Dynamo PCP

OMC Catalonia

15th of June, 2023

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Housekeeping rules

Recording

This session will be entirely recorded and published on the DYNAMO channels.

Microphone

All participants must be muted when not presenting to avoid noises

Questions

Feel free to post your questions in the zoom chat

Intervention

If you have any comment, please, use the chat box, so we can keep the questions registered to use them afterwards.

Objectives

1. Introduce the DYNAMO project and the Call for Tenders
2. Explain the Pre-Commercial Procurement (PCP) mechansim
3. Consult with potential supllers the draft specifications
4. Facilitate the establishment of partnerships

OMC Draft agenda

01

Block 1: Main challenges and scope

12:00 - 12:10: Welcome and introduction to Dynamo.
Ramon Maspons (AQuAS)
12:10 – 12:40: Dynamo challenges and scope
Jordi Piera & Lluis Martín (Dept. Salut)
12:40 – 13:00: Q&A

02

Block 2: DYNAMO PCP next steps

13:00 – 13:20: Dynamo PCP phases and tender process.
Uxío Meis (AQuAS)
13:20 – 13:40: Q&A

Presenters

Dynamo PCP

Jordi Piera Jiménez

Director of the Digital Health Strategy Office

Lluis Valle

Management of the Clinical Knowledge Modelling unit - Pla de Sistemes

Uxío Meis Piñeiro

Innovation Manager at AQuAS

Ramon Maspons Bosch

CINO AQuAS

DYNAMO in brief

DYNAMO procurers

Attica

Periferia Attikis

Catalonia

AQuAS (Agència de qualitat i avaluació sanitàries de Catalunya).

Treviso

ISRAA (Istituto per servizi di ricovero e assistenza agli anziani).

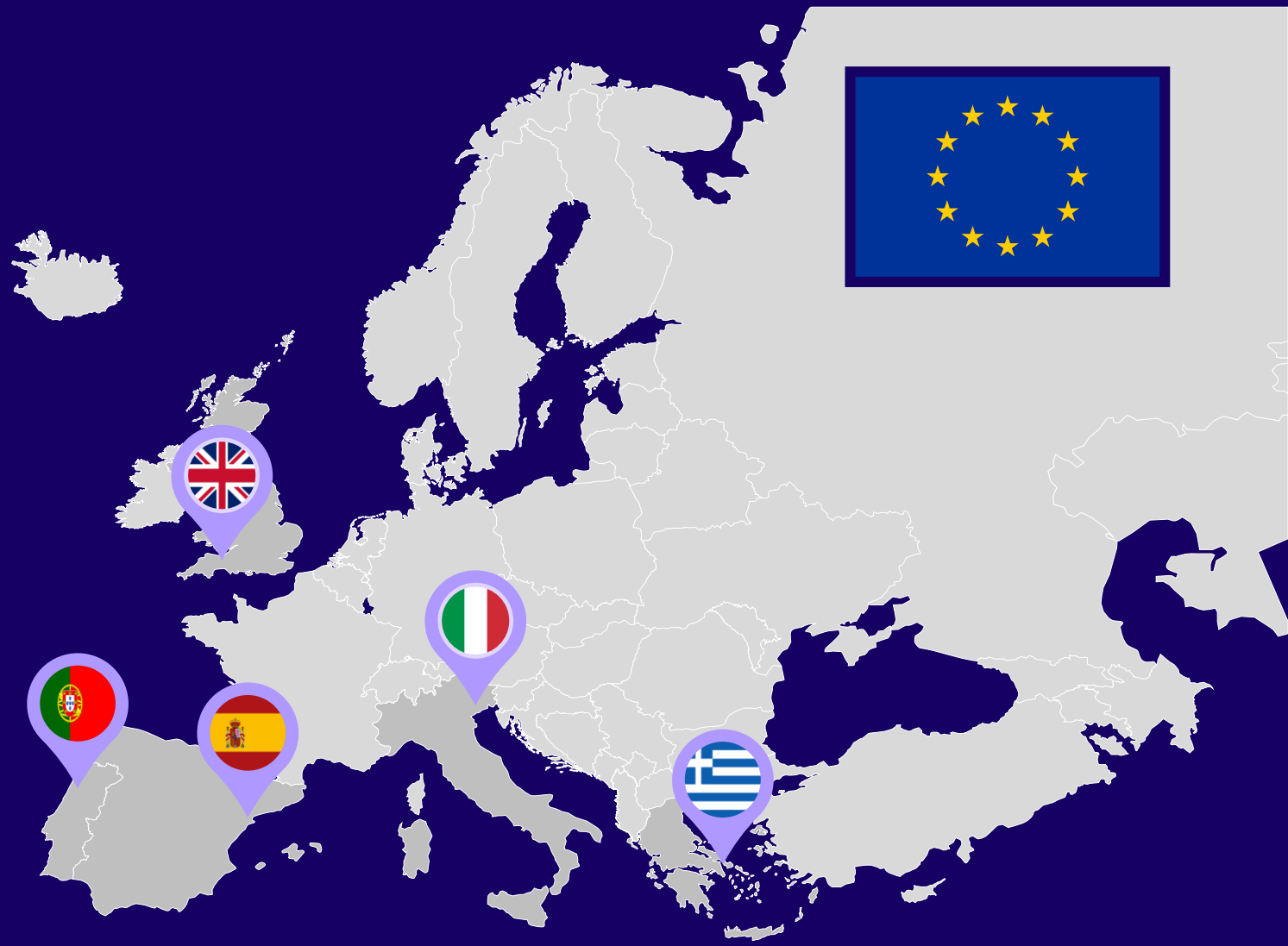
Amadora

SCMA (Irmandade da santa casa da misericordia da amadora IPSS).

Associated procurer

West Wales

Hywel dda local health board.



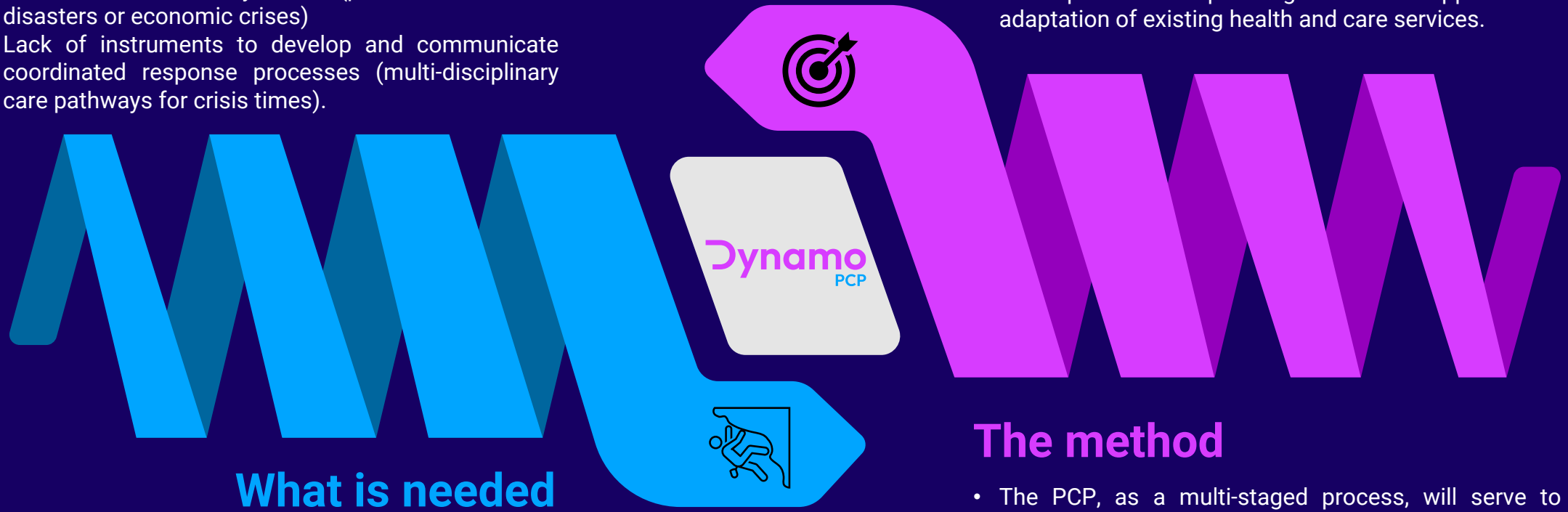
The challenge

The problem

- Threats to health systems (pandemics, natural disasters or economic crises)
- Lack of instruments to develop and communicate coordinated response processes (multi-disciplinary care pathways for crisis times).

