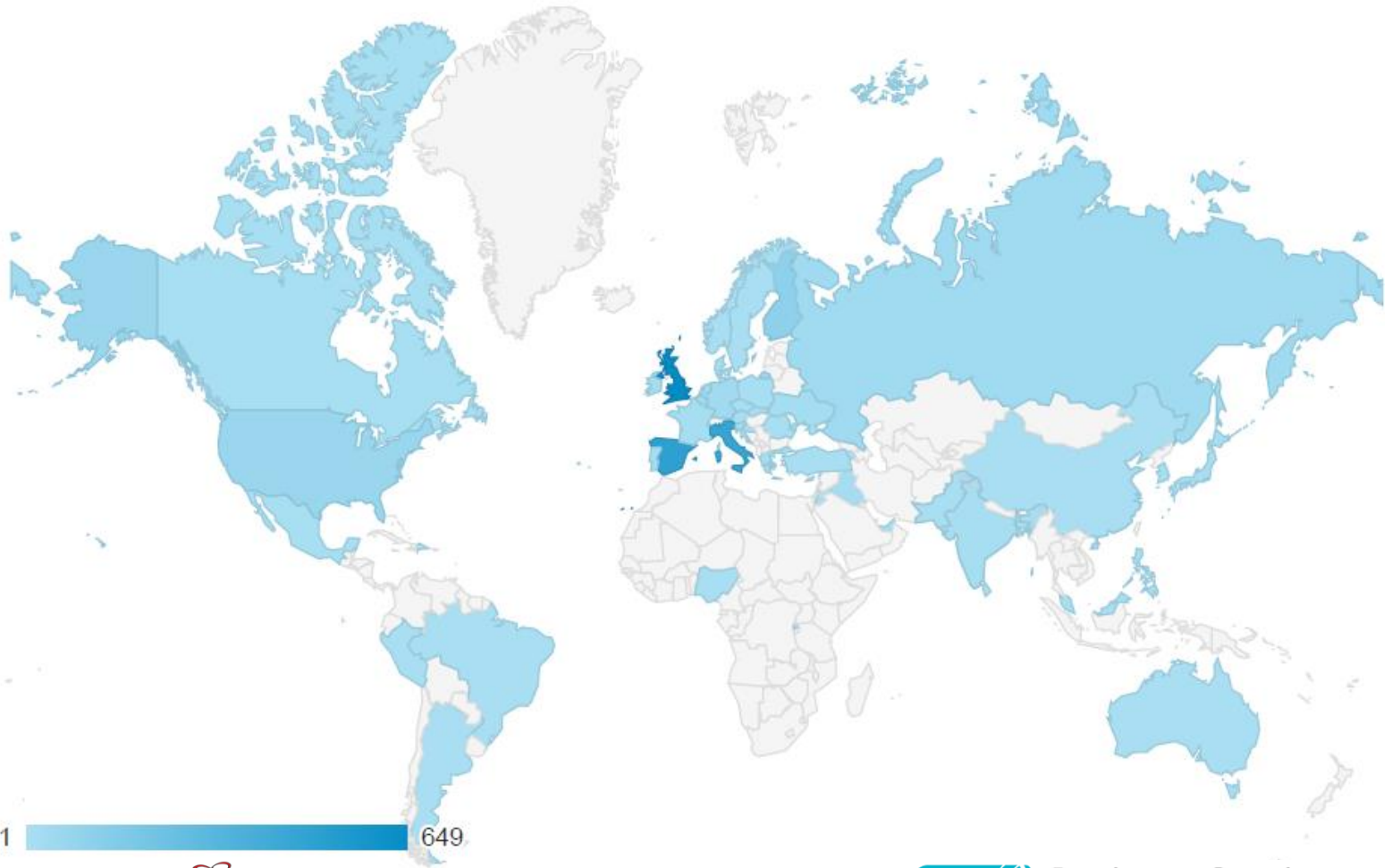
Supplier(s)  
A, B, C, D  
and/or X

Phases 1 & 2 Combined in SBRI



Business Services  
Organisation

# Worldwide Interest...



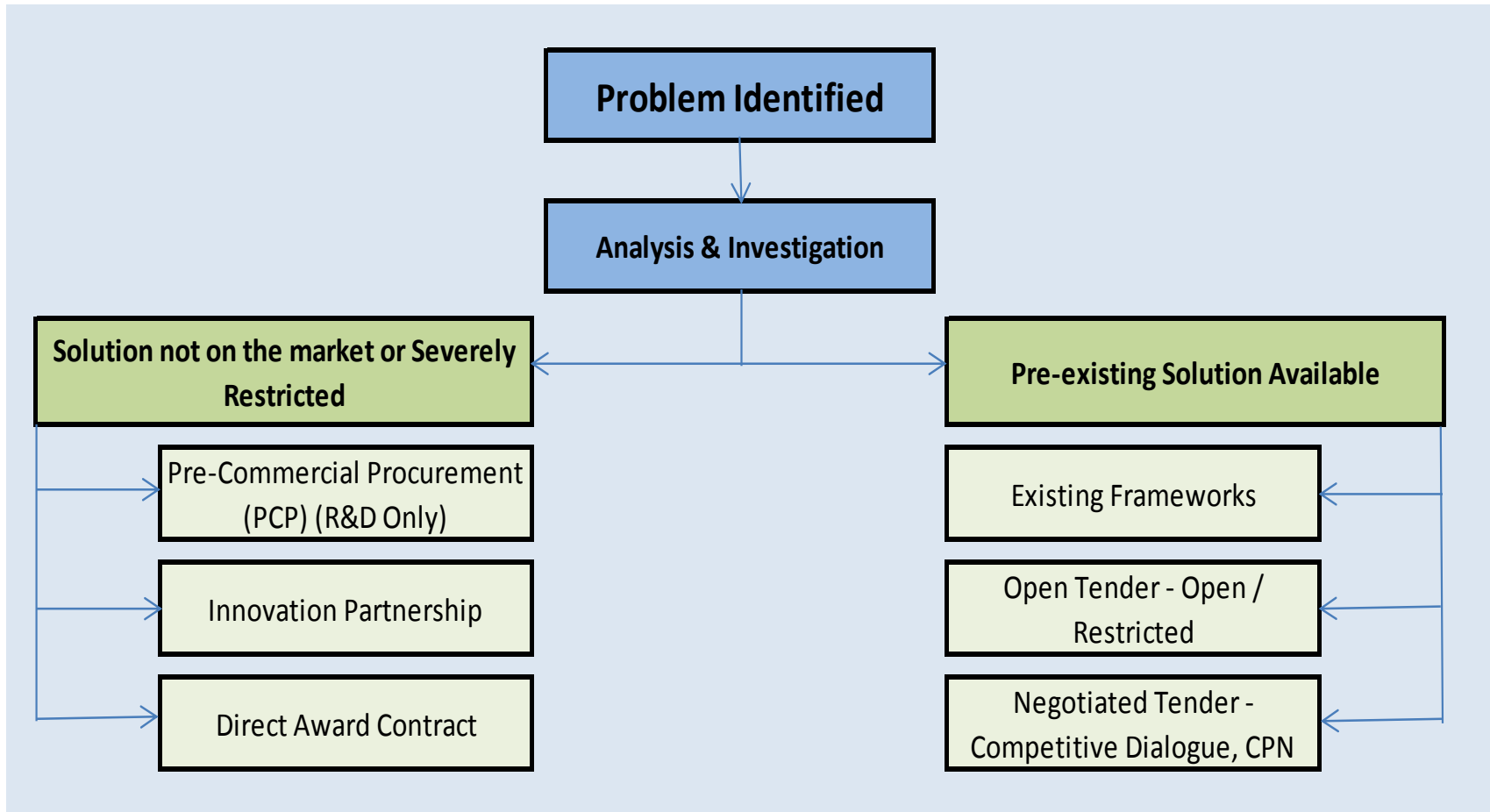
*magic*

# This is the Procurement of Innovation...



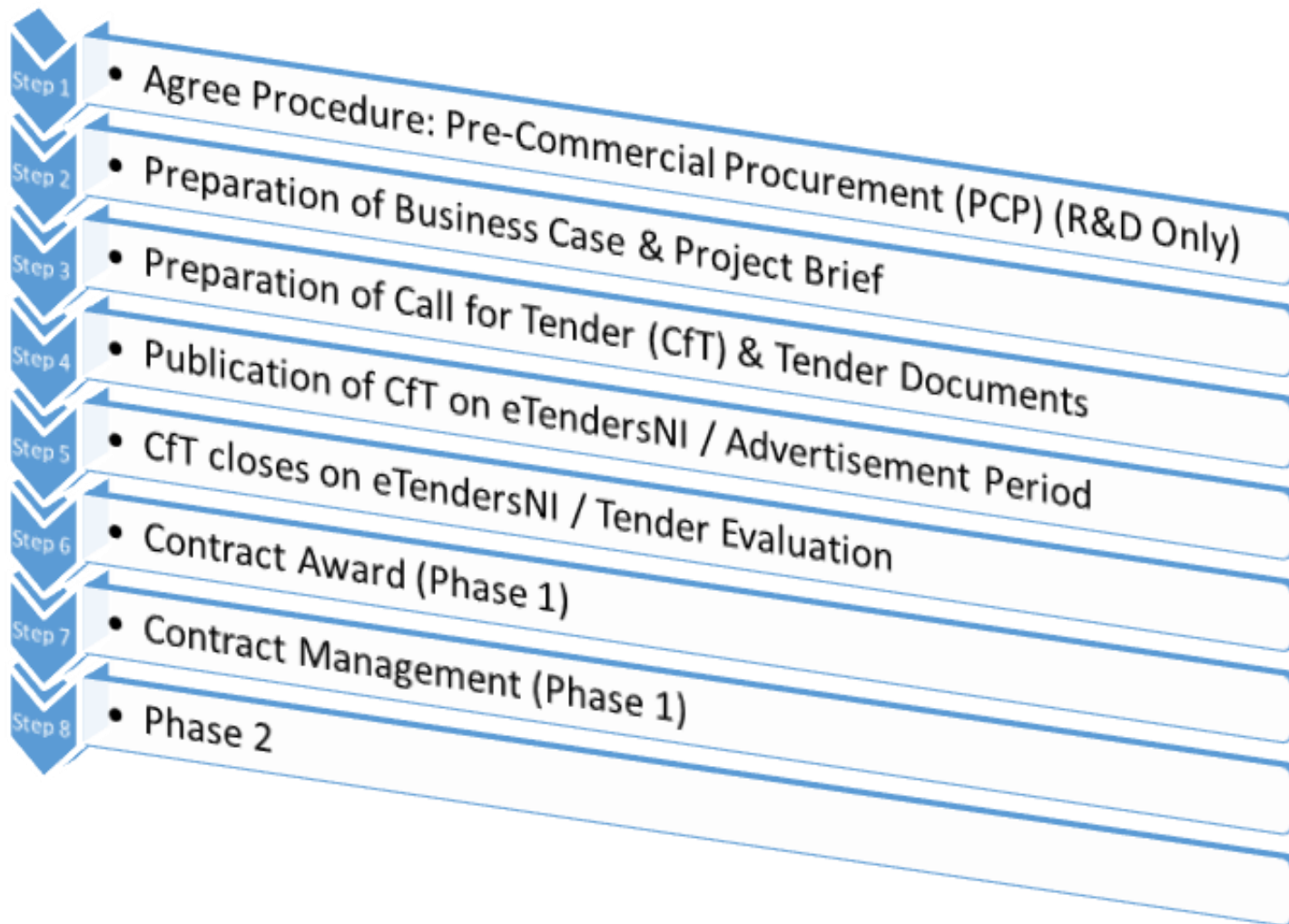
# Pre-Commercial Procurement (PCP) Process Map

## 1. Procurement Decision Process (Overview)





## 2. Pre-Commercial Procurement (PCP) Process Flow – Phase 1



# EC fund 70% of MAGIC...

		Minimum Number Providers	euro innovation award	Total
Phase 1	Solution development	7	€ 60,000.00	€ 420,000.00
Phase 2	Prototyping	4	€ 105,700.00	€ 422,800.00
Phase 3	To scale trial by 3 suppliers in 2 EU States	3	€ 930,000.00	€ 2,790,000.00
			TOTAL	€ 3,632,800.00
	In PCP Project MAGIC the EU funds will directly & fully fund the PCP-Costs			



# What has MAGIC completed to date?

## February 2017

8 successful suppliers from across Europe were awarded MAGIC Phase 1 contracts to design solutions.

