

TECHNIQUES TO FOSTER INNOVATION PROCUREMENT



WEBINAR – 17 September 2025

Welcome

Ana Lucia Jaramillo

Corvers Procurement Services BV

Introduction & Agenda



House rules

It is possible to ask questions in the private chat



The recording of the webinar will be made available on the EAFIP website

The list of participants will not be disseminated



In case there are technical problems, the session will be recorded and published

AGENDA

TIME (CEST)	TOPIC	SPEAKER/PARTICIPANTS
10:00 – 10:05	<i>Registration to the platform</i>	<i>Participants can ensure that the platform's functionalities are working fine</i>
10:05 – 10:10	Welcome & Introduction Agenda	Ana Lucia Jaramillo Corvers Procurement Services B.V.
10:10 – 10:30	The Scaleup Strategy: <i>measures to promote European start-ups and scale-ups at EU level as well as in the Member States.</i>	Lieve Bos Policy Officer, DG RTD, European Commission
10:30 – 10:50	SMEs participation in PCP: <i>examples from AI4Cities and Space4Cities</i>	Ari Kaukiainen Forum Virium Helsinki
10:50 – 11:10	Functional specifications: <i>examples from PCP WISE climate change EO project</i>	Hans van Leeuwen STOWA
11:10 – 11:30	Joint cross-border procurement to make Europe a world leader in supercomputing: <i>examples from PRACE and EuroHPC Joint Undertaking</i>	Jean-Philippe Nominé CEA – Département des Sciences de la Simulation et de l'Information
11:30 – 11:40	Discussions & Q&A	<i>All participants</i>
11:40 – 11:50	Coffee break	
11:50 – 12:10	Floating Solar project: <i>example from the Federal Public Service, Health, Food Chain Safety and Environment</i>	Wendy Bonne FOD VVVL
12:10 – 12:30	Value based award criteria: <i>examples from the healthcare sector</i>	Caterina Sampol Hospital Sant Pau
12:30 – 12:50	IPR distribution in innovation procurement: <i>examples from PCP and PPI projects</i>	Beatriz Gómez Fariñas Corvers Procurement Services B.V.
12:50 - 12:55	Discussions and Q&A	
12:55 – 13:00	Conclusions & closure	Ana Lucia Jaramillo

The Scaleup Strategy: measures to promote European start-ups and scale-ups at EU level as well as in the Member States

Lieve Bos
Policy Officer
DG RTD, European Commission



EU Start-up Scaleup Strategy European Innovation Act

BOOSTING INNOVATION PROCUREMENT TO DRIVE EUROPEAN
GROWTH, INNOVATION AND RESILIENCE

*Lieve Bos – Policy Officer,
Innovation Policy and Access to Finance - DG RTD*

Eafip webinar, 17 September, 2025

Innovation Procurement: Huge opportunity that Europe cannot afford to miss

Innovation Procurement could help to address many persisting challenges



To boost the economic recovery, the twin transition and the resilience of the EU



To modernize public services, delivering higher quality on an optimal budget



To address societal challenges (e.g. in health, energy, transport, security)



To help innovative companies grow

What is holding us back?

- **Public procurement rules** (EU & national) are not innovation friendly enough
- **Europe** is still **underinvesting in Innovation Procurement** (only 10% of public procurement in EU, versus 20% in the US and 25% in South Korea*)
- **Lack of cross-border procurement** stifles cross-border growth of companies
- Insufficient contracts to **develop / test innovative solutions with clients** (5X less R&D proc contracts in EU vs US*)
- Also **private procurement** (e.g. large corporates) not innovation friendly and start-up friendly enough
- **Know-how of start-ups / scale-ups** on procurement market is also too low

* [EU wide benchmarking of national innovation procurement policy frameworks and investments](#)

Unleashing innovation procurement potential in EU can create additional € 300 Bn of contracts for innovative companies

How innovation/start-up friendly is proc legislation?

	US	EU
Doing market research before buying	Mandatory	Optional
Openly announcing market consultations before buying	Mandatory	Optional
Use of easier procedures / exemptions for buying R&D an innovative solutions	Mandatory	Optional
Awarding contracts based on value for money instead of lowest price	Mandatory	Optional
Awarding contracts based on total cost of ownership	Mandatory	Optional
Minimize overspecification of tender documents	Mandatory	Optional
Use of value engineering to update products with emerging innovative solutions during ongoing contracts	Mandatory	Optional
Use of contract award and performance monitoring criteria that stimulate innovation	Mandatory	Optional
Use of innovation friendly IPR conditions	Mandatory	Optional

How innovation/start-up friendly is proc legislation?

	US	EU
Use clauses reinforcing strategic autonomy & resilience	Mandatory	Optional
Easy way for joint cross-border procurement	Not available	Not available
Easy way to implement multiple sourcing	Available	Not available
Advance payments to startups/SMEs	Encouraged	Optional
Accelerated payments to startups/SMEs	Mandatory	Optional
Financial compensation to startups/SMEs to make bids, participate in dialogues	Encouraged	Optional
Ensure contractors to protect the rights of subcontractors (which are often startups/SMEs)	Mandatory	Optional
Minimize disqualification due to lack of performance history and unreasonable financial requirements	Mandatory	Optional
Maximum deadline for procurer to evaluate offers	Encouraged	Optional

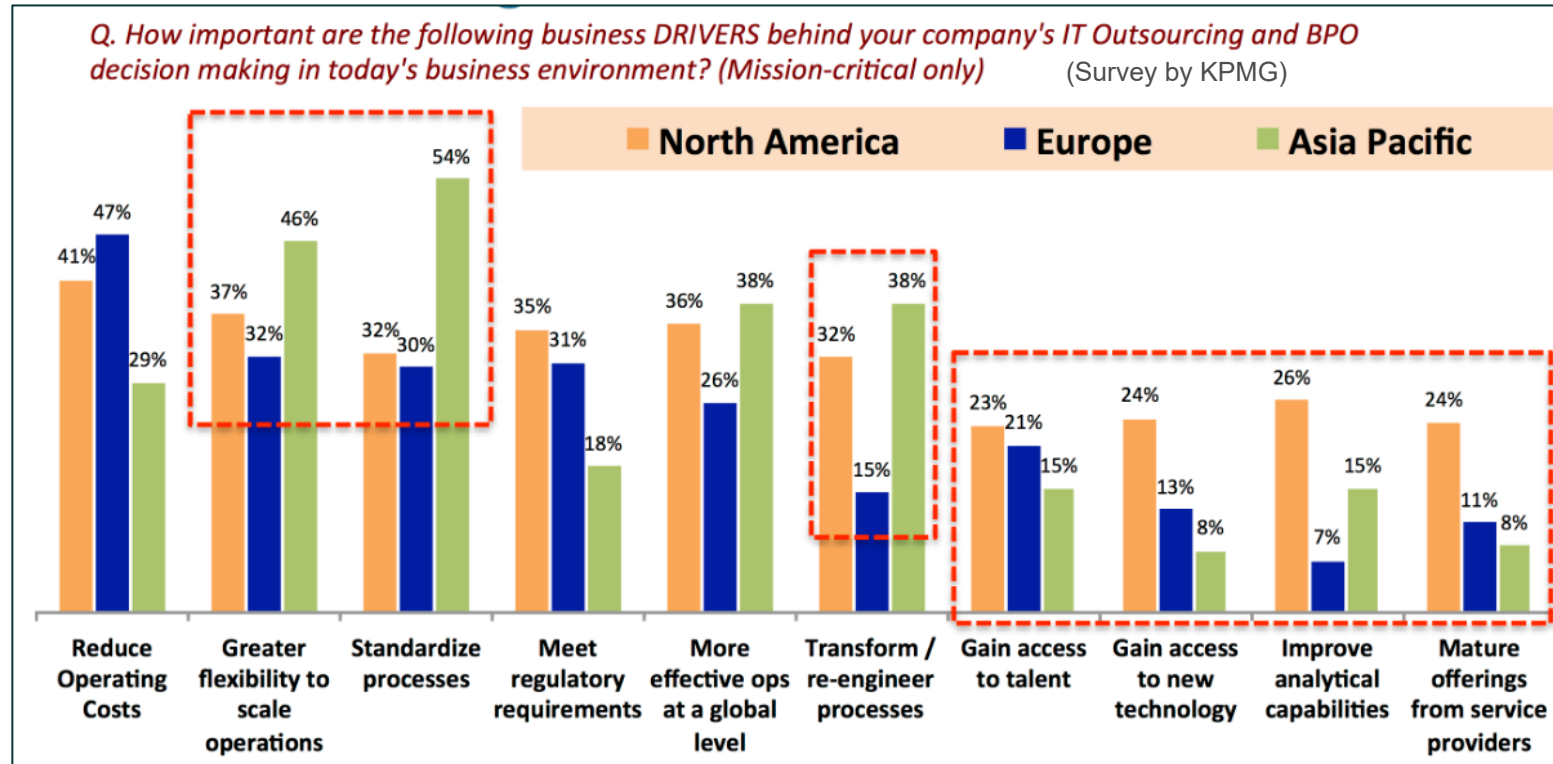
* [Source: EU expert group has analysed differences between all EU Member States and other key \(US, China, Japan, Canada, South Korea\)](#)

Interesting practices from other EU countries

- **14 countries** have created/are creating (FI, AT, BE, ES, SI, PT, EE, CZ, SK, EL, FR, HU, CZ, LU) action plans and **7 countries** (LT, PL, FI, EE, FR, IT, SK) have spending targets for innovation procurement
- **FI** is proposing to make market research & market consultations mandatory (FI proc law under revision)
- **ES, IT, AT, FR, HR, IE, HR, RO** are restricting the use of lowest-price-only award criteria and **ES** is now also creating innovation procurement award criteria for public buyers
- **BE** proc law has default scenario to leave IPR ownership with contractors (10 other countries promote this via model contracts or guidance).
- **BE, HU** proc law obliges advance payments, **BE** also obliges payment for bid preparation (some cases), and early announcement of the preliminary ranking
- **AT** has model subcontracting agreement that protects rights of subcontractors
- **IT, CZ, SK** limit the amount of financial guarantees/bonds/indemnity insurance procurers can require
- **PT** proc law obliges procurers to allow suppliers to correct minor unclarities in their offers. **LT** requires procurers first evaluate technical offer, and only after that the financial and admin parts of the offer.
- **ES, RO** have first embryonic value engineering provisions in proc law
- **ES, AT** proc law sets maximum time for procurers to evaluate offers

How innovative is private procurement?