What is needed

- Lean and powerful solutions that enables IT platform-independent planning of crisis care pathways
- Strategic planning tools able to effectively guide a non- or partially automated implementation across different health sectors and adjacent public service domains.



The solution

- DYNAMO brings together procurers from Italy, Portugal, Spain and Greece
- Funded by the EU, they will jointly tender for the development of a planning tool that supports the adaptation of existing health and care services.

The method

- The PCP, as a multi-staged process, will serve to evaluate incoming offers according to pre-defined criteria and select suitable vendors.
- In the final project phase, a fully functional prototype will be tested, assuming selected "high pressure scenarios" that severely affect existing health and care services.

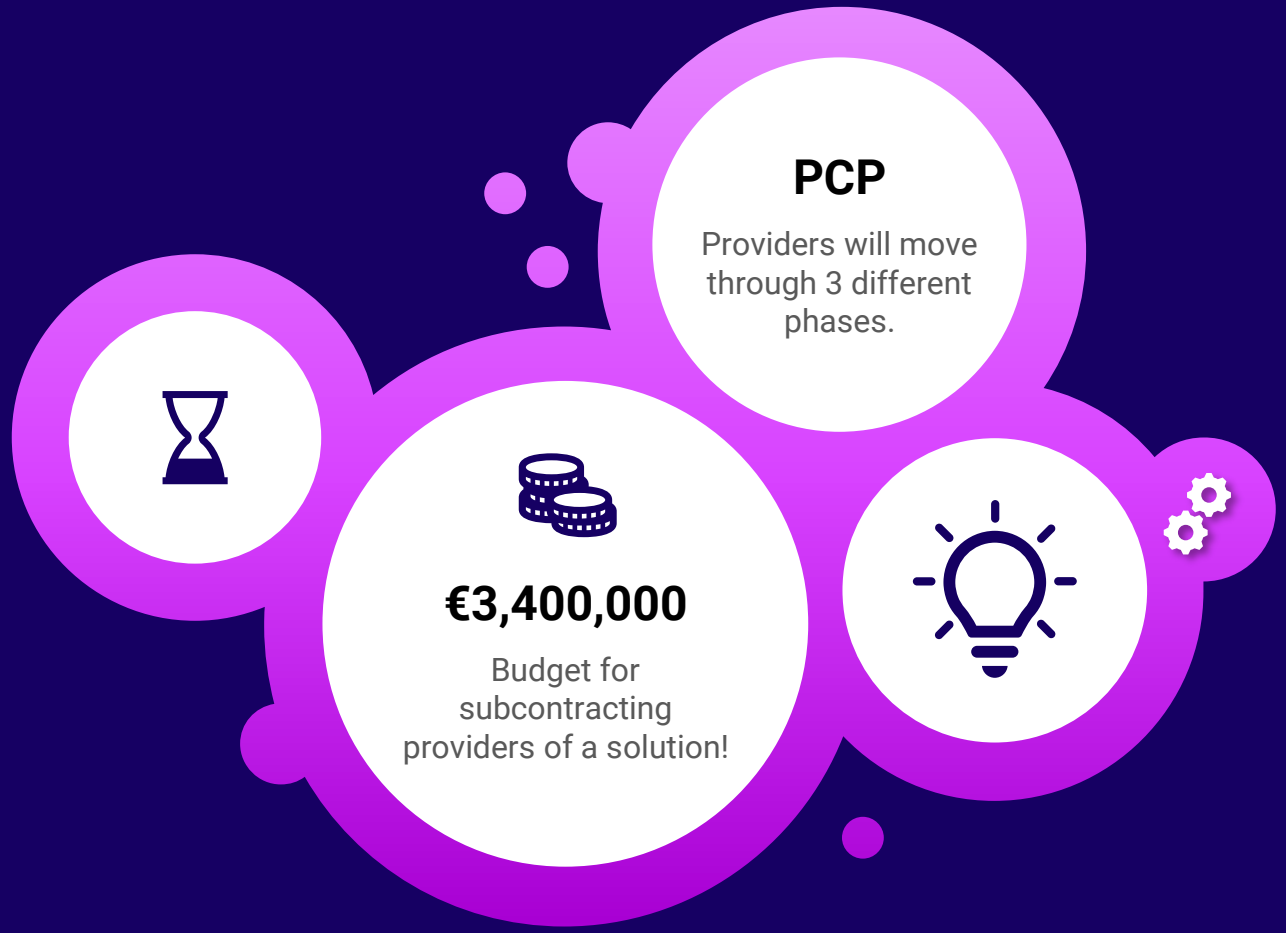
DYNAMO budget and procurement

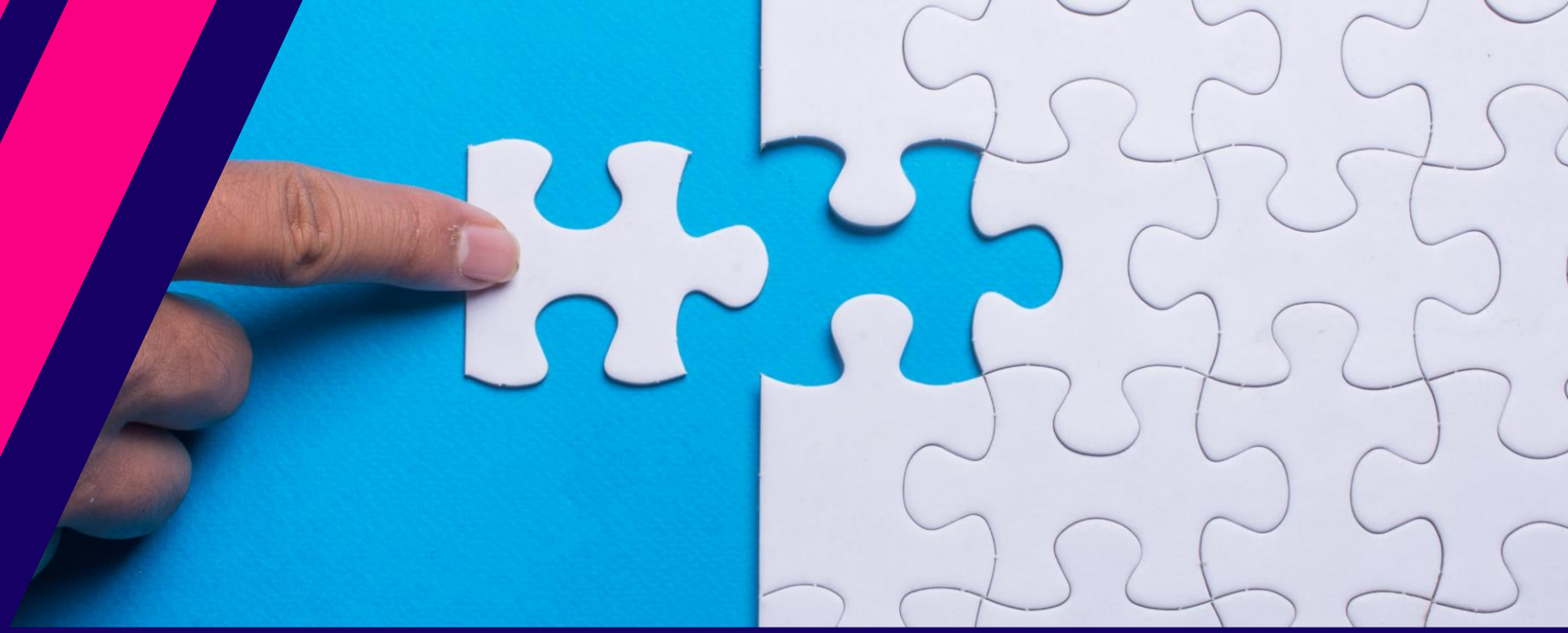
How we want to solve the problem?