All 8 suppliers were assigned a Go-To Clinician in a Northern Ireland Trust and in Italy for their expertise to assist in prototype design.

## June 2017

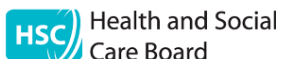
Suppliers showcased their final Phase 1 solutions to the Buyers Group and Italian Clinicians in Chieti, Italy.

## November 2017

4 of the 8 Phase 1 suppliers were awarded a Phase 2 contract and started prototype development:



### Buyers Group



### Project support



### Observer states



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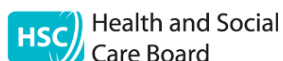
**November 2017** - Suppliers started Phase 2 Prototype development. Each supplier was assigned a Go-To Clinician and a Trust Research Manager for advice with trial planning.

**April 2018** - Suppliers showcase Phase 2 solutions in Chieti, Italy to the Buyers Group and Clinicians

**April 2018** - Phase 2 close

**October 2018** - Phase 3 commence with 3 successful suppliers participating for 18-months. Feasibility Study/ to-scale field trial

**Buyers Group**



**Project support**



**Observer states**



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## **PHASE 3 – Three Feasibility Studies**

**Each Study has One Zone in Northern Ireland & One Zone in Italy**

**Feasibility Studies have full Research Governance & Ethics Approval**

**Up to 150 participants per Zone – Potential for up to 900 Patients to Benefit**

**Clinician Involvement and Co-Creation**

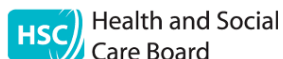
**All 5 of the Northern Ireland Health and Social Care Trusts are equally involved**

**South Eastern Trust & Belfast Trust - Corehab**

**Northern Trust - Camlin**

**Southern & Western Trusts – Tech-4-Care**

### **Buyers Group**



### **Project support**



### **Observer states**



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# Camlin – ARC-Intellicare

ARC-Intellicare is a machine-learning-based wireless platform designed to work in a patient's home in post-acute phase after stroke. ARC can address the specific rehabilitation needs of each patient, by allowing therapists to personalise rehabilitation routines, provide continuous monitoring and give performance feedback during both the exercise program and Activity of Daily Living (ADL). The main components are: wearable inertial sensors for upper, lower limb and postural monitoring, a tablet and a software platform, with a simple, gamified and straightforward usability. From October 2018 the ARCANGEL field trial to evaluate the feasibility, acceptability and usefulness of ARC during the rehabilitation program of Italian and Northern-Irish pa



**CAMLIN**



**CAMLIN**

# Corehab-WeReha

WeReha is an innovative medical device to rehabilitate stroke patients by using wearable sensors and biofeedback for total body exercises and “smart objects” for hand rehabilitation. The study will be evaluated in Northern Ireland and Italy with more than 100 stroke patients to assess their acceptance of technology and evaluate improvement in motor skills after 3 and 6 months of usage at home. Physiotherapists will train patients before discharge and follow progress at home through an easy to use web application. Outcome measures include percentage of patients using WeReha and their effective activity level, Barthel index, mRS and other validated scores will be used in the study.







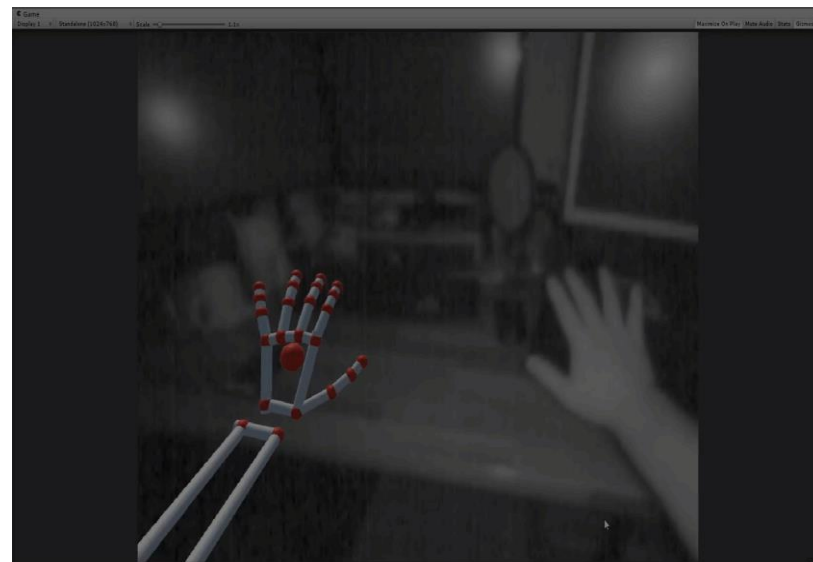
# Tech4Care – Magic Glass

- The MAGIC-GLASS project aims to develop an innovative home rehabilitation solution for rehabilitation of stroke survivors. MAGIC-GLASS exploits the potential of augmented and virtual reality (AR / VR) for enabling the patient to perform optimal physical and cognitive rehabilitation at home, by means of serious games grounded on the mirror-therapy approach. In Phase 3, the MAGIC-GLASS project will have the main aim to test and evaluate a working prototype in clinical trials with stroke patients in both Italy and Northern Ireland. Study results will provide evidence about the feasibility, effectiveness and usability of the MAGIC-GLASS prototype.



**Tech4Care**

Nuove tecnologie per l'assistenza







## **Prof.ssa Maria Gabriella Ceravolo – Clinica di Neuroriabilitazione Ospedali Riuniti (AN)**

The initiative has been successful, **given the fact that all the proposed solutions seem to reflect the real functional needs of patients with stroke.**

Moreover, all the four devices **seem to meet the requisites of Usability and Acceptability by subjects with motor and cognitive deficits, and of Sustainability, given their potential distribution in the retail market for home training.**

Some devices seem more suitable to foster patients' motivation and motor relearning than others (maybe this is just my opinion, but the products that exploit immersive virtual reality could determine a greater and quicker impact on brain plasticity than the ones using wearable motion sensors).