While **less mature EU & Asian private procurers** still focus more on **cutting costs...**
More **mature private US procurers** have moved on to focus more on **increasing total value added!**



But there is **potential for change**, as EU firms are slowly opening up to buy more innovatively (even R&D):
E.g. R&D outsourcing by EU companies (CAGR 6,5%) is projected to **grow 5% faster** in 2024-2031 than
R&D outsourcing by US companies (CAGR 6,2%). (Source: Cognitive Market Research)

EU Start-up Scale-up Strategy

European Innovation Act

Revision EU PP directives

seeks to improve and simplify access for startups/scaleups

- Limiting overspecification, excessive financial requirements, price only award
- Introducing innovation-friendly IPR provisions and value engineering

Revision EU defence proc

directive also seeks to foster inclusion of startups/scaleups and create EU preference

EU Innovation Act seeks to

- 1) Increase total public and private procurement investments
- 2) Provide fast track procedure for buying R&D services
- 3) Incentivise innovation-minded private sourcing strategies (especially when they use public funding or operate critical infrastructures)

Non legislative support measures

- 1) EU wide monitoring of innovation procurement policies & investments
- 2) Reinforce EU R&I funding to buyers for joint innovation procurements in strategic sectors
- 3) Expand EU network of national competence centers & EU assistance to buyers and small companies for innovation procurement

The EC will create a **European Corporate Network** with large corporate procurers to benefit from innovative solutions from startups

- Advise on policy & Matchmaking
- Voluntary commitment to buy from startups

Link with other areas in EU Innovation Act

Procurement from startups can also benefit from:

- **Incentivize commercialization mindset in academia**
(remove hurdles for startup creation, startup's access to academic IPR and industry-academia collaboration)
- **Improve access to research & technology infrastructures**
for companies, incl. startups/scaleups and their clients
- **Foster wider use of regulatory sandboxes** to enable early testing and ensure innovation-friendly technology regulation
(buyers, suppliers and regulators accelerating market uptake together: R&D procurements can service as sandbox vehicle)



Contribute to EU policy making

Have Your Say in the public consultations for:

- The **European Innovation Act**: [consultation open until 3 Oct 2025](#), adoption EC proposal planned for Q1 2026
- The revision of **EU civil public procurement directives**: consultation expected to be launched in Q1 2026, adoption EC proposal in Q4 2026
- The revision of **EU defence procurement directive**: consultation expected to be launched in Q2 / Q3 2026, adoption EC proposal in 2027



A word cloud centered around the phrase "THANK YOU" in large, bold, blue capital letters. Surrounding this central text are various words in different languages and fonts, including: "DANKE", "TACK", "mercier", "kiitos", "mahalo", "dank je", "GRAZIE", "merce", "obrigado", "gracias", "diolch", "AKUN", "ngiyabonga", "misaotra", "sukriya", "maururu", "merci", "TAK", "arigato", "dankeschon", "TAKK", "grazzi", "sagolun", "client", "communication", "OBRIGADO", "dziękuje", "business", "logotype", "спасибо", "דאנק", "dakujem", "дякую", and "merci". The words are arranged in a circular pattern around the central text, with varying sizes and orientations.

SMEs participation in PCP: examples from AI4Cities and Space4Cities

Ari Kaukiainen
Forum Virium Helsinki



SME participation in PCPs: Example from Space4Cities

Ari Kaukiainen
Project Planner
Forum Virium Helsinki, SPACE4Cities
ari.kaukiainen@forumvirium.fi



This project has received funding from the European Union for the Space Programme Agency (EUSPA) via the Horizon Europe research and innovation programme under grant agreement No. 101131955.

Forum Virium Helsinki

- Non-profit innovation agency owned by City of Helsinki
- 60-65 personnel, 30-35 ongoing project
- Funded by the City + local & EU projects for around ~8M€/yr
- Main topics: Smart mobility, Digital Twins, data, smart & green city, health, climate resilience, Energy, citizen engagement



Pre-Commercial Procurement

- Multiple procurers **jointly purchasing R&D** for competing and innovative solutions that are **not yet commercially available**.
 - Early collaboration between public authorities and Suppliers.
 - Based on **functional, rather than technical specifications**; high risk.
 - Possible follow-up Public Procurement of Innovation (PPI).
- **Public sector buys R&D to:**
 - steer development to meet its needs, collect info about alternative solutions.
 - create a future competitive supply base, learn about new markets
- Suppliers: companies, non-profit organizations, RTOs
- **Risks shared** between Suppliers and Procurers

Benefits of PCP


- **Suppliers: Lower investment** needed to generate new market opportunities.
 - Support on **solution development** and **field testing**.
 - Commercial **references and opportunities** beyond the project.
 - New opportunities through **collaboration/competition** with other Suppliers.
- **IPRs generated are retained by Supplier**; solution, data & results IPRs.
 - The **Buyers' Group** has the **right to access and exploit the results** after the end of the PCP (case-by-case agreements).
- **Procurers: Information & preparation for future** markets and technologies.
 - Potentially affordable method to **solve public issues & create economic growth**.

Forum Virium's PCPs

- **SILVER 2012-2016**, 7 Procurers: Elderly care robots. 32 Tenders > 7 suppliers selected.
- **Select4Cities 2015-2019**, 5 Procurers (Coordinator): Platforms for co-creation and testing IoE services. 28 Tenders > 10 selected.
- **FABULOS 2018-2021**, 6 Procurers (Coordinator): Self-driving shuttle buses for public transport. 6 Tenders > 5 suppliers selected.
- **AI4Cities 2020-2022**, 6 Procurers (Coordinator): AI accelerating cities transition to carbon neutrality. 97 Tenders > 41 selected.
- **Circular PSP 2023-2026**, 8 Procurers: Circular economy solutions. 15 Tenders > 5 selected.
- **SPACE4Cities 2024-2027**, 6 Procurers (Coordinator): Satellite data solutions for urban management. 141 bids > 20 selected.
- **PCP-WISE 1/2025-**, 12 Procurers: Water management with satellite data. 5 Suppliers selected in early 2026.

YouTube NL

Search



The diagram illustrates the SPACE4Cities Pre-Commercial Procurement (PCP) process, structured into five phases represented by colored circles on a purple background with a cityscape. A yellow banner at the top left reads 'Pre-Commercial Procurement Process'. The phases are:

- Phase 0: Open Market Consultation** (Yellow circle with a question mark icon)
- Phase 1: Solution Design** (Pink circle with a lightbulb icon)
18-20 Suppliers
Total budget 720 000€
Budget max. 40 000€ per Supplier
- Phase 2: Prototype Development** (Dark purple circle with a gear icon)
9-10 Suppliers
Total budget 900 000€
Budget max. 100 000€ per Supplier
- Phase 3: Piloting: Preparation & Execution** (Light pink circle with a checkmark icon)
5 Suppliers
Total budget 1 250 000€
Budget max. 250 000€ per Supplier
- Phase 4: Scaling** (Yellow circle with a magnifying glass icon)
Scaling up results with Replicator Cities

The video player interface shows the video is at 0:12 / 0:36. The channel is Forum Virium Helsinki (FV) with 483 subscribers. The video title is 'SPACE4Cities Pre-Commercial Procurement'.

SPACE4Cities Pre-Commercial Procurement

Forum Virium Helsinki
483 subscribers

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2

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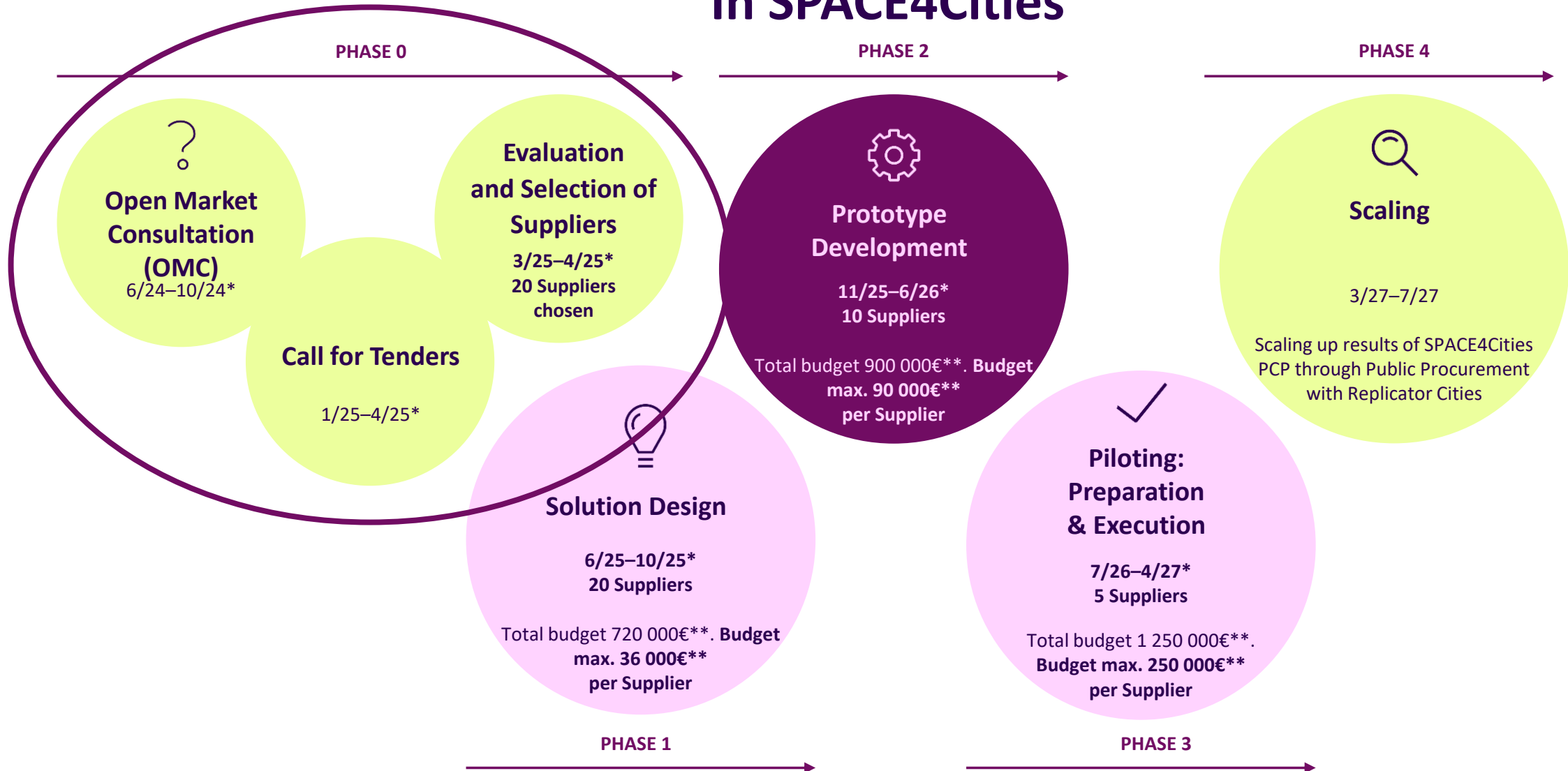
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Save

[Watch the SPACE4Cities PCP video:](#)

<https://www.youtube.com/watch?v=v2JUXchvSQE>

Pre-Commercial Procurement Process In SPACE4Cities

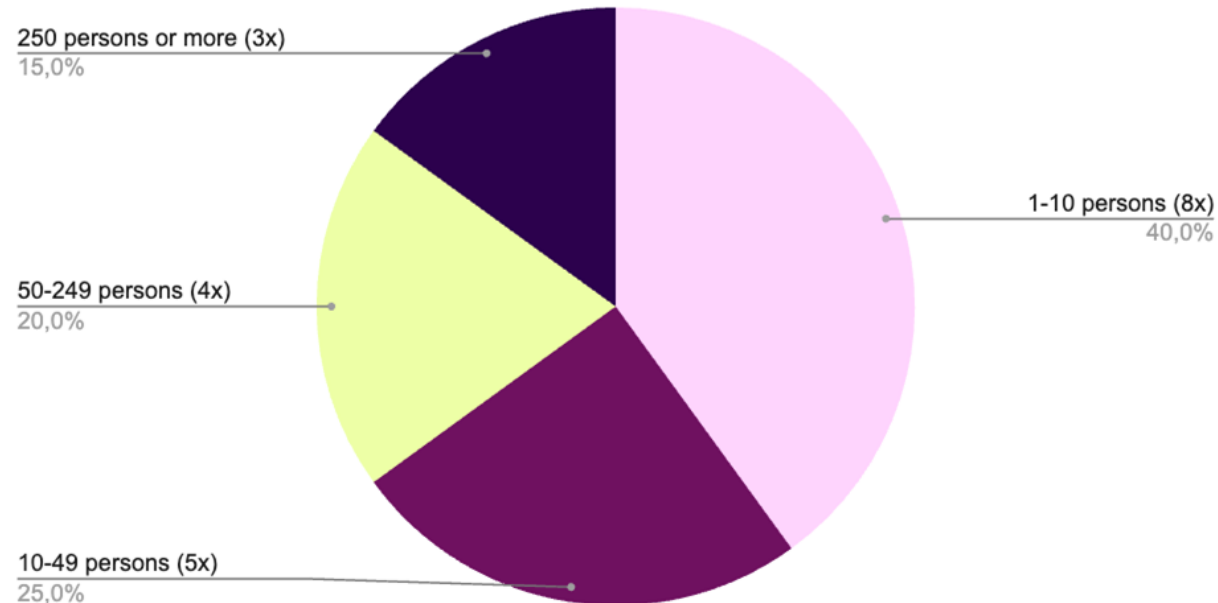


(*) Dates, number of suppliers and budget are indicative until the Call for Tenders is published.