For solving the problem, DYNAMO PCP has a budget of up to €3,400,000 to distribute among the consortia that bring a solution for the challenge.

The applicants will move through three phases:

- Phase I: Solution design (15% of budget)
- Phase II: Prototype development (35% of budget)
- Phase III: Testing pilot systems (50% of budget).





Block 1:
DYNAMO challenges and scope

Aim of the procurement

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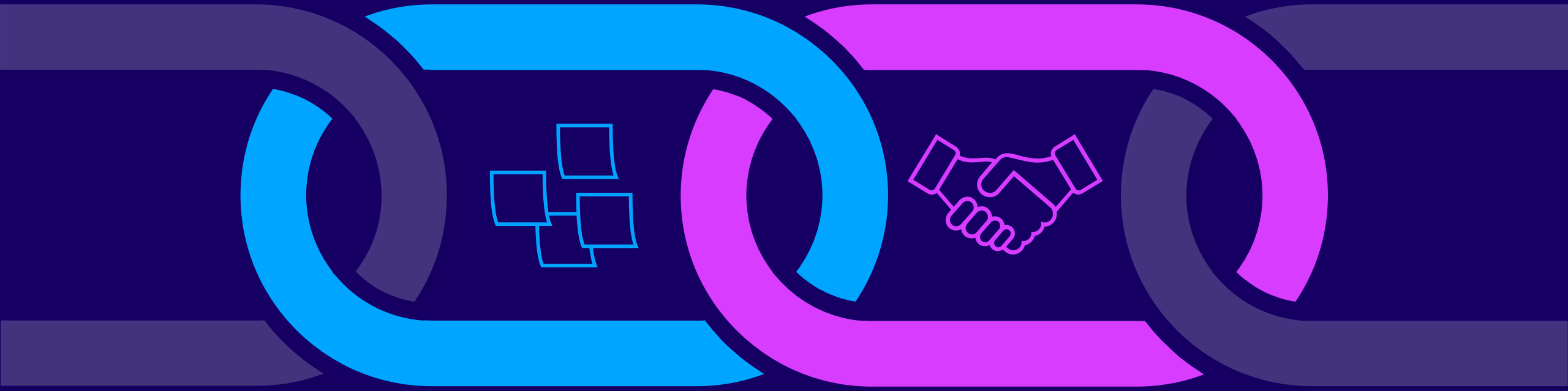


Addressing unmet needs

- Disruptive threats to health systems which profund implications
- Multidisciplinary care pathways.
- Enabling of IT platform-independent solutions for disruptive care situations.
- Strategic planning tool across different health and adjacent sectors.

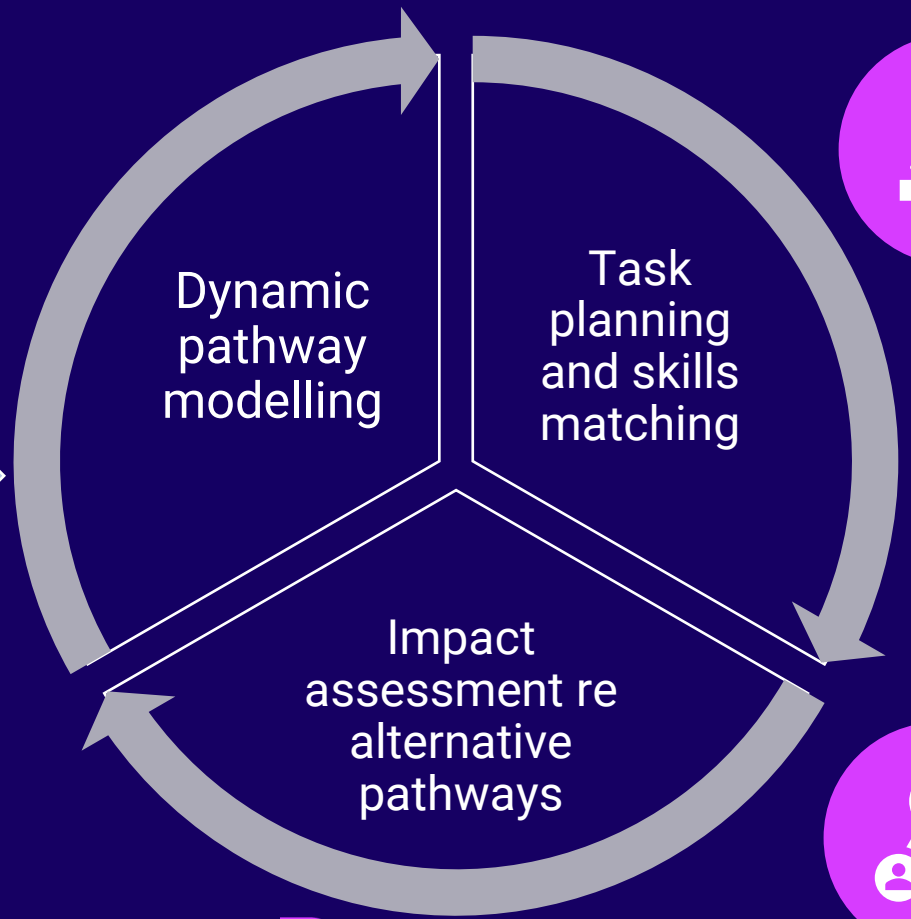
Bring solutions to the reality

- Procurers from different European regions.
- Funded with the support of the EU.
- Multi-staged process for developing a tailor-made solution.
- Real-environment testing of the solutions in project latest stage.

Will there be a real benefit ?

Systemic Threats

- Propagated epidemic
- High service demand by migrants / refugees
- Increasing anti-microbial resistance
- Heat wave
- Staff layoffs (e.g. caused by structural staff shrinkage)
- Energy poverty inducing respiratory illness
- Cyber attack
- …



Efficiently adapt service delivery processes to shocks and structural changes

Forecast outcomes and impacts of alternative pathway configurations

Facilitate task planning and skills matching in times of crises

Building blocks

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MULTI-DISCIPLINARY CARE PATHWAYS DESIGN (FIT FOR CRISIS SITUATIONS)

One building block envisages to enable pathway planning and design across various organisations and settings, suitable to deal with several various system threats.

EX-ANTE IMPACT ASSESSMENT AT PATHWAY PLANNING STAGE

Second building block is expected to enable ex-ante impact assessment that includes relevant parameters and is suitable for situations where health system function is threatened.

TASK PLANNING AND SKILLS MATCHING

Third building block is expected to enable task-based staff planning and skills matching that is appropriate for health system.

Building blocks

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MULTI-DISCIPLINARY CARE PATHWAYS DESIGN (FIT FOR CRISIS SITUATIONS)

- Multi-disciplinary care pathways and platform independent.
- Rapid response and increase preparedness.
- Dynamic and sharable pathways modelling.