In order to help the assessors to understand the clinical impact of the proposed devices, it would be useful that each buyer tests all the solutions on the same group of subjects. I mean that, if different centers experiment different solutions, the outcome will likely be influenced also by individual variables of the different studied samples. **If each center and each patient has the opportunity to train motor (cognitive) skills with all the devices (in consecutive time periods), the individual variables will be better controlled.**

# Was the MAGIC PCP what you thought it would be?

Sabrina - I had no previous experience. **I learned by doing.**

Emer - I thought the project exceeded expectations in the area of engaging with provider and the concepts of co-design with end users. This level of partnership in the R&D process was a very strong point.



# What did you learn by being part of a PCP?

Sabrina - To give voice to patients and caregivers not as "end users" but as main actors of the design in the healthcare sector

Emer - I learned a great deal about the challenges faced by SMEs in designing new products.

- How system constraints can make procurement in a public sector setting very challenging for suppliers.
- Culture GAP between public and private sectors, in that the public sector had to adjust to the rapid pace set by the PCP process and the milestones to be achieved by companies.



# What did you dislike or found difficulty with?

Sabrina - The relationship with the administrative and legal staff in my organization caused by the absence of specific skills in the management of the PCP.

Emer - Within a huge system such as HSC NI it was difficult to conduct the volume of work required and maintain constant communication with stakeholders.

- Key stakeholders during design were users and clinicians whilst in Phase 3 Senior Trust Management needed to be wholly bought into the project.
- There was a sense that we could have spent more time getting full 'buy-in' for Executives sooner. However, this may not have been possible as they would only be interested at the point in the process where they would be required to actually interact.
- Info Tech Trust services found the timescales to enable tech deployment too challenging – Security, Data Access & GDPR





# What did you dislike or found difficulty with?

## Lawyers & Procurement Managers:

Colm - From my perspective there should perhaps be greater clarification on what is required to be in the contracts:

- There are some things that are essential to ensure the project remains compliant with procurement and state aid rules, but
- There are other elements where a certain amount of tailoring can be performed. There should be greater guidance on these different areas.

Damien- Two significant problems with the procurement:

- SME's interpretation of the IPR discount when pricing
- Inability to adjust prices for later Phase CfT i.e. the SME's were asked to price subsequent phases at time of initial bid and this was not good for suppliers or the procurers as too much is unknown in the pre-phase 1 stage when the technology is truly innovative.

# What did you think was good?

Sabrina – The 'Needs Profile' as the challenge for the public-private partnership

Emer - It was really great to get stroke survivors and clinicians involved with innovation. This will be the first time many of our clinicians have been involved in technology development and they were very excited by it. The need for technological transformation to assist with bridging the GAP between workforce supply and demand remains just as crucial as it was at project inception. There is real hope that a procurable solution will be found by the end of the process.



# What advice would you give to others thinking about using the PCP instrument?

Sabrina - Always gather the profile of needs of the challenge involving patients and caregivers for their experiential knowledge

Emer - Spend as much time as possible early in the process getting clear commitments from key decision makers in host organisations.

- If the providers of the services and trial sites are not in the Buyers Group this is extra important.
- Set aside a clear budget for dissemination and communication.
- Be mindful of cultural differences in international projects, these can be very positive and we have learned much through solving problems together as an international team.



# Any other thoughts?

Emer - Don't underestimate the challenges involved in IT integration with public sector IT systems. Build this in to trial designs early and look for alternative solutions that do not require integration during the trial phases.

*magic*

# PCP Enabling Innovation in Health & Social Care Northern Ireland & Italian Healthcare

- Driving targeted change to:-
  - Address real & defined issues
  - Help more service users with less resource ... efficiency
  - Be more effective
  - Allow creativity to shine ... co-creation between industry and frontline practitioners
  - New solutions for a new era

*magic*



Business Services  
Organisation

# Platform for Innovation of Procurement and Procurement of Innovation (PIPPI)

Romualdo Ramos & Tanja Stamm

Medical University of Vienna

Center for Medical Statistics, Informatics and Intelligent Systems

Institute for Outcomes Research

ECOVATION 2018 / Vienna, November 27th, 2018

# European University Hospital Alliance

Founded in April 2017



# Background

- Digital transformation of healthcare calls for innovative solutions for which public-private collaborations are essential.
- However, these collaborations are often reactive (rather than pro-active) and not fully in touch with the needs and specifications of healthcare professionals.
- To address this challenge, the demand side should be in the driving seat of innovation procurement in healthcare.





# Proposed Solution

The PIPPI project will create a **cross-border Community of Practice (CoP)** of major European university hospitals bringing together experts from the demand side to identify common clinical needs for digital healthcare solutions, and prepare a **cross-border PCP** for a selected clinical need while also offering tailored assistance on procurement to other hospitals within and outside the CoP.

The idea is that creating a cross-border CoP focusing on procurement of innovation in the short term, will have an impact on innovation procurement in the long term.