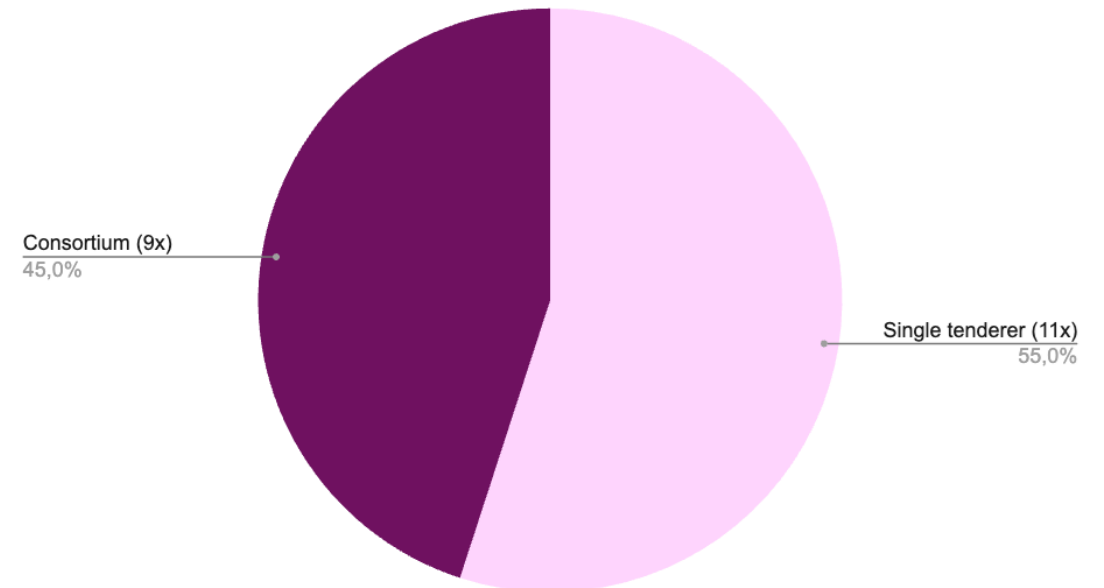
(**) Financial figures are VAT 0%. Total maximum budget per supplier 390 000€.

SPACE4Cities Call for Tenders Results: 20 Awarded Tenders out of 141 Received

Sizes of Lead Tenderers



Single Tenderer or Consortium



Goals Open Market Consultation

- Disseminate upcoming Call for Tenders & attract suitable Suppliers and Replicator cities.
 - Provide information & support for interested Tenderers to send their tender
- Conduct a needs analysis of the Buyers' Group following the preparation in early Phase 0).
 - Validate the feasibility of Procurers' needs and user requirements with the market.
- Conduct market research:
 - Map Suppliers and gain understanding of the state of the Art.
 - Used to fine-tune the upcoming CfT and needs/requirements.
 - Identify remaining gaps and challenges and where R&D is still required.
- To identify the most critical success factors, barriers and enablers to be considered.

Activities & Reach in SPACE4Cities OMC

3 EU-wide OMC webinars: 569 registrations

6 National OMC webinars & 1 live event:

- Finnish (+live event), French, Greek, Dutch, Portuguese, Flemish: 324 registrations

21 Events attended by S4C Consortium partners

- 8 Presentations on S4C OMC
- 1 booth + 1 workshop + 1 poster session
- Networking activities in each event

Survey for Suppliers:

- 77 responses / 50% SMEs and 25% startups

Matchmaking Directory:

- 81 Suppliers: 4 consortia formed.

- 460+ organisations incl. around 70 public authorities
- 1500+ people (dialogue cities & solution providers)
- 405 potential providers / Suppliers
- Participants from 35 countries

Engaging SMEs: tips for success

Dedicated expert partner (Procuring Partner or not) from the field/industry PCP addresses.

Before the OMC during Phase 0:

- PCP Challenges: clear needs and requirements from cities on related Challenges; co-creation.
- Contact main stakeholders and networks to have them ready to disseminate your OMC.
- Produce high quality communications material, e.g. via project videos, animations.
- Desktop market research to know your potential Tenderers and state of the Art.

During the OMC:

- Active communications and dissemination: webinars, event participation
 - Explaining PCP themes, provide information on Procurers' needs.
- Survey both Tenderers and cities AND validate feasibility of your needs/requirements.
- Provide Matchmaking to enable single Tenderers to find consortium partners.



**Visit SPACE4Cities
Website space4cities.eu**

Deliverables:
D7.4 Phase 0 Recommendations
D2.4 OMC Report
D3.1 Call for Tenders Report

Ari Kaukiainen

Forum Virium Helsinki, SPACE4Cities

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A satellite with large solar panels is shown in orbit above the Earth's cloud-covered surface. The background is the blackness of space with a few distant celestial bodies.

Thank you!



@SPACE4Cities



#satelitedata



#urbanspace



#smartcity

Functional specifications: examples from PCP WISE climate change EO project

Hans van Leeuwen
STOWA



The PCP WISE challenge

Soil-Water-Vegetation monitoring

Hans van Leeuwen, STOWA



Project ID Card



- EU-funded project via Horizon Europe Programme
- Builds on the preparatory action from PROTECT project
- 26 partners covering 9 countries
- 12 Public buyers and 14 support partners
- Duration: 36 months
- Overall budget: €19M
- Project coordination: Barrabés
- Lead buyer: hetWaterschapshuis





What is PCP WISE about?

PCP WISE

The Challenge We Face: Climate Change and Water Management

Climate change is causing severe global problems, such as droughts, floods, and disruptions in water supply. These issues also affect soil stability, drinking water quality, and increase the risk of wildfires, creating enormous potential for damage. European governments bear the responsibility for managing these risks.

To address these challenges, having accurate and timely management information is critical. This requires not only better maintenance systems but also leveraging smart monitoring and digital innovations. Tools like drones for inspections, AI-driven modelling, and satellite data are excellent examples of how technology can enrich existing knowledge. Water authorities must embrace these digital advancements to stay ahead of the challenges.

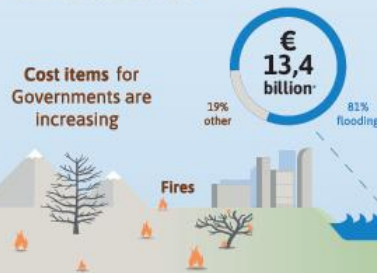
The Horizon Europe programme provides a unique opportunity to drive this digital transformation and tackle global climate challenges effectively.

Horizon Europe Programme: Funding Innovation for Water Management

In 2024, the EU allocated a €19M grant through the Horizon Europe programme to support applied research and development of satellite-based water management solutions. A project application, named PCP WISE, was submitted for this funding and received approval in September 2024.

PCP WISE aims to deliver practical solutions to help water authorities improve their management capabilities. The below infographic highlights the project's goals and its potential benefits in addressing climate and water challenges.

*Estimation 2023 | Source: NOS 22/2024



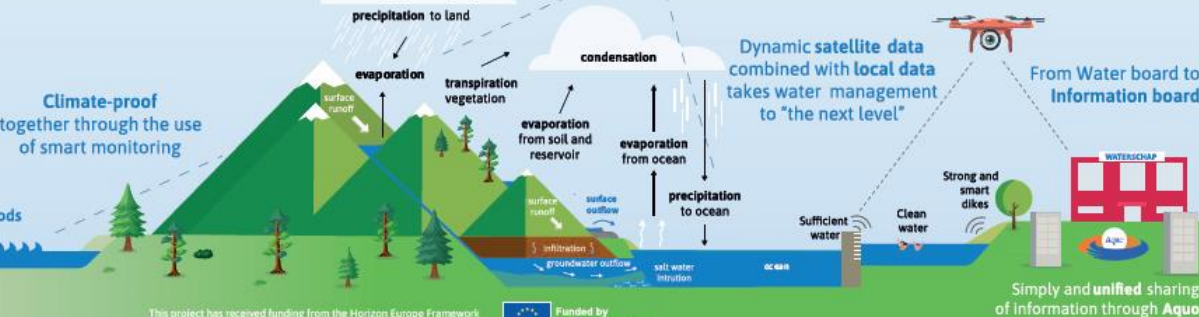
PCP WISE: Monitoring the Soil-Water-Vegetation System

PCP-WISE focuses on improving the monitoring of the local water balance in soil-water-vegetation systems using remote sensing technology. This approach creates consistent and shareable data about water conditions.

- 1 Insight into (climate)trends, and current conditions
- 2 Getting to know the critical boundaries of our water balance system
- 3 Developing and stimulating climate models



With this updated information, local water managers can better prioritise actions based on Environmental Act guidelines. For example, when water shortages occur, decisions can be made to allocate resources effectively. The insights also support creating risk maps, which raise environmental awareness and help mitigate damage during water-related crises.



This project has received funding from the Horizon Europe Framework Programme (HORIZON) under grant agreement N° 101182917.

Funded by the European Union

PCP WISE Action Plan

The European PCP WISE consortium of 26 local authorities, water authorities, and research institutions from 10 countries, has been formed to drive this initiative forward. To this end, Het Waterschapshuis is leading a group of 12 buyers who joined forces to undertake a Pre-Commercial Procurement procedure, supported by 34 additional partners providing assistance in this process.

In 2025 the consortium will launch a call for tenders inviting innovative market suppliers to respond and submit an offer to develop tailored solutions meeting the needs of the Buyers' group. These solutions will aim to enhance water system monitoring, improve insights, and advance early warning and monitoring technologies.

Currently, 22 use cases across five European countries — including five in the Netherlands — are being used to assess stakeholder needs. These use cases help shape the project's goals and refine the functional requirement of the solutions to be developed.

Benefits for Water Authorities

Water authorities are responsible for maintaining strong dikes and ensuring clean, sufficient water supplies. With the growing pressures of climate change and strict European regulations, experimenting with pilot projects has become essential.

PCP WISE supports the move toward data-driven operations and bears the ambition to prepare all water authorities for digital innovation by 2029. It offers a significant opportunity for the water sector to lead its digital transformation, build an international network, and share uniform cross-border data for a climate-resilient future.

By creating up-to-date local and sector-wide risk maps, water authorities can strengthen their ability to manage flood crises and potentially become leaders in European risk management.

*Proposal for the Customisation/Pre-operationalisation of Water Management Innovations from Space for European Climate Resilience

PCP WISE

WATER MANAGEMENT INNOVATIONS FOR CLIMATE RESILIENCE



What is Pre-Commercial Procurement?