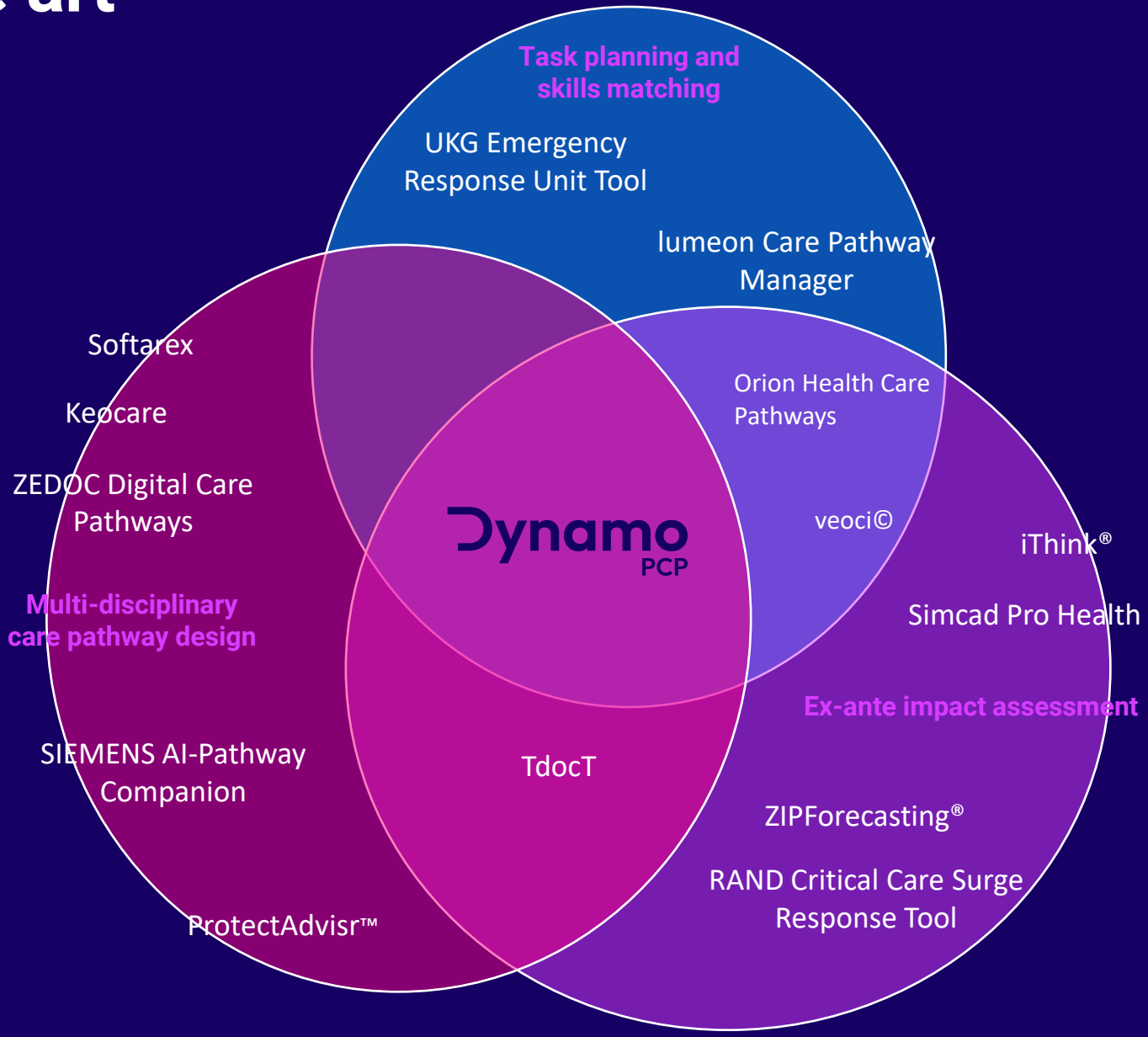
EX-ANTE IMPACT ASSESSMENT AT PATHWAY PLANNING STAGE

- Alternative crisis-related health care pathways.
- Integration with existing health IT infrastructures.
- Consider data points for parameters (regular capacities, and additional resources).
- Consider surge onset, surge duration and special supply need.
- Allow ethical triage.
- Consider context data for region or nation.
- Couple data mining capabilities.
- Pursue different levels of interoperability.
- Allow effective data management.

TASK PLANNING AND SKILLS MATCHING

- Model care pathways around task allocations.
- Design a standard catalogue of tasks (skills of different professional groups).
- Skills inventory of relevant staff categories.
- Mechanisms for task shifting and staff pool mapping.
- Ad hoc care skills alert.

State of the art

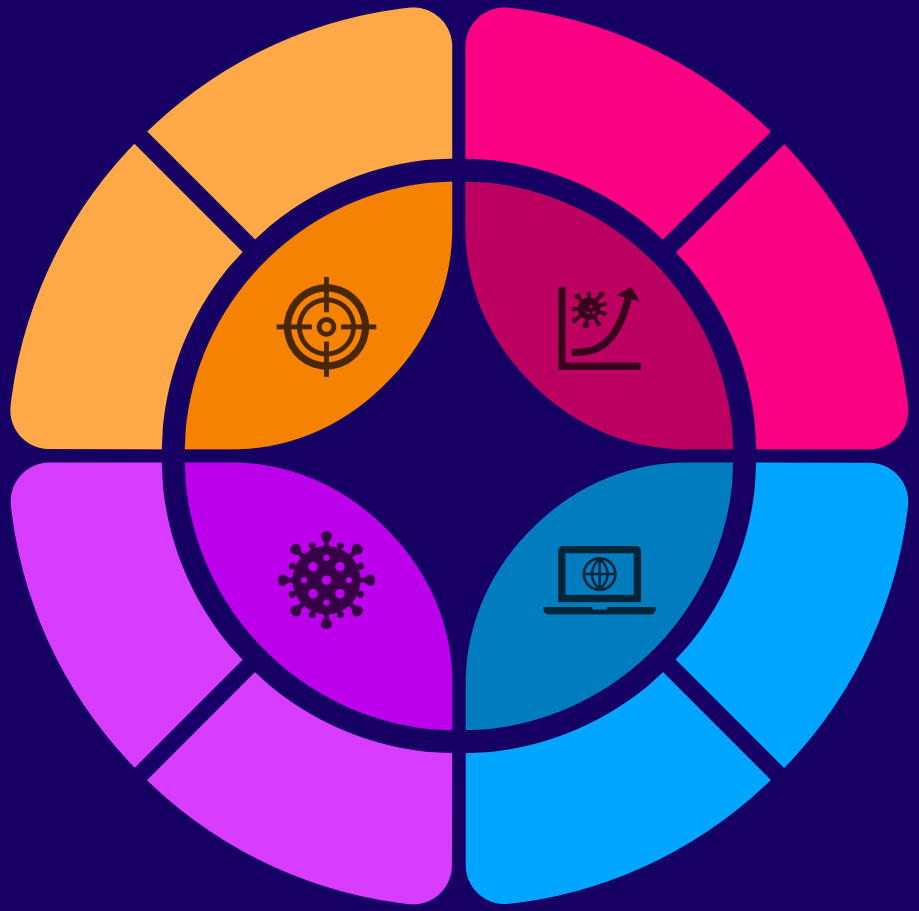


High-pressure scenarios (I): Communicable

Point-source epidemic

Propagated epidemic

Identified by West Wales (UK).



Pandemic

Identified by Amadora (PT), Attica (GR), and Catalonia (ES).

Cyber attack

Identified by Catalonia (ES).