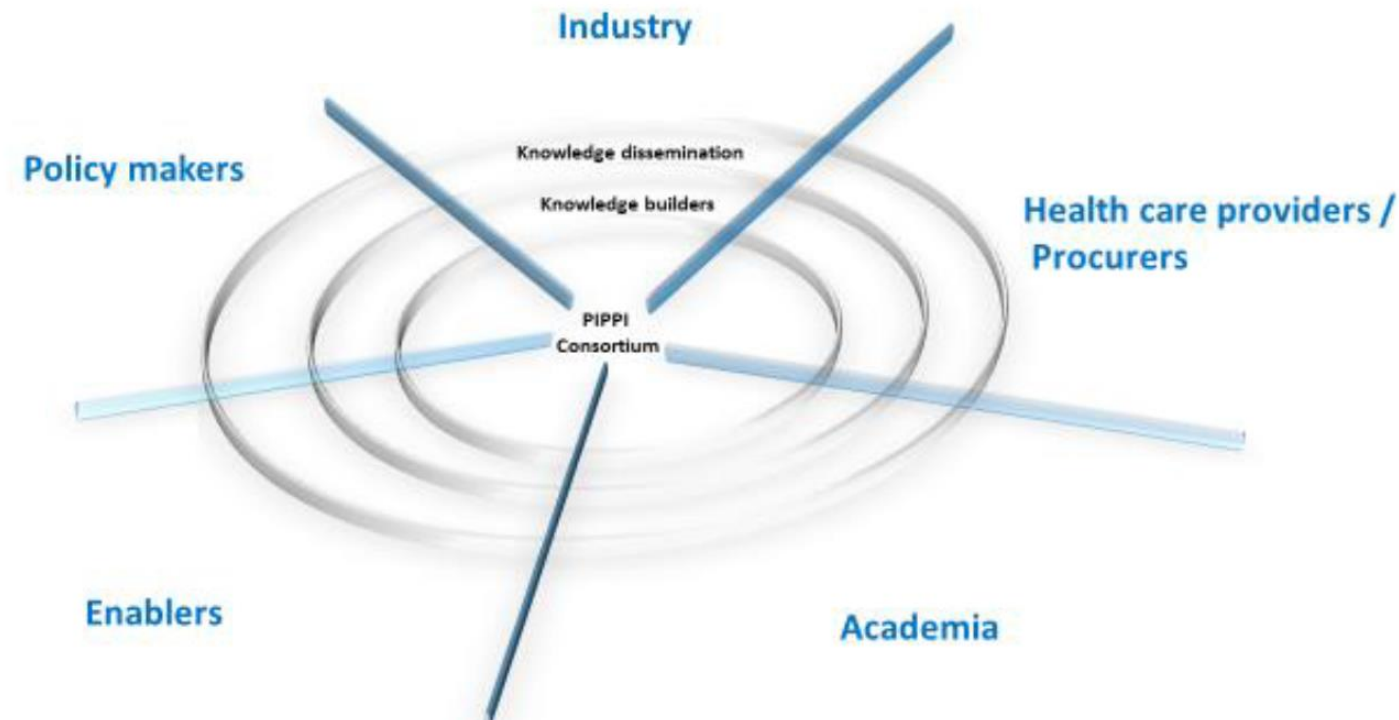
# Overall Aim

- the ultimate aim of all consortial partners is to solve shared clinical challenges.
- The consortium and its network partners (e.g. industry, payers) will gather best practices, and develop structural capital and tools around procurement that will be shared through a knowledge brokerage platform on an EU level.
- The consortium will identify major clinical needs around Europe and compile a shortlist of challenges that are suitable to tackle with digital solutions. This shortlist will be the base for a feasibility study and preparation of a concrete cross-border PCP.
- To secure the future use of project results, including long-term assessment and monitoring of outcomes, the PIPPI project will develop a business and implementation plan with the ultimate aim to improve patient outcome, decrease healthcare costs, create growth for European life science industry and create new markets.

# Five (5) objectives of the PIPPI project

**(1)** Establish an eco-system of stakeholders and partners, with aligned purposes and incentives to improve health care, by enabling & growing the use of value-based innovation procurement.

PiPPi CoP Ecosystem Project members



# Five (5) objectives of the PIPPI project

**(2)** Establish, leverage, and scale a shared set of tools and best practices for the common benefit of healthcare providers, patients/citizens, private sector, and policy-makers.



**(3)** Establish an open access web-platform for multi stakeholder communication and collaboration.



# Five (5) objectives of the PIPPI project

**(4)** Complete a feasibility study and preparation of a cross-border PCP (Pre-Commercial Procurement) for digital health services, based on identified health care needs.