Pre-Commercial Procurement (PCP) challenges industry from the demand side to develop innovative solutions for public sector's needs. PCP is a public procurement process that allows public procurers to test and procure innovative

solutions that are not yet available on the market. To do so, public procurers buy R&D services from several market suppliers and technology vendors in parallel to steer the development of solutions tailored to the public sector's needs. Public procurers

compare alternative potential solution approaches and filter out the best possible solutions that can be delivered to address procurers' needs. The end result including the intellectual property rights remain with the contractors.

PCP WISE Timeline

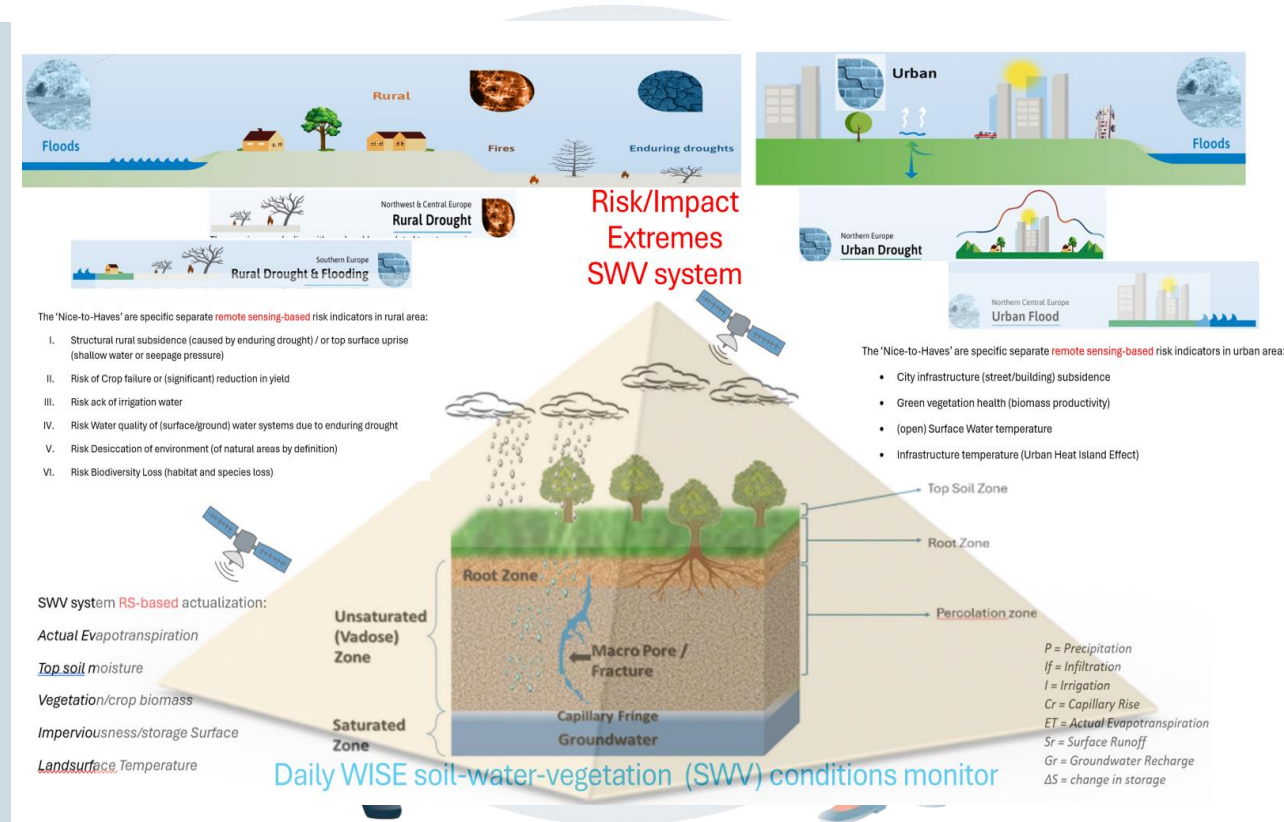
As of January 2025, the 11 PCP-WISE Buyers will engage into the below PCP process to generate innovative solutions to multiple water-related crises both in rural and urban areas.





PCP WISE in a nutshell

PCP WISE is an innovative project aimed at **developing cutting-edge solutions (up to TRL 8) for water management and climate resilience across Europe using the Pre-Commercial Procurement (PCP) instrument.** By leveraging **space technology and Environmental Observation (EO) data**, PCP WISE seeks to address critical challenges related to **floods, fires, and infrastructure impacts both in rural and urban areas.** This collaborative effort brings together public buyers, research institutions, and industry experts to create and implement advanced climate services that will **enhance Europe's ability to adapt to and mitigate the effects of climate change.**





PCP WISE logic

*The (pyramid) base of the 'WISE-information service' consists of **regular monitoring of the soil-water-vegetation system** conditions using **innovative techniques** like satellite remote sensing, (biophysical process) modeling, datascience/AI, local knowledge. The **extremes of the SWV conditions** induced by climate dynamics can be confirmed (RS-based) by **risk indicators for various sectors in urban and rural context**.*





Project Objectives



1

Innovative Solutions

Develop and test state-of-the-art technologies for climate adaptation using space and Earth observation data

2

Cross-Border Collaboration

Foster cooperation between regional water management, cities, communities, and crisis organisations across EU Member States

3

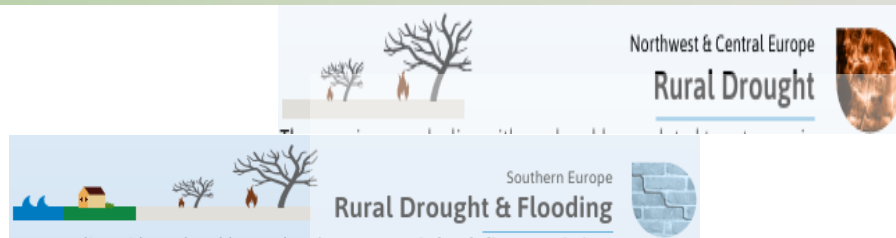
Enhanced Information System

Create common operational information products on local and regional water, soil, and climate systems to improve decision-making

4

Demand-driven Approach

Establish an active user network for exchange, validation, and continuous improvement of climate services through the PCP approach



Risk/Impact Extremes SWV system

The 'Nice-to-Haves' are specific separate **remote sensing-based** risk indicators in rural area:

- I. Structural rural subsidence (caused by enduring drought) / or top surface unrise (shallow water or seepage pressure)
- II. Risk of Crop failure or (significant) reduction in yield
- III. Risk ack of irrigation water
- IV. Risk Water quality of (surface/ground) water systems due to enduring drought
- V. Risk Desiccation of environment (of natural areas by definition)
- VI. Risk Biodiversity Loss (habitat and species loss)



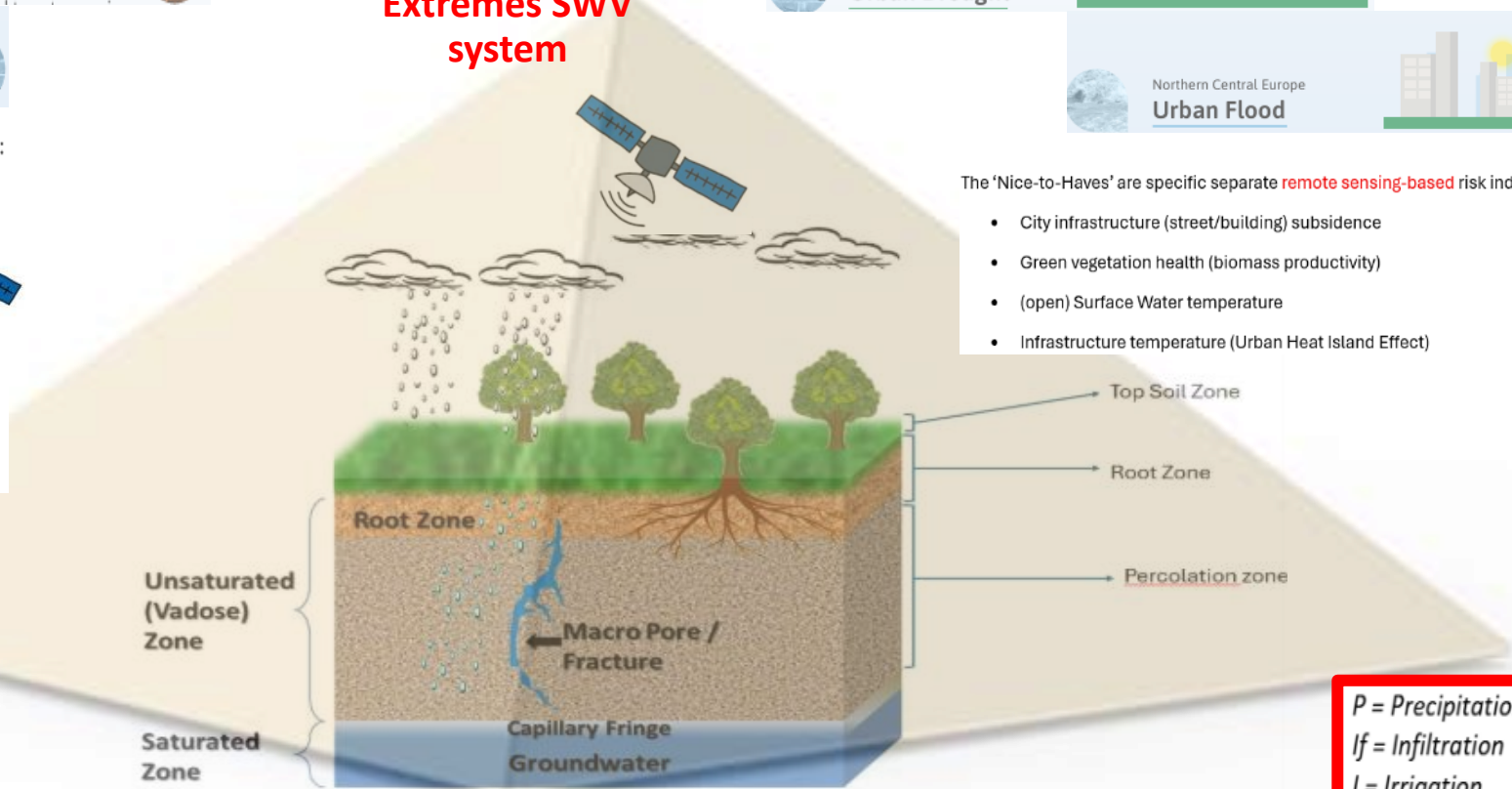
SWV system **RS-based** actualization:

Actual Evapotranspiration

Top soil moisture

Vegetation/crop biomass

Imperviousness/storage Surface



The 'Nice-to-Haves' are specific separate **remote sensing-based** risk indicators in urban area:

- City infrastructure (street/building) subsidence
- Green vegetation health (biomass productivity)
- (open) Surface Water temperature
- Infrastructure temperature (Urban Heat Island Effect)

Daily WISE soil-water-vegetation (SWV) conditions monitor

- P = Precipitation
- I_f = Infiltration
- I = Irrigation
- Cr = Capillary Rise
- ET = Actual Evapotranspiration
- Sr = Surface Runoff
- Gr = Groundwater Recharge
- ΔS = change in storage