High-pressure scenarios (II): Non-communicable

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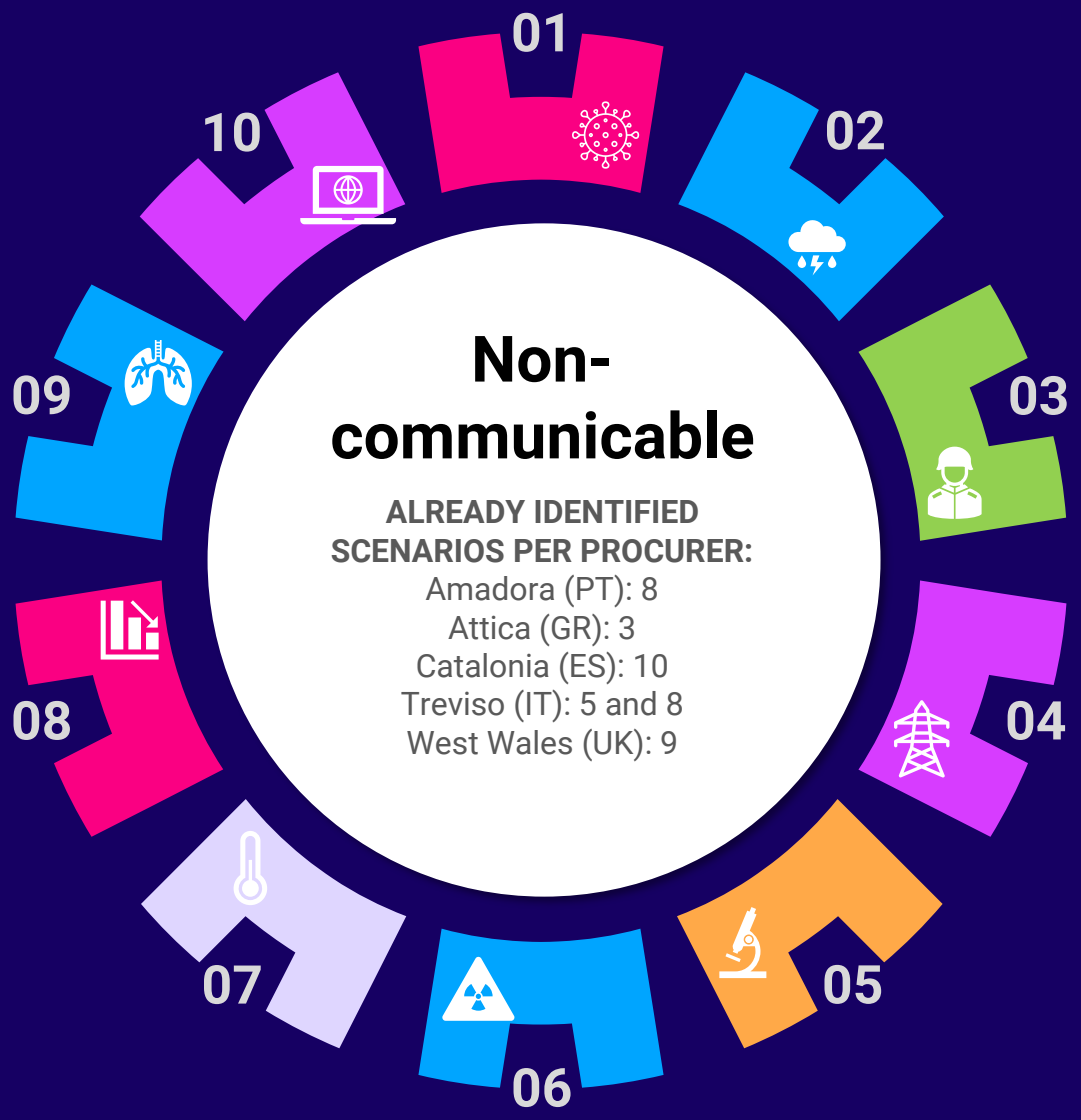

01 Point-source epidemic

02 Flood/tidal wave

03 Migrants/war refugees

04 Internet, electrical and water failure

05 Anti-microbial resistance

06

07 Nuclear hazard

08 Heat wave/extreme temperature

09 Staff layoffs (financial crisis, structural change)

10 Cyber attacks

Energy poverty inducing respiratory illness

Solution target end-users

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01. Health and care professionals/planners

A healthcare professional is a person who is contracted to provide a healthcare service to a patient and is associated with either a specialty or a discipline. Two types: strategic planning, and operational planning.

02. IT planners and programmers

In the field of software engineering, computers in healthcare are used to connect patients with professionals, such as doctors and nurses, and to make their job more efficient.

03. Community staff

Community staff is here referred to professionals who link patients to primary care providers, provide health information, health screening, financial assistance or transportation

04. Care managers

Facilitators who can give advice and provide information about the variety of options available in their area for care services. They are not only experts in the services available, but also know the quality and costs of different providers.

05. Decision-makers

Individuals who can make the authoritative decisions on behalf of the organisation or a specific department. (i.e., managers, executives, directors, presidents, and so on).

06. Data managers

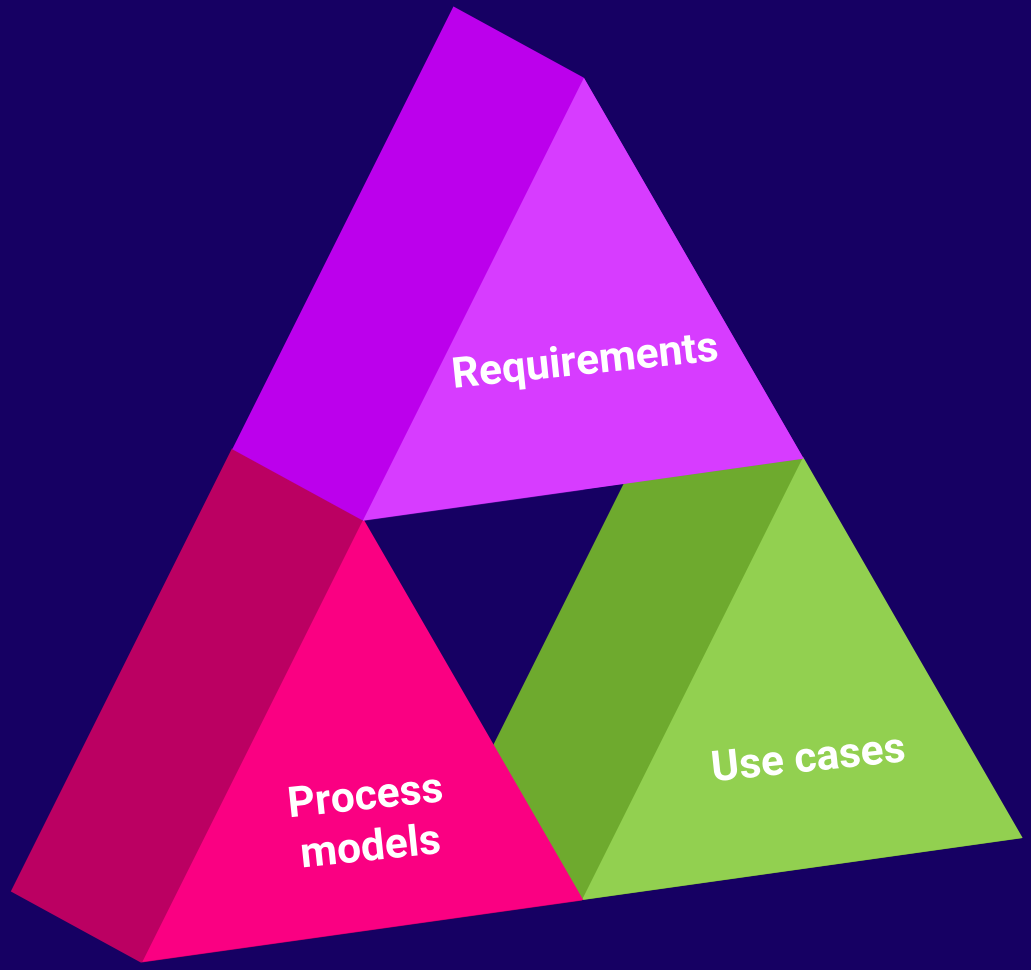
The ones developing, overseeing, organising, storing, and analysing data and data systems. Responsible for security and confidentiality, taking all due ethical issues into account in accordance with the GDPR, and in a timely manner.