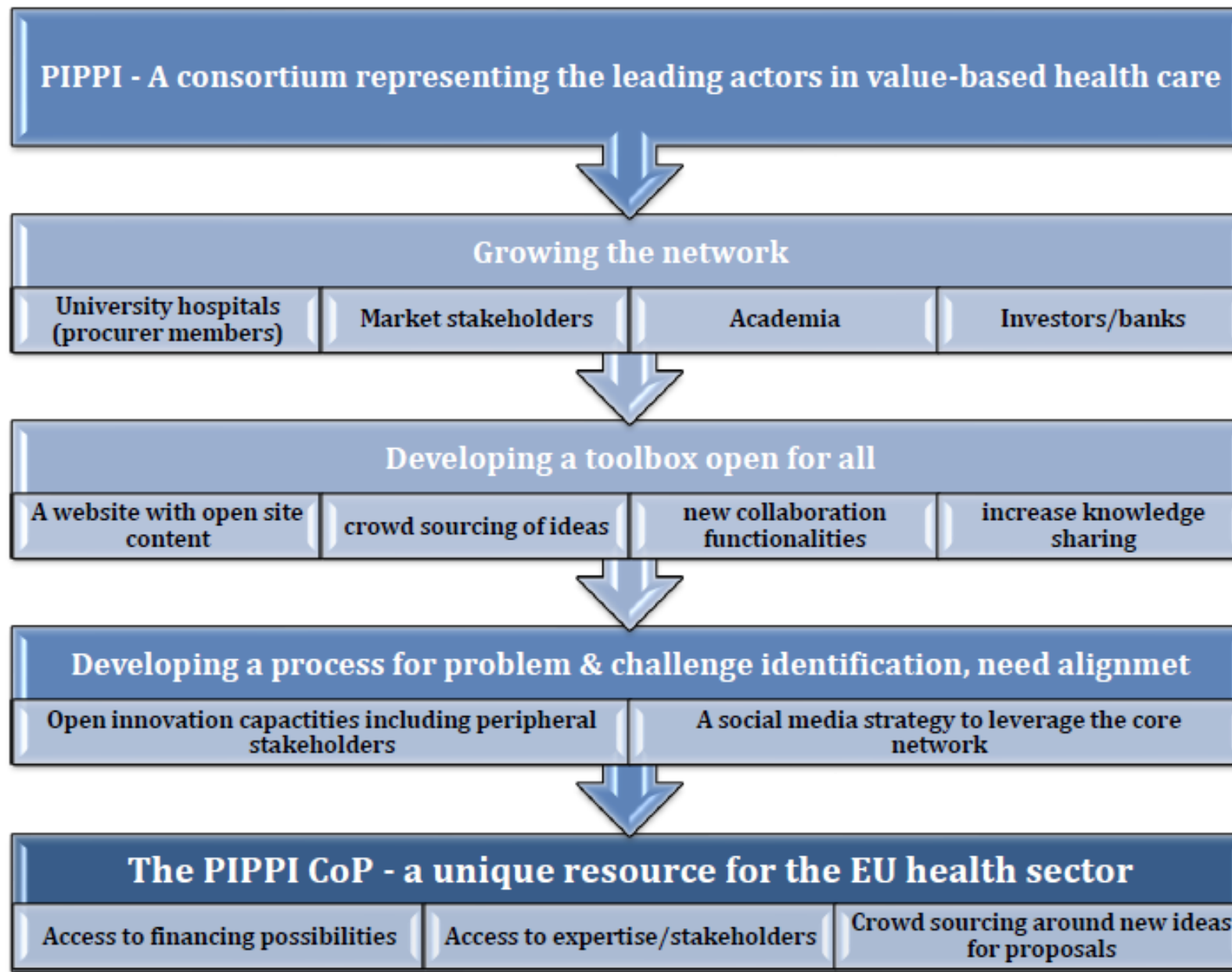


**(5)** Establish an implementation & maintenance plan and development of structures and processes to ensure that the value of the PIPPI activities continues after the duration of the project. This includes the validation of a working business plan & model to ensure a wide dissemination, exploitation and sustainable results.

# Patient Pathways and Outcomes Program developed in parallel with the PIPPI project

Prioritization of key pathologies to test the patient pathway and outcome programme

PATIENT PATHWAY	KAROLINSKA UNIVERSITY HOSPITAL	ERASMUS MC	CHARITÉ	VALL D'HEBRON	OSPEDALE SAN RAFFAELE	THE MEDICAL UNIVERSITY VIENNA	ASSISTANCE PUBLIQUE HÔPITAUX DE PARIS	UZ LEUVEN	KING'S COLLEGE HOSPITAL
BREAST CANCER	✓	✓	✓	✓	✓	✓	✓	✓	✓
CLEFT LIP	Facial deformities	✓	Only children					✓	
KIDNEY TRANSP....	✓	✓	✓		✓	✓			
STROKE	✓	✓	✓	✓	✓	✓	✓	✓	✓
VERY PREMATURE CHILDREN	✓	✓		✓	✓	✓			
LUNG CANCER	✓				✓				
HEART FAILURE	✓	✓			✓				✓
PROSTATE CANCER	✓	✓	✓	✓	✓	✓			
PREM <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓



# Thank you for your attention!

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[tanja.stamm@meduniwien.ac.at](mailto:tanja.stamm@meduniwien.ac.at)

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# STOPandGO

Sustainable Technology for Older People – Get Organised

*Liverpool City Council - England*



*PPI Pilot project funded by the European Commission*

**Liverpool City Council**



# Who are we?

**Liverpool** - population of 466,000

- 157,900 people under 25
- Since 2001, increases in those aged 40-64 years and 75 and over

## **Liverpool City Region (LCR)**

- Population of 1,507,000
- LCR is a £23.1bn economy
- 690k economically active (3.7% below national average)
- LCR households have £1,700 less income per person than the national average
- City Region contains 34 of the top 100 most severely income deprived LSOAs in England





# Who are we?



Liverpool  
City Council

Liverpool City Council is the governing body for the City of Liverpool in Merseyside UK.

The authority has a statutory duty to assess and provide care to meet people's eligible social care needs and their eligibility for publicly funded care and support.

This social care is means tested and chargeable unlike health care which under the NHS has to be free at the point of delivery.

Liverpool Clinical Commissioning body is the authority responsible for providing the local NHS services.



**Liverpool City Council**

# Potted History of Liverpool

- Liverpool founded in 1207 by Royal Charter
- From 1660, growth of population and commerce – sugar and tobacco trade with America and West Indies
- From 18th Century Slave Trade expanded
- 19th century industrial revolution – “2nd City of Empire” and world’s leading cotton market and links to India
- 1970s/80s: economic decline, population decline, 20% unemployment
- Economic revival since mid-1990s
- European Capital of Culture 2008



# What is the problem been addressed?



Liverpool  
City Council

**The previous domiciliary care service contract legally needed to be re procured.**

Issues included:

- Capacity due to ever increasing demand – originally 6 contractors had to offer 6 short term contracts
- Budget cuts - In 2010 the council received £523.72 m in Government funding, compared with the £243.90m it will receive this year. That figure will drop even further to less than £215m by 2019/20
- Recruitment and retention of carers – despite the increase in the living wage there is a shortage of carers across all the social care providers





Liverpool  
City Council

## STOP & GO

The main objectives are:

- Developing a common procurement template for health and social care for older people
- Encourage interaction with other countries
- Encourage technical Innovation

The STOP and GO project focuses on:

1. Procuring services enabled by technology instead of “just” innovative technology itself
2. The technology has to exist as there is no funding for development of technology.







Liverpool  
City Council

## STOP & GO

Procurement process:

- Market Consultation day – Anfield, 20 care providers and 50 tech companies “speed dating”
- Clash of cultures – very low tech in Domiciliary Care services
- Care providers chose which technology suited their business need





Liverpool  
City Council

## STOP & GO

- We had indicated in the specification areas where the advancements in new technology could assist in. It was not an exhaustive list and any technological products that can improve the quality and safety of services and service users were welcome:-
  - workforce management
  - lone worker protection
  - compliance management
  - integration
  - assistance with daily living tasks







Liverpool  
City Council

## STOP & GO

- We evaluated the tenders on quality of service
- Held competitive dialogue with tech companies
- Agreed to fund the chosen technology which includes: –
  - ❖ PASSsystem – Digital care records updated in real time
  - ❖ Webroster – digital rostering with real time updates
  - ❖ LoRaWAN – technology (low cost ambient internet of things technology)





Liverpool  
City Council

## STOP & GO

### ❖ PASSsystem – Digital care records

- Using Smart phone technology
- Carers swipe QR code on record when arrive in house for tasks and outcomes to be achieved – they update activities
- Families can get app to see in real time what activity has taken place
- Companies have dash board to see in real time if any outcomes outstanding