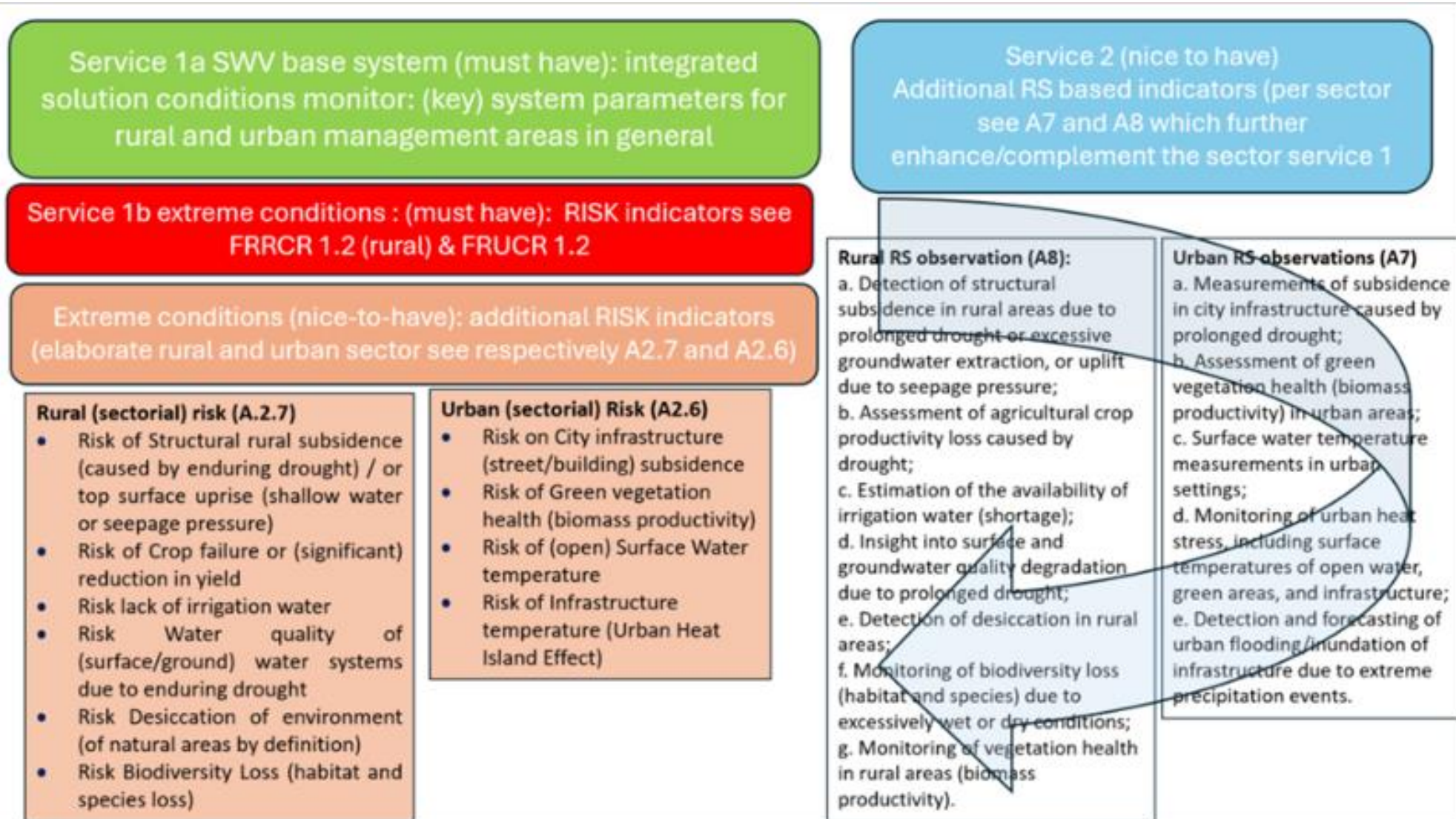


Core functions PCP-WISE information monitor

- **Urban Regular:** Soil matrix/groundwater conditions (monitor), short term (3d) forecast, specific link to apps on subsidence, heat islands (evapotranspiration), park/green monitor, water storage, etc.
- **Urban Crisis:** spatial (weighted) risk mapping (sector limits)
- **Urban Climate:** Historical Trends, input to long term forecast/scenarios
- **Rural Regular:** Soil matrix/groundwater conditions (monitor), short term (3d) forecast, specific link to apps on agriculture, nature, etc.
- **Rural Crisis:** spatial (weighted) risk mapping (sector limits)
- **Rural Climate:** Historical Trends, model-based inputs to long term forecast/scenarios



The core service (green and red: must have) of PCP-WISE and the additional sectorial (pink: nice to have) risk insights in extreme SWV system conditions and specifically related direct Remote sensing based (blue/white: nice-to-have) applications and related Pass/Fail and weighted award criteria coding





Functional Requirements pre- & during crisis (Urban & Rural); mandatory

Mandatory risk-indicators Urban:

- Soil Drying & Wetting (in terms of severity, magnitude, duration, and spatial extent; Risk maps: where does it become drier and wetter in the unsaturated zone)
- Saturated soil moisture conditions (prior to heavy rainfall)
- Floodrisk

Mandatory risk-indicators Rural:

- Soil Drying & Wetting (in terms of severity, magnitude, duration, and spatial extent)
- Saturated soil moisture conditions (prior to heavy rainfall)
- Risk of Wildfires
- Floodrisk



Functional Requirements: Nice-to-have Risk indicators

Nice-to-have risk-indicators Urban [2]:

- City infrastructure (street/building) subsidence
- Green vegetation health (biomass productivity)
- (open) Surface Water temperature
- Infrastructure temperature (Urban Heat Island Effect)



Functional Requirements: Nice-to-have Risk indicators

Nice-to-have risk-indicators Rural [2]:

- Structural rural subsidence (caused by enduring drought) / or top surface uprise (shallow water or seepage pressure)
- Risk of Crop failure or (significant) reduction in yield
- Risk lack of irrigation water
- Risk Water quality of (surface/ground) water systems due to enduring drought
- Risk Desiccation of environment^[1] (of natural areas by definition)
- Risk Biodiversity Loss (habitat and species loss)



Additional Functional Requirements from urban / rural endusers

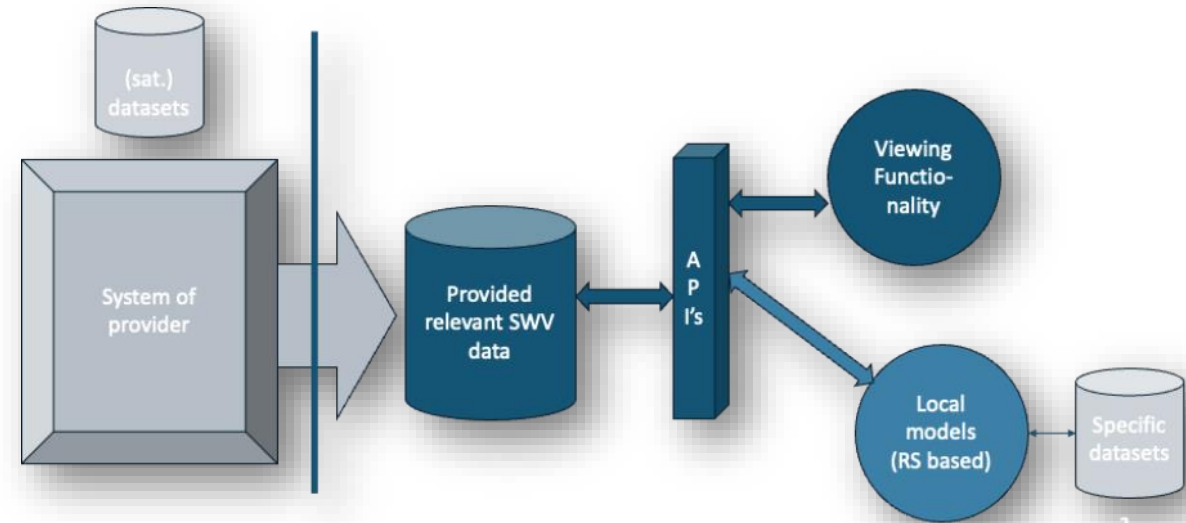
- Timeliness regular: daily in regular/pre-disaster phase (mandatory)
- Intelligence crisis: most added value (mandatory) is the 3 days forecast of (spatial) risk indicators. If feasible in crisis (wanna have): 1 hourly updates of these Risk Indicators
- Data delivery (mandatory) now cast: daily at 8:00 am important during crisis but also regular management (during fast changing conditions)
- Re-analysis (mandatory) of the 3-day forecast by looking back (3-day hind cast which improves/updates the monitor (integrated method) quality
- User functional requirements on Visualisation requirements of WISE information (in short: WISE results into use friendly Viewer with clickable maps, timeslider, time-series graphs, option to integrate own user data to compare, etc. Option to link up with opensource IMOD suite/MODFLOW hydrological standard)



Technical considerations

Service Core solution aspects:

- Multi-disciplinary components needed for the solution (several fields of expertise)
- Integrated solution (combination of several thematical processes)
- Vision on solution architecture (IT and functional)
- Solution requires demand driven operation (easy plug in towards user working environments)
- Solution needs serious attention to the following aspects: timeliness, scalable, reproducible, interoperable, evolutionary (self learning, adjustable), European standards/validity, etc as a solid future basis for European application





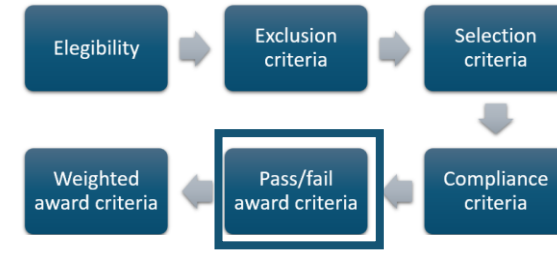
During contract considerations

Phasing and evolution aspects during WISE contract:

- Phase 1 (4 mo): **solution design**: requires a profound interaction with the users and understanding the use cases of the 5 representative lead sites in Europe. The 3 best designs/bids out of 5 will be selected for:
- Phase 2 (11 mo): **prototype** development and testing in controlled lab conditions with again intensive background user interactions/aspects and local understanding of operational aspects of the solution in order to have the best 2 prototypes/bids out of 3 for:
- Phase 3 (6 Mo): **validation & demonstration** exercises, which requires besides local operational (TRL 7-8) technical performance also clear visualization and presentation of outputs near to the various user environments



Award criteria



WEIGHTED AWARD CRITERIA

The tenders will be evaluated on the weighted award criteria (according to a quality assessment and a price assessment) only if the tenderer(s) is not subject to any of the exclusion criteria, compliance criteria and fulfils the selection criteria and the tender complies with the pass/fail award criteria.