Towards a common specification of needs!

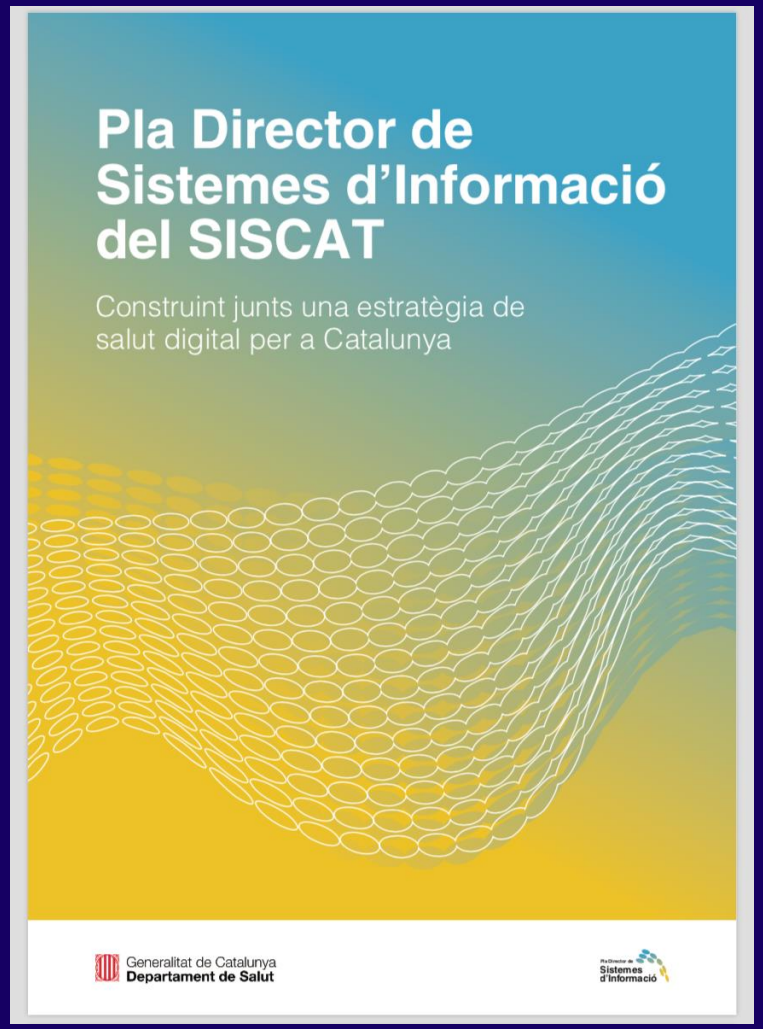
DYNAMO procurers

Supporting partners

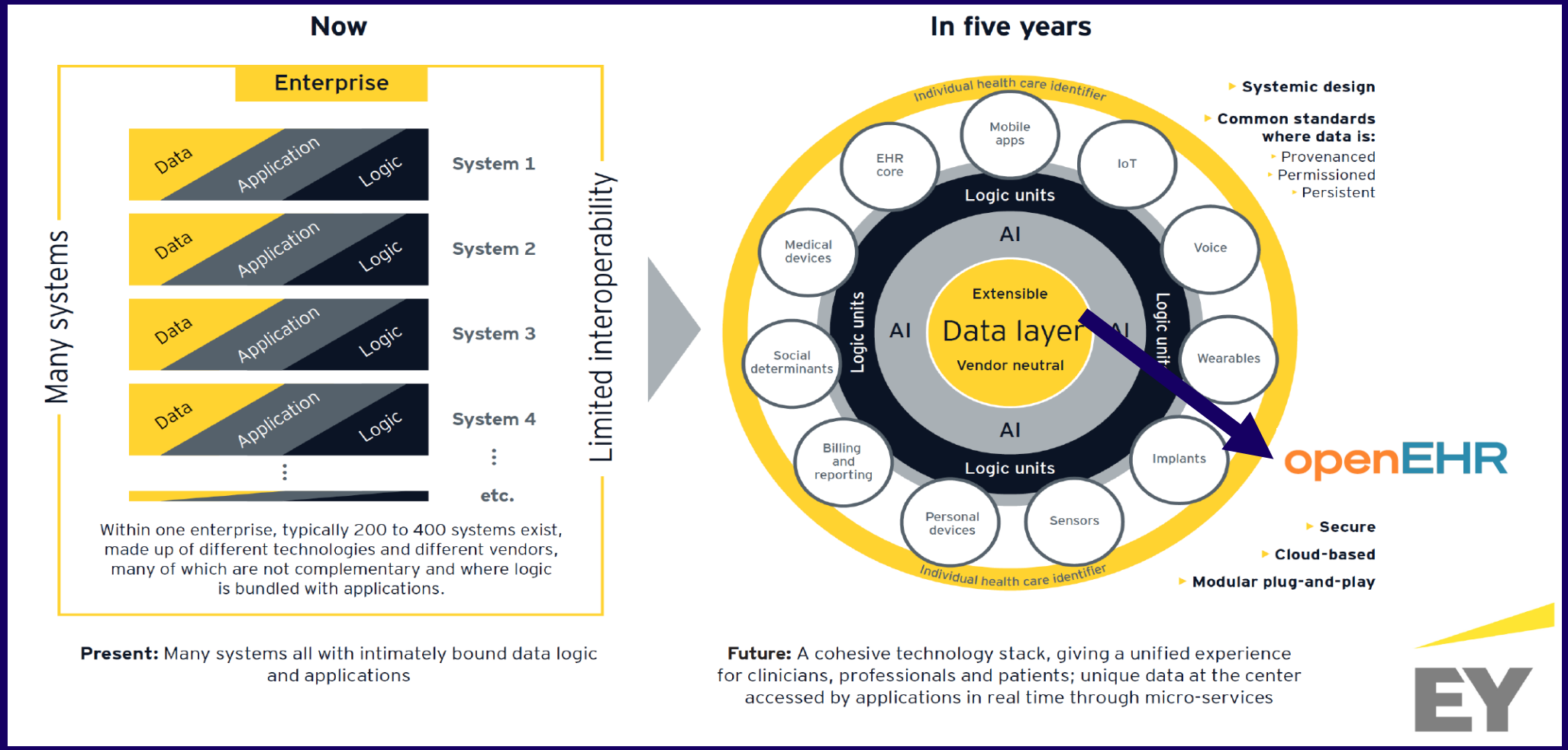
Advisory board



Alignment with the Digital Health Strategy for Catalonia



Current vs future view



Our vision for an open future

- We are building an INFOSTRUCTURE
  1. Business processes
  2. Information needs
  3. Applications
  4. Technology
- We will decouple data from applications, storing data in an open format
- This will enable data to follow the patient
- This will foster better integration and collaboration → Patient-centric care
- It will help scaling-up innovations
- We will manage to measure costs and outcomes → Value-based healthcare

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Q&A

Block 2:
Phases and tender process

Benefits of PCP

Taxpayers

- More resilient health services in emerging crisis situations;
- Access to better healthcare and social services;
- More innovative and globally competitive society;
- Attractive for foreign investment;
- Increased employment demand.