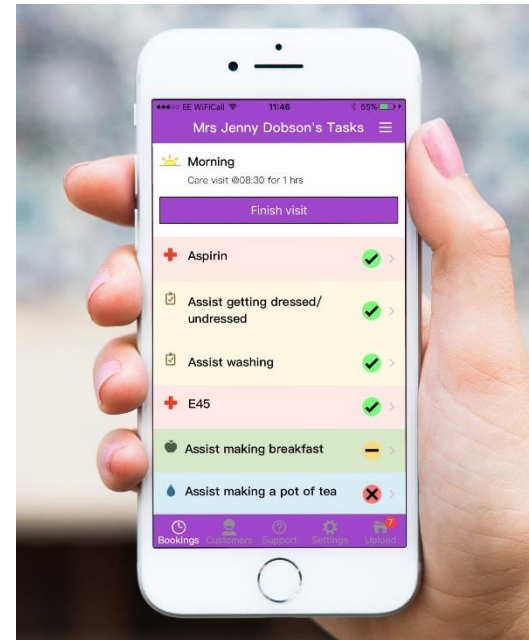
# Technology Solutions

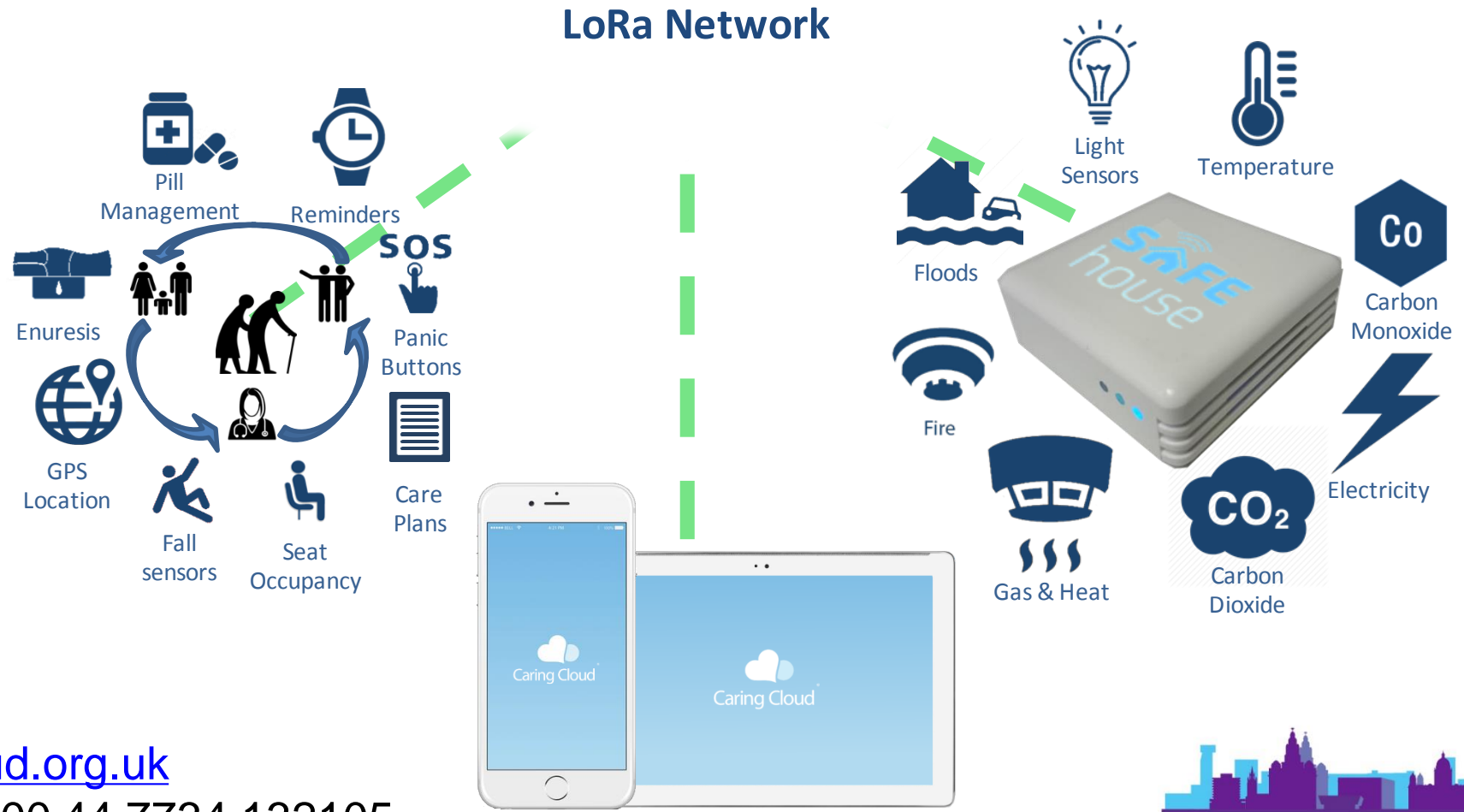
PASS System - digital care management platform, provides single view of care records from enquiry, medication and task changes. Automates the process of assessments

[www.everylifetechnologies.com](http://www.everylifetechnologies.com)

Contact:

Phil Holt +00 44 7393 765148





[www.caringcloud.org.uk](http://www.caringcloud.org.uk)

Lionel Phillips +00 44 7734 132105

# Initial lessons learnt

- Lead in time for providers
- More training for providers...
- Transferring data from paper records to digital records takes time
- Real time monitoring whilst driving up quality highlights issues
- Not all the Carers were prepared to take on the new system
- The Technology market in health and social care is immature this has been an issue for the SME providers in developing a sustainable business model



# Building on the Lessons learnt

- LCC now leading member of DCMS funded 5G Health and Social care test bed and trial
- Quality of care improved, demonstrated with improved CQC ratings
- Used same STOP & GO procurement process to introduce digital care records to care homes
- Using STOP & GO concept of procuring services with tech not just technology by itself
- Developing with Liverpool ehealth cluster Implementation ready tool to complement tech ready tool





Liverpool  
City Council



Any Questions?