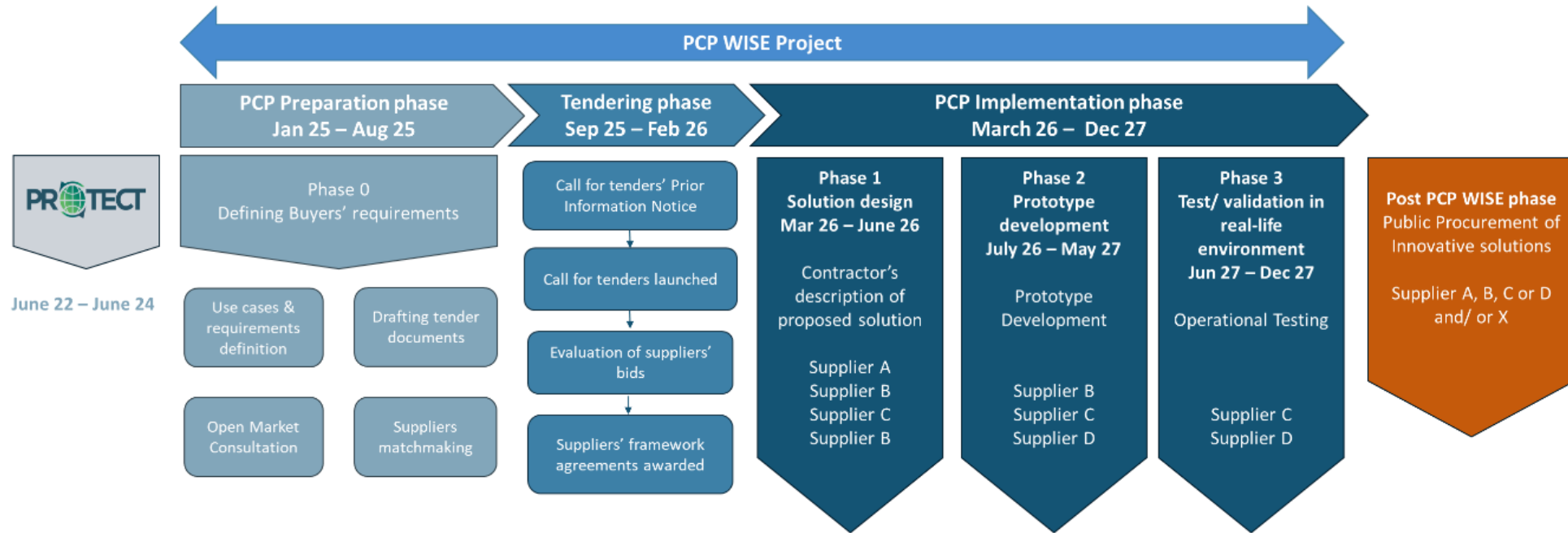
The award criteria and related sub award criteria will also be used to evaluate the award of the Phase 2 Contract and the Phase 3 Contract, according to a quality assessment.

No.	Weighted award criteria	Max points	Threshold
A.	Impact on the challenge	49	0
B.	Validity of the technical approach	23	0
C.	Quality of the tender	18	0
	Total	90	0

- 90 points correspond to the **technical offer**, and
- 10 points correspond to the **financial offer**



Overview of the PCP WISE project





Documents and Online gathering



**Where can you find the
Tender documents?**

[https://pcp-
wise.tuttogare.it/pcp/dettagli
o.php?codice=1](https://pcp-wise.tuttogare.it/pcp/dettaglio.php?codice=1)



Questions & Answers

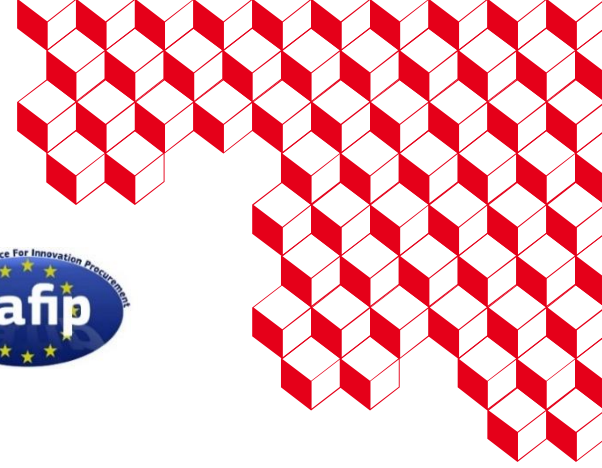
Joint cross-border procurement to make Europe a world leader in supercomputing: examples from PRACE and EuroHPC Joint Undertaking

Jean-Philippe Nominé
CEA – Département des Sciences
de la Simulation et de l'Information



TECHNIQUES TO FOSTER INNOVATION PROCUREMENT Webinar

September 17, 2025



Joint cross-border procurement to make Europe a world leader in supercomputing:
examples from PRACE et al. & EuroHPC Joint Undertaking

Dr. Eng. Jean-Philippe Nominé
jean-philippe.nomine@cea.fr

Outline

- **PCP: PRACE 3IP, HBP** 

- **PPI: PPI4HPC, ICEI** 

- **EuroHPC**  



FP7 Capacities Work Programme: Infrastructures

Topics opened in Call FP7-INFRASTRUCTURES-2012-1 (call N° 10):

INFRA-2012-2.3.1: Third implementation phase of the European High-Performance Computing (HPC) service PRACE

This supercomputing infrastructure addresses the ever growing computational and simulation requirements of science and engineering communities to allow them to stay at the forefront of research; as well as those of industry to boost its innovation capabilities.

Special objectives in the third implementation phase are: (i) to pilot joint pre-commercial procurement and (ii) to deploy services for industrial users, including SMEs. The joint pre-commercial procurement is carried out with a view to develop and test the required mechanisms in PRACE, increase the financial resources devoted to HPC R&D in Europe, and ensure that European HPC procurement benefits the development of systems and software in Europe.

PRACE PCP

<https://prace-ri.eu/prace-archive/infrastructure-support/pre-commercial-procurement/>



9 M€

Whole-System Design for Energy Efficient High Performance Computing (HPC)

- **PHASE I – solution design; duration 6 months**
- **PHASE II – prototype development; duration 10 months**
- **PHASE III – pre-commercial small-scale product development; duration 16 months**

Eventually ran from 2013 to 2018

In November 2016, after successful completion of phase I & II, three contracts were awarded to Atos-Bull, E4 Computer Engineering SpA and Maxeler Technologies Ltd to implement the third and final phase of the PRACE PCP on Whole-System Design for Energy Efficient HPC.

In 2017, the three companies deployed the pilot systems in operational HPC Data Centres located at Montpellier GENCI/ CINES, Bologna CINECA and Juelich JSC. Scalability and energy efficiency were evaluated initially with four different benchmark codes used in the PRACE user community, followed by real scientific and engineering applications.



Specificity: 3 final contenders selected

Budget of 5M€ broken down into

- 1 M€ for Maxeler
- 2,47 M€ for E4
- 2,02 M€ for Bull-Atos

February 2018 (end of PCP)

Today



Added the power measurement innovation to its cluster software product portfolio. Commercialised the solution.

Power measurement framework
Already sold to several customers



Added the power monitoring / capping and SLURM innovation to its product portfolio. Working on an updated improved version. Commercialising in partnership with IBM.

OP206 Gold
Commercialisation ongoing



Commercialised as a service on AWS cloud and separately, the Conjugate Gradient kernel. Commercialising in partnership with Xilinx.

AWS cloud and Conjugate Gradient kernel solution
Commercialisation ongoing



- After PRACE, the Human Brain Project endeavoured another HPC PCP.
- Shorter project 2014–2016, benefitted from PRACE experience (subset of PRACE 3IP procurers involved)
- High Performance Computing requirements for brain simulation, including **interactive supercomputing** and **large memory capacity**.
- Three vendor consortia competed on the solution design in Phase I of the HBP PCP: Cray, Dell/Partec/Extoll, IBM/NVIDIA.

End 2016 (end of PCP)



The PCP strengthened the cooperation between NVIDIA and IBM
Together they are successfully commercialising and rolling-out the solution

Today

JURON
Interactive in-situ HPC visualisation with NVIDIA graphical processing unit accelerators in IBM Power Processors



DE

The core technology developed in the PCP has grown further and split into two strands of engineering (for which Cray attracted also further funding) that will likely result in products

JULIA
KNL-based compute nodes. Intel processors. Omni-path 100 Gbps network

PPI4HPC

H2020 call EINFRA-2016-2

In 2018, four countries took the lead for an HPC PPI: CINECA (IT), Juelich Supercomputing Centre (DE), CEA and GENCI (FR), Barcelona Supercomputing Center (ES).

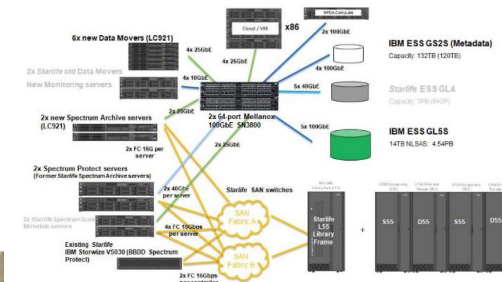
The 73 €M joint procurement **PPI4HPC (Public Procurement of Innovative solutions for HPC)** aimed to realise a significant upgrade of the European HPC infrastructure towards future exascale systems. The most prominent common technical challenge was to increase significantly the performance of the systems compared to currently installed supercomputers without increasing **power / energy consumption**

This led to the award of contracts for PRODUCTION systems that have meanwhile or are being deployed at four different sites throughout Europe:

- CEA/GENCI deployed a versatile supercomputer (Bull/ATOS) supporting both, highly scalable computing applications and high-performance data analytics and machine learning applications
- CINECA deployed a supercomputer from IBM including technology from E4, which is optimised for compute-intensive applications with a peak performance of 32 PFlop/s
- BSC deployed a new high-performance storage infrastructure from IBM that is able to scale to more than 100 PByte as a single file space
- JSC deployed a supercomputer with a peak performance of 16 PFlop/s from Bull/ATOS that is optimised for data-intensive applications and therefore features a large memory and storage capacity.

Consortium and Procured Solutions

- BSC (Spain):
Storage system
- CINECA (Italy):
HPC system Marconi100
- GENCI/CEA (France):
HPC system Joliot Curie
- JSC (Germany):
HPC system JURECA-DC



PPI4HPC

Based on a set of common and site-specific requirements, suppliers were specifically asked to consider

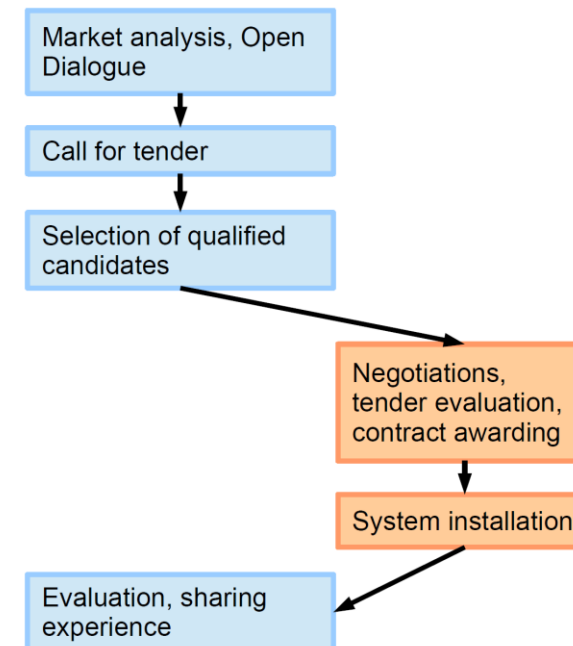
- Solutions for measuring and steering energy consumption to allow for dynamic optimisation of hardware parameters such that energy is reduced with minimal impact on performance
- Integration of water-cooled power supplies that improves Power Usage Effectiveness (PUE) by reducing the energy needed for cooling the system
- New solutions for integrating non-volatile memory technologies into HPC systems to enable much faster and more flexible access to storage
- Innovative software components that facilitate easy integration of tape technology in a way that data is transferred to tape transparently to the user innovations into the offered solutions. This included:

Project budget of 26 MEUR

- Aggregate procurement budget > 70 MEUR

Procurement procedure

- Split into 4 different lots
- Aim for competitive dialogue



Overview of the process

- **Preliminary work (May 2014 - March 2017):** drafting of an answer to the call for proposals launched by the EC (call EINFRA-21-2017)
- **Project set-up (April 2017 - July 2017) with the objective of:**
 - Clarifying and formalizing the organisation of the project (teams, consortium agreement, joint procurement agreement)
- **Preparation of the procurement (July 2017 - May 2018) with the objective of:**
 - Conducting a market consultation
 - Preparing the tendering package
 - Publishing the contract notice under the French law
- **Execution of the procurement (May 2018 – May 2020) with the objective of:**
 - Awarding the contracts for the four high performance innovative systems
 - Closing the procurement procedure (contract award notice)
- **Deployment and operation (started in December 2019) with the objective of:**
 - Providing access to new high-performance innovative system to scientists
 - Assessing the innovation deployed in real production environment