Procurers

- Solutions tailored to public needs.
- Increase quality of services.
- Knowledge about pros/cons of alternative solutions.
- Procurers get to select the best options.

Suppliers

- Opportunities to gain leadership in a sector or to enter new markets;
- Retention of IPR ownership;
- Testing under real world conditions
- Shortening time-to-market process for solutions.

A WIN-WIN FOR EVERYONE!

Overview

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Pre-Commercial Procurement

Preparation

Since Jan 2023

Open Market Consultation

Market sounding

Consultation webinar
Jul 2023

Local consultations in
Italy - Jun 2023
Portugal - Jun 2023
Greece - Jun 2023
UK - Jun 2023

Jun - Oct 2023

Call for tender

Call open for industry participation

Nov 2023- Apr 2024

Phase 1

Solution design

- Supplier A
- Supplier B
- Supplier C
- Supplier D
- Supplier E

Jul - Oct 2024
4 months
510k€ PCP budget

Phase 2

Prototype development

- Supplier B
- Supplier C
- Supplier D

Jan 2025 - Jun 2025
6 months
1190k€ PCP budget

Phase 3

Development of pilot systems and testing

- Supplier B
- Supplier D

Aug 2025 - Jan 2026
6 months
1700k€ PCP budget

Phase I – Solution design

Concept design, solution architecture and technical specifications based on procurers' requirements, use cases and process models.

Suppliers

- 6 suppliers to be awarded
- Budget per supplier: €85,000

Expected output

- Detailed report describing the solution and a detailed plan for the prototyping and testing activities.
- Pathway design and assessment tool: Concepts + Full architecture
- User training tutorial & training cases: Concepts.

Phase characteristics

- Starting: July 2024
- Ending: October 2024
- Duration: 4 months
- Total budget: €510,000

Phase II – Prototype development

Development of prototype systems in two iterations.

Phase III – Develop of pilot systems and testing

Final development and testing of a limited volume of services in real world conditions.

Tendering process: Submission of tenders

01 Electronic submission

Via eMail

02 Different sections

Administrative
Technical
Financial

03 Timing

~5 months to submit offers

04 Language

Official language of submission is English

Tendering process: Eligibility and evaluation criteria

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01

Typology

Open to all type of operators, regardless of their size or governance structure.

02

Number

Single entity or joint tender offer, it does not matter if the proposal covers all the requirements.

03

OMC

OMC participation is voluntary, it is not a condition for submitting a tender.

04

Ratios

Applications will be selected based on a quality-price ratio, focusing on quality.

05

Criteria

Exclusion, selection, compliance and award criteria are **yet to be developed**.

Tendering process: Beyond quality / price

01 **Criteria**

How to find a fair criteria when deciding the best solution?

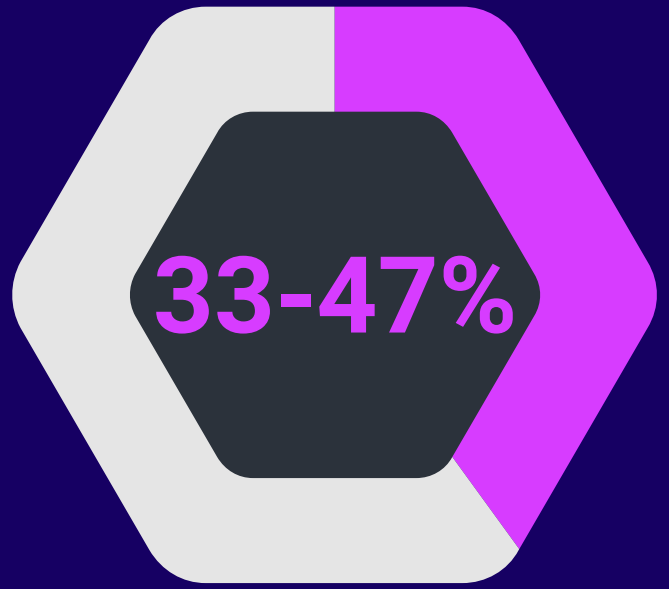
02 **Population health**

If population health goes beyond cost-effectiveness, shouldn't we find a tailored criteria as well?

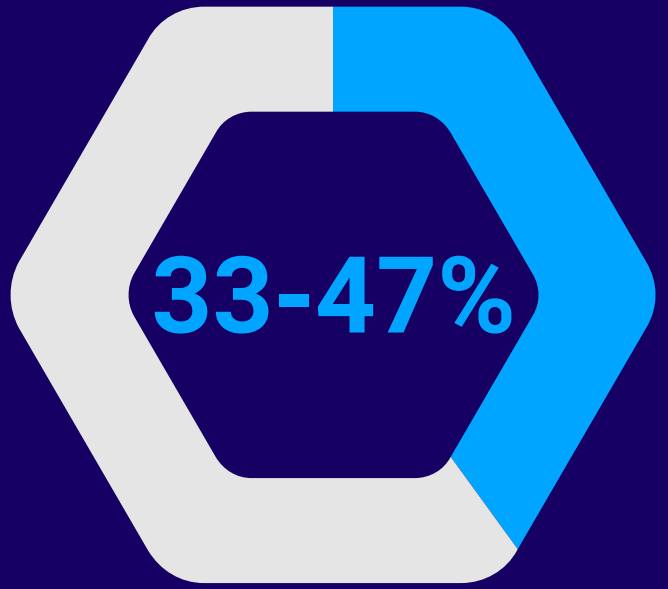
03 **Cost**

Cost shouldn't be a burden for innovation. It will be based on real-life estimations, not on development cost. Its relevance will increase as phases move forward.