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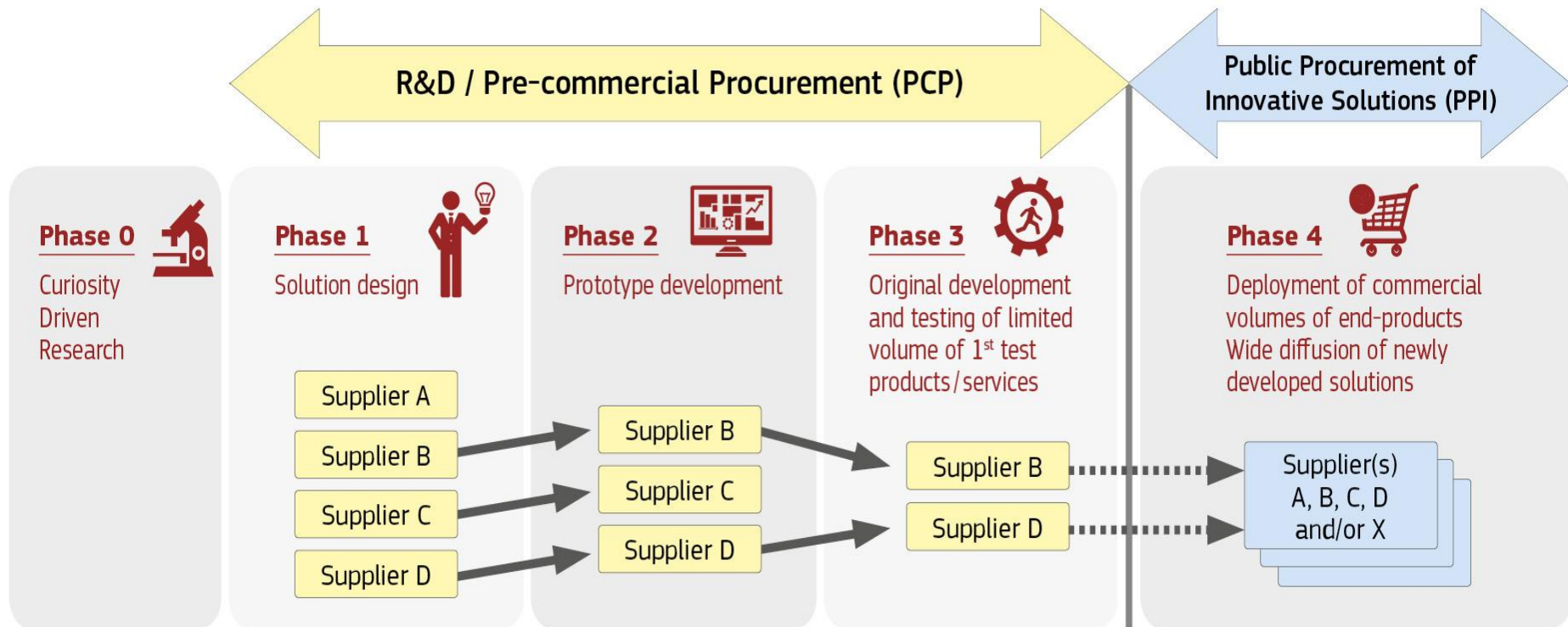


# **INNOVATION PROCUREMENT H2020 SUPPORT**

**Vassilis Tsanidis Dr.Jur.  
Digital Innovation and Blockchain Unit (F3)  
DG CNECT  
European Commission**



- **PCP** to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors
- **PPI** to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



# Forms of support



- ❖ Coordination and Support Actions (**100%** funding rate):
  - Support only coordination activities e.g. preparation of a PCP or PPI by a group of procurers (investigating feasibility to start PCP/PPI, open market consultation with industry before initiating a concrete PCP or PPI etc)
  - CSAs do not provide EU co-financing for an actual PCP or PPI procurement
- ❖ PCP Actions (maximum **90%** funding rate):
  - Provide EU co-financing for an actual PCP procurement (one joint PCP procurement per PCP action) + for related coordination and networking activities (e.g. to prepare, manage and follow-up the PCP procurement)
- ❖ PPI Actions (**35%** funding rate):
  - Provide EU co-financing for the actual PPI procurement(s) (one joint procurement **or several separate but coordinated PPI procurements** per PPI action) + for related coordination and networking activities (e.g. to prepare, manage and follow-up the PPI procurement(s))

# PCP and PPI actions – participation requirement



**Minimum 3 independent participants from 3 different MS or AC, of which minimum 2 public procurers (buyers group) from 2 different MS or AC**

In addition, other entities can also participate

- In buyers group: also private/NGO procurers providing services of public interest
- In coordination/networking activities: any private/public type of entity (e.g. experts, end-users, certification bodies that assist procurers) that has no conflict of interest (no potential suppliers of solutions for the PCP/PPI)

**Sole participants** can be also eligible if the minimum conditions are met by the legal entities forming the sole participant (e.g. central purchasing bodies, European Research Infrastructure Consortia, European Groupings of Territorial Cooperation)

Public procurers are contracting authorities or contracting entities as defined by the EU public procurement directives

MS = Member States, AC = Countries Associated to Horizon 2020

# PCP and PPI actions - Role of different actors



## ❑ **Beneficiaries and third parties**

- Action involves beneficiaries that undertake together the PCP procurement or PPI procurement(s), i.e. the buyers group & the lead procurer
- Action can include third parties that can make in-kind contributions (make available resources / equipment to the beneficiaries to carry out the PCP or PPI(s)). E.g. end-users (fire brigades) as 3<sup>rd</sup> party associated to procurer/beneficiary (min. of interior)

## ❑ **Buyers group**

- Procurers in the action that provide the financial commitments for the PCP or PPI(s)
- Min 2 public procurers from 2 different Member States or associated countries
- Representing the demand side (responsible for acquisition and/or regulatory strategy, or having a mandate from one of more of such procurers to act on their behalf in the procurement e.g. central purchasing bodies)
- Seeking ambitious quality and/or efficiency improvements in services of public interest

## ❑ **Lead procurer**

- Procurer appointed by buyers group to lead and coordinate the PCP or PPI(s). Can be one of the procurers in the buyers group or another procurer.

## ❑ **Subcontractors**

- Successful tenderers, selected by the buyers group & lead procurer as result of the PCP or PPI call for tender, to provide the R&D services (PCP) or innovative solutions (PPI). They do 'NOT' enter the grant agreement with the EC and are not paid by the EC

**Thank you very much  
for your attention**

**Vassilis Tsanidis Dr.Jur**  
**Digital Innovation and Blockchain Unit (F3)**  
**DG CNECT**  
**European Commission**  
**[Vasileios.Tsanidis@ec.europa.eu](mailto:Vasileios.Tsanidis@ec.europa.eu)**