PPI4HPC Insights

Competitive dialogue

- Enables in-depth analysis of technical options
- Addressed technical challenges: data centre integration and energy efficiency
- Integration of innovative solutions

Technical lessons



Use common set of benchmarks

- Reduces efforts and risks
- Based on a TCO approach targeting real scientific and industrial applications



Establishment of a collaboration with providers during contract execution

- Supports the development of innovations, quality or usability of procured solutions



Market impact in the creation of new solutions

- Discussion with vendors helps to define future products
- Deployment of several innovative solutions developed earlier in the field of a PCP (pre-competitive procurement within PRACE-3IP project) by PPI4HPC partners

Legal lessons



Build motivated and available teams in early project stages

- Include members with technical and legal know-how
- Regular joint team meetings
- Sharing of roadmaps and best practices



Legal consultancy

- Engagement of a law firm with know-how of relevant legal aspects in the countries of the 4 public procurers



Clear definition of roles and liability of each partner



Strategies to reduce the impact of conflicts between the national laws and lead procurer



Organise clear and fair information to the market with clear procurement organization and tendering package



Awareness and good internal communication among all relevant stakeholders during the execution of the local procurement procedures

Results

- All innovative solutions installed and in production in due time
- Some innovative solutions led to first-ever PPI4HPC funded systems made available to European users through national and PRACE calls
- Development and dissemination of best practices for joint procurements in the field of HPC

ICEI PPI (related to HBP as well)

- ICEI PPI – Deploying federated interactive compute and large scale data services across Europe
- In 2018, the ICEI (Interactive Computing E-Infrastructure)⁷ project continued procurements for **wider deployment of solutions developed in the HBP PCP across an enlarged buyers group**. The buyers in the ICEI PPI are Juelich Supercomputing Center (DE), CSCS (CH), BSC (ES), CEA (FR), CINECA (IT). The aim is to deliver e-infrastructure services that will be federated to form the Fenix infrastructure.



EuroHPC procurements

- EuroHPC created in 2018, since then:
 - HPC systems
 - More recently, AI optimised HPC systems (for AI Factories)
 - Quantum computing systems
 - A specific software development procurement for Federated HPC services



Exascale Systems

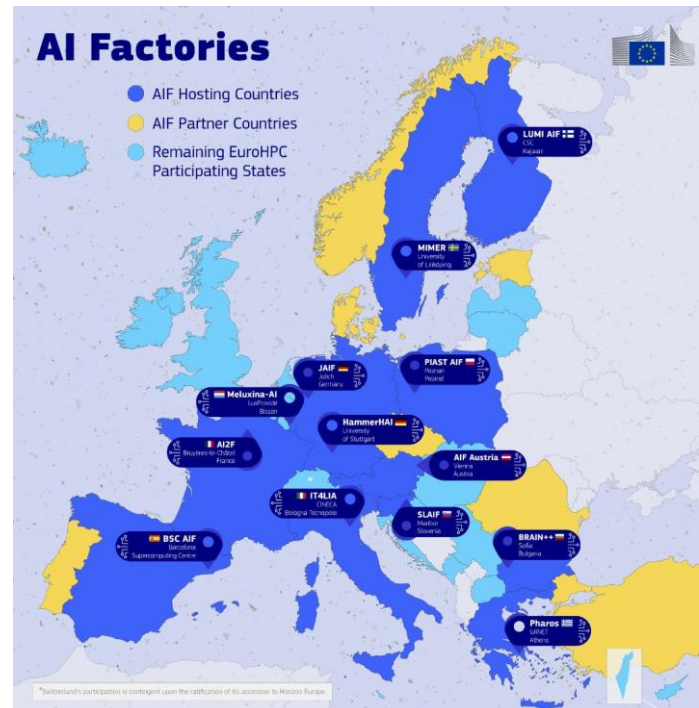
- JUPITER | Jülich Supercomputing Centre, Jülich
1 exaFLOP/s
- Alice Recoque | CEA/GENCI, Bruyères-le-Châtel

Pre-Exascale Systems

- LUMI | CSC, Kajaani
~0.54 exaFLOP/s
- Leonardo | CINECA, Bologna
~0.32 exaFLOP/s
- MareNostrum 5 | Barcelona Supercomputing Centre, Barcelona
~0.3 exaFLOP/s

Petascale Systems

- MeluXina | LuxProvide, Bissen
~0.02 exaFLOP/s
- Karolina | IT4Innovations National Supercomputing Center, Ostrava
- Discoverer | Sofia Tech Park, Sofia
- Vega | IZUM, Maribor
- Deucalion | Univ. Minho, Riba de Ave



EuroHPC Quantum Computers



10
Quantum
Computers

EQUIPPING EUROPE FOR THE QUANTUM LEAP
The European Union is making history by building the world's first public network of cutting-edge quantum computers.

650
qubits in total
are available
starting 2023

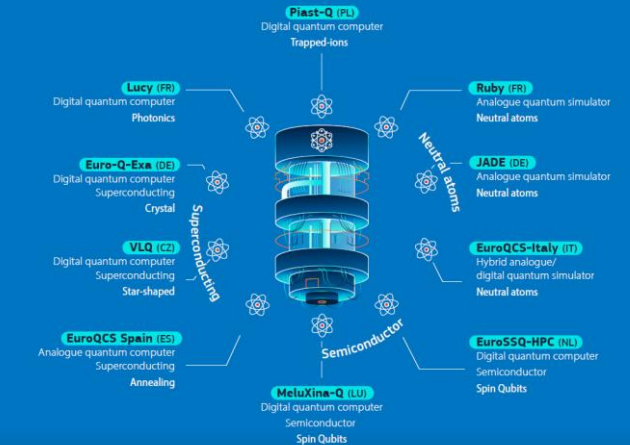
120
million EUR of EU
& national funds
are invested in European
research & innovation

6
different quantum
technologies
are integrated in European
supercomputers

29
partners from 17
European countries
are involved
in the initiative



EuroHPC quantum computers
are developed by European companies, and will help
scientists to break unsolvable problems, boosting EU competitiveness,
strategic autonomy and sustainable prosperity.



EuroHPC JU
LEADING THE WAY IN EUROPEAN SUPERCOMPUTING

EuroHPC procurements

« Classical » procurements, typically competitive dialogues for hardware/supercomputers.

Some expectations w.r.t. European technologies and activities of vendors were only expressed as specific requirements with some scoring in evaluation criteria (rather weak constraints...)

EuroHPC explicitly activated restriction clauses for QPUs acquisitions.

EuroHPC procurements

Excerpt of EuroHPC 2025 Work Programme: restriction clauses reminded, can be activated (on a case by case basis for the different calls)

https://www.eurohpc-ju.europa.eu/document/download/25e9fb7a-a29c-4d15-9186-ed22a0faf6d3_en?filename=EuroHPC%20JU%20GB%20Decision%20No%2026.2025_Amendment%20No%204%20to%20Work%20Programme%202025.pdf

.../...

General Conditions and restrictions:

For all activities implemented by the EuroHPC JU that are funded from the Horizon Europe (HE) budget, the Governing Board may decide to limit in the calls for proposals the eligibility of participants according to Horizon Europe Article 22(5).

For all activities implemented by the EuroHPC JU that are funded from the Digital Europe Programme (DEP) budget, the Governing Board may decide to limit in the calls for proposals or procurements the eligibility of participants according to Digital Europe Articles 12(6) and 18(4).

For all activities implemented by the EuroHPC JU that are funded from the Connecting Europe Facility (CEF) budget, the Governing Board may decide to limit in the calls for proposals or procurements the eligibility of participants according to Connecting Europe Facility Article 11(4).

.../...

EuroHPC procurements

Example of activation in Work Programme 2023 (was then the case for QPUs in general)

https://www.eurohpc-ju.europa.eu/document/download/0c8373a9-38b5-4eea-9132-2d26a854ff8d_en?filename=Decision%2054.2023_8th%20Amendment%20to%20WP23.pdf

.../...

EUROHPC-2023-CEI-QC- 01: Call for expression of interest for the hosting and operation of European quantum computers or quantum simulators integrated in EuroHPC supercomputers

The EuroHPC Joint Undertaking (JU) will launch a call for expression of interest to identify hosting entities for the procurement and operation of quantum computers or simulators (QCS), their integration with HPC supercomputers and the development of a quantum software stack. Applicants could be either single European entities or consortia of European entities. The EuroHPC JU will initiate and manage the Calls for Expression of Interest for hosting QCS systems and evaluate the 15 applications received, with the support of independent external experts. The hosting entities will be selected by the Governing Board of the Joint Undertaking following the call for expression of interest.

Following the selection of the hosting entities the EuroHPC JU will initiate the procurement of the selected QCS systems. The specific conditions of the procurement will be defined in a call for tender. For security related reasons and as the action is directly related to the Union's strategic autonomy, the participation of suppliers in the acquisition of the quantum computers or simulators will be subject to conditions in accordance with Article 12(6) of Regulation (EU) 2021/694, and in accordance with Article 18(4) of that Regulation.

.../...

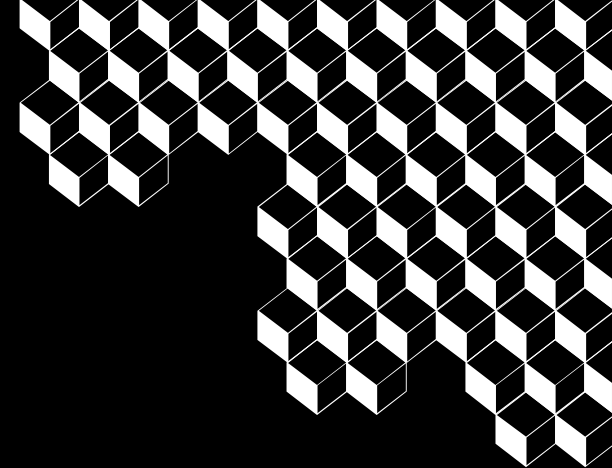
Concluding remarks

(personal opinion and feeling)

- PCP by PRACE was interesting but a long and tricky process (not aligned with the pace of technology evolutions; and heavy paperwork).
- HBP PCP could then be more agile, benefitting from PRACE experience – (small) useful systems stemmed from it, but no strongly related PPI afterwards.
- PPI4HPC was a very nice success, 4 production systems w/ various innovations – however not strongly related to the previous PCP.
- EuroHPC has so far not really taken this kind of path.
 - There is likely more room for more assertive and positive use of instruments like PPI (PCP? well, if optimised....), more generally to improve the uptake of EU technologies, incl. but not limited to those supported and funded by EU R&D programmes.



Questions ?



A group of business professionals in an office setting. A man in a dark suit and striped tie is on the left, gesturing with his hand. A woman in a grey blazer is in the center, holding a smartphone. Another person is on the right, also holding a smartphone. In the foreground, a tablet displays a document with text and circular diagrams. There are white coffee cups on the table. The text "Discussions and Q&A" is overlaid in the center.

Discussions and Q&A



COFFEE BREAK

Floating Solar project: example from the Federal Public Service, Health, Food Chain Safety and Environment

Wendy Bonne
Federal Public Service, Health, Food Chain Safety
and Environment

Floating Solar & multifunctional platforms in the Belgian North Sea



Health
Food Chain Safety
Environment

Wendy Bonne
Marine Environment Unit
DG Environment

The hard learning from high complexity / confusion / mistakes
+ from the right experienced advisor !

Wouldn't it be great if...

- Using solar energy as **renewable energy source** for more electricity production at sea (space needed at sea)
- Connection with **electricity grid** (new or existing (expensive) cables)
- Cost efficient energy provision – **Lowered Levelised Cost of Energy (LCOE)**
 - Cost of transport, materials etc.
- **Multi-use and multifunctional** (platform for different objectives): Floating solar to be efficiently combined with windmills and other low-risk activities (like **ocean observation** opportunities, but aquaculture excluded for this case)
- Solar panels floating at sea or solar panels elevated on floating platforms, but anchored at the sea bottom (fixed structure from a legal perspective)
- **Easy maintenance** through easy access
- **Safe** towards other users of the sea (windmills, maintenance vessels, shipping, recreation, fishing, etc.)
- **Maritime security**, low intruders' and sabotage risks
- **Environmental friendly & Do not Significantly Harm Principle (DNSH)**, including its 6 objectives
 - Sustainable use and protection of water and marine resources
- **Protection and restoration of biodiversity and ecosystems**, not to be significantly detrimental to the good condition and resilience of ecosystems
 - Species friendly (sea birds, seals, no invasive species, etc.)
 - Habitat friendly, including hydrodynamics, sea bottom integrity and associated life (minimum contact with sea bottom)
 - Ecosystem friendly (phytoplankton, pelagic food chain and benthic-pelagic coupling)
- Circular economy, including **waste prevention and recycling**
- Pollution prevention and control (**no toxics or pollution from corrosion and coating materials**)

RRF Investment I-7.16: “Floating solar”

- Through Research & Development advancing the technical, economic, and financial feasibility of floating solar panels in the North Sea
- Increasing the technology readiness level from 4 to 7 (on a nine-level scale)
- **A full scale floating solar panel demonstrator installed and operational with a capacity between 1 and 5 MW.**
- To be completed by 31 December 2025 / 30 June 2026 as milestone for the Belgian Plan for Resilience and Recovery (RRF).

Which components are at which TRL?

TRL 1 Basic concepts observed

TRL 2 Technology concept formulated

TRL 3 Experimental proof of concept

TRL 4 Technology validated in lab

TRL 5 Technology validated in relevant environment

TRL 6 Technology demonstrated in relevant environment

TRL 7 System prototype demonstrated in operational environment

TRL 8 System complete and qualified

TRL 9 Actual system proven in operational environment

Solar panels?

Carrying platform?

Anchorage structures?

Grid connection?

Proof of concept



www.seavolt.be

in front of Ostend
(Blue Accelerator)

Prototypes

250 kW - 1 MW

Demonstration phase

1 - 5 MW



Aim to include in RRF
(too much)

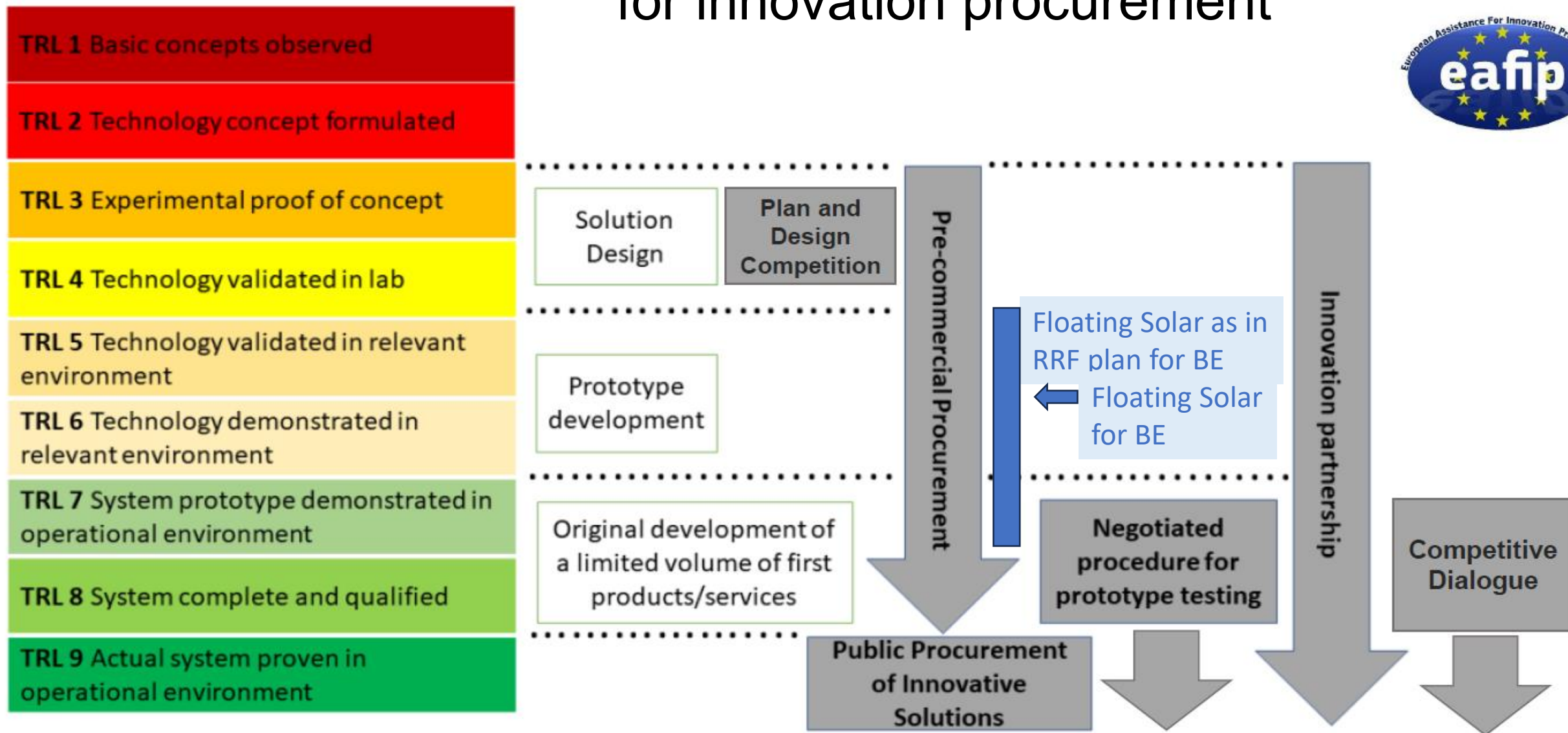
Floating Solar Panels BE - pilot project I - 7.16 RRF

- A first element to consider when deciding on the procurement procedure is **whether the respective purchase entails R&D services or not.**
- What is R&D ? Definition of R&D in **Frascati Manual** (OECD, 2015)
- R&D is always aimed at new findings, based on original concepts (and their interpretation) or hypotheses. It must satisfy five core criteria. The activity must be:
 - novel - NOT yet available and used knowledge
 - creative - NO routine activities/monitoring but new concepts/ideas to test
 - uncertain - solution of the problem not evident and result unsure
 - systematic - planned time, resources and personnel
 - transferable and/or reproducible - results based on statistically relevant data
- R&D ≠ Innovation: The results of an R&D process have to reach the commercialisation phase in order to be considered innovations. A prototype, for example, is not innovation.

OECD (2015), *Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development*, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris.

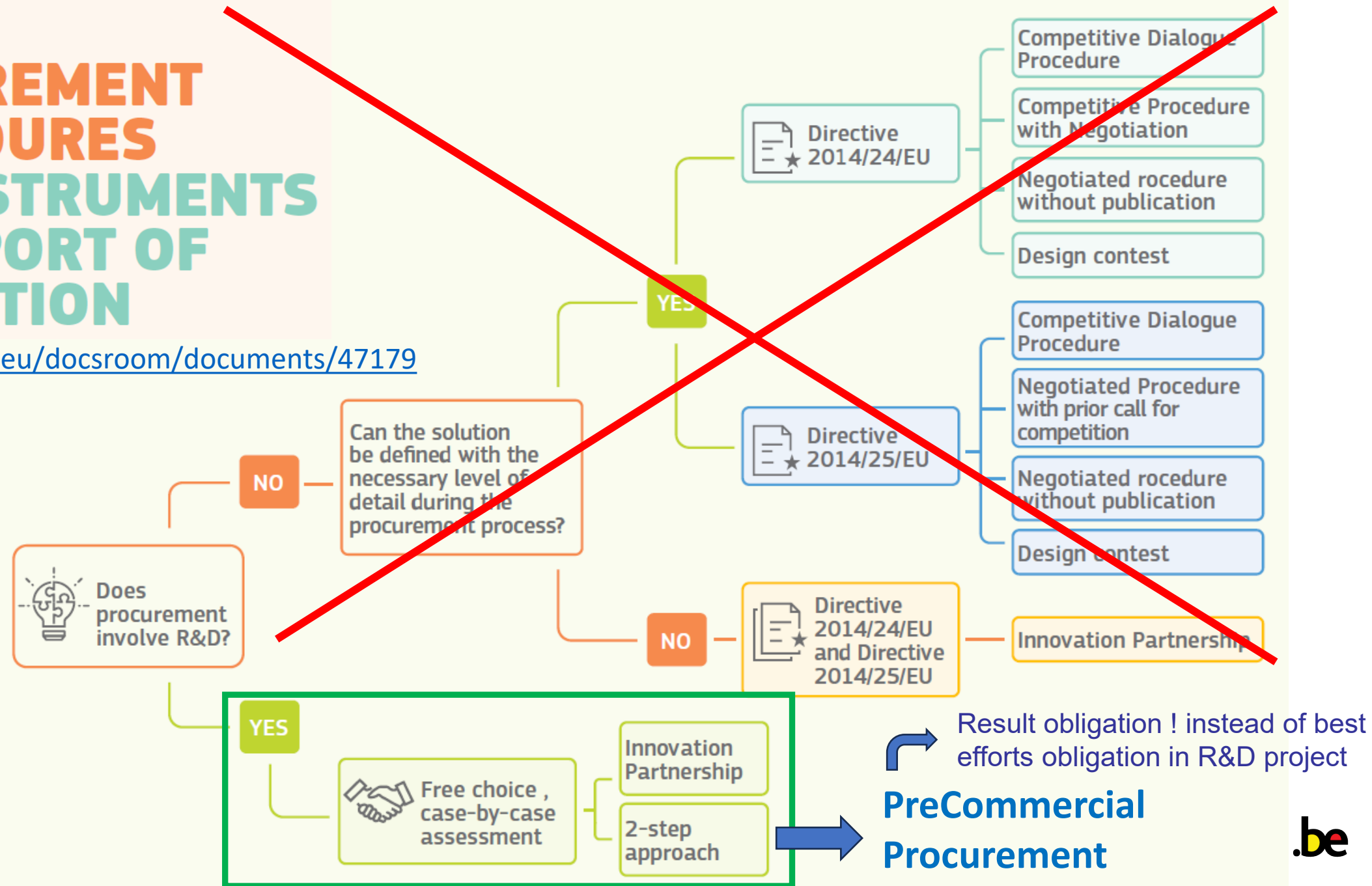
DOI: <http://dx.doi.org/10.1787/9789264239012-en>

Different procedures/methods for different stages of development for innovation procurement



PUBLIC PROCUREMENT PROCEDURES AND INSTRUMENTS IN SUPPORT OF INNOVATION

<https://ec.europa.eu/docsroom/documents/47179>



Legal Framework for PCP (PreCommercial Procurement)