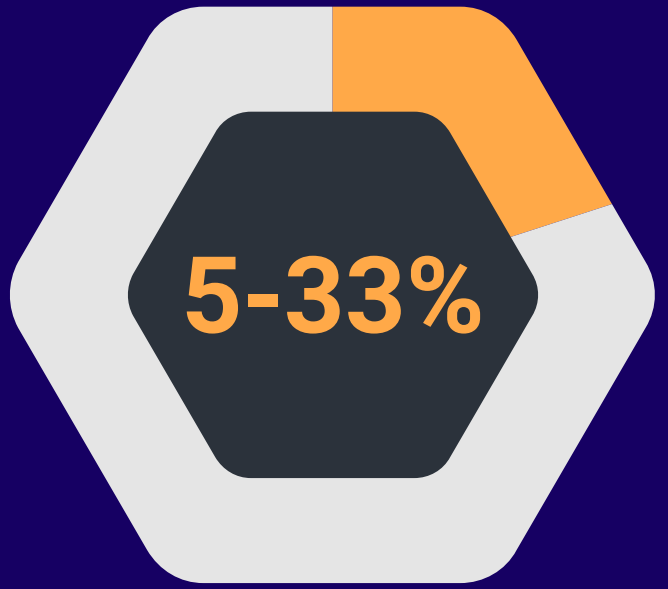
Tendering process: DYNAMO triple aim



Population health



Process fit

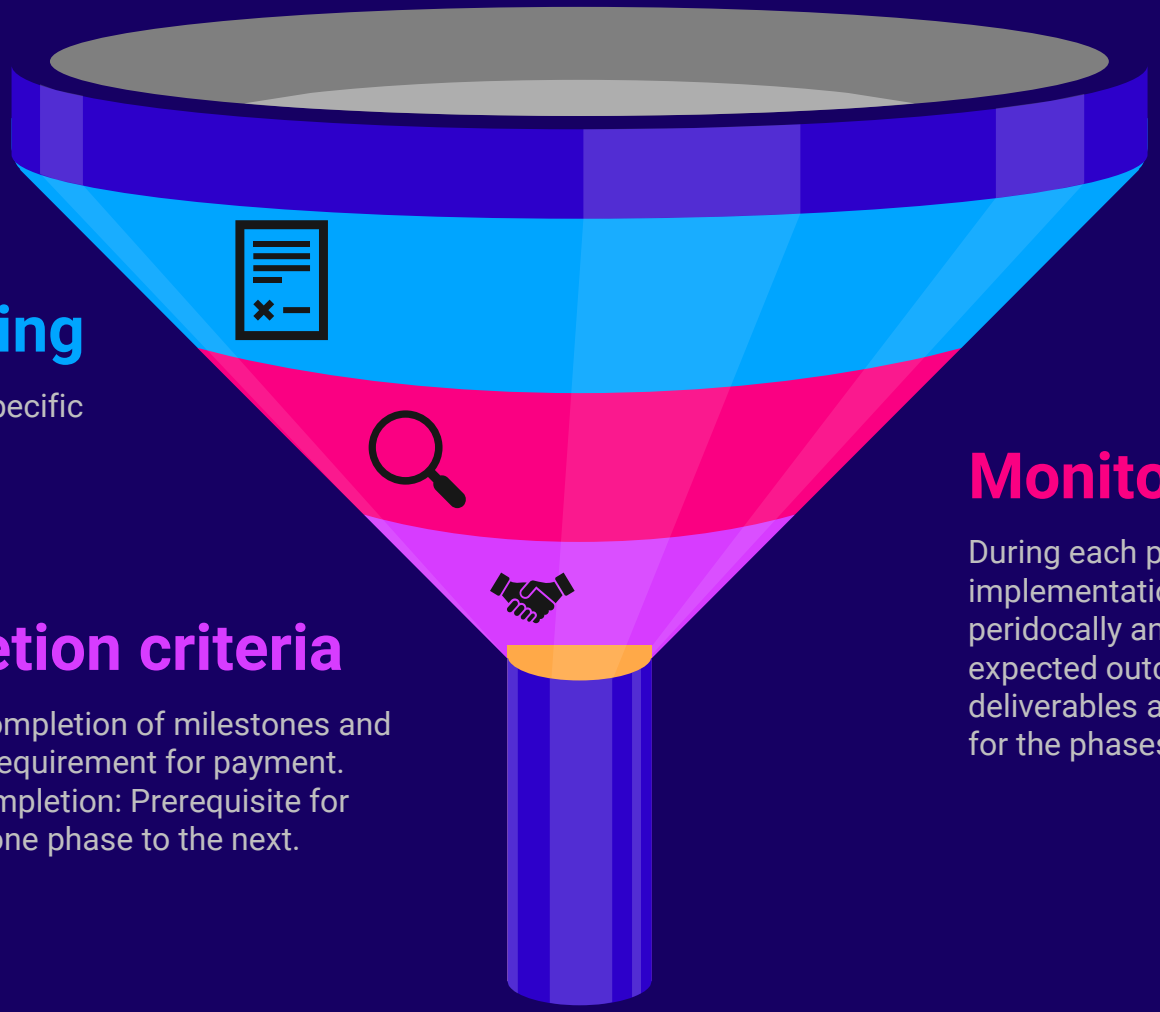


Cost

Tendering process:
Contract, monitoring and payments

Contracting

Framework agreement with specific contracts in each phase.



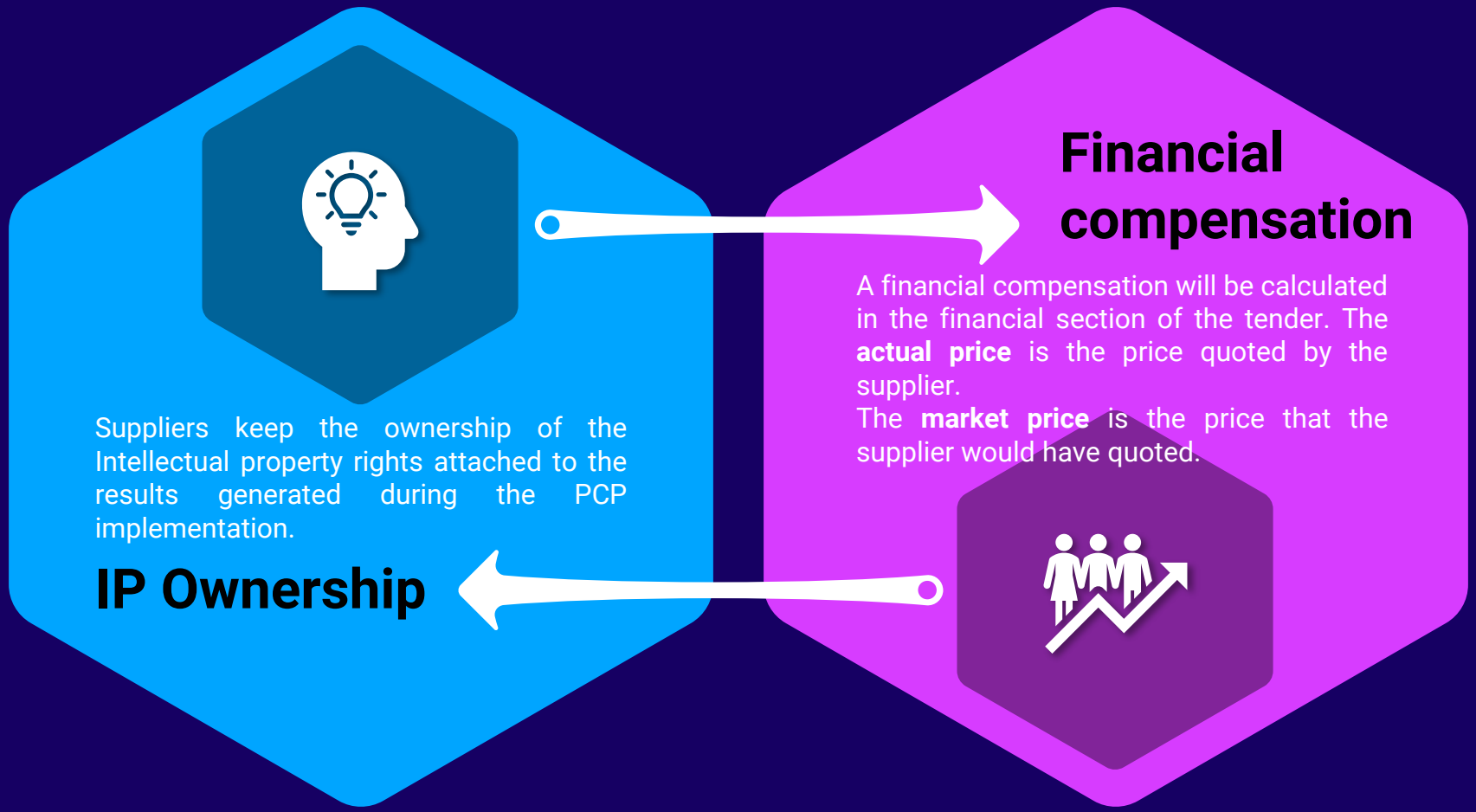
Completion criteria

Satisfactory completion of milestones and deliverables: Requirement for payment.
Successful completion: Prerequisite for passing from one phase to the next.

Monitoring

During each phase, contract implementation will be monitored peridocally and reviewed against the expected outcomes (milestones, deliverables and ouput or results) for the phases.

Tendering process: Intellectual property rights



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Q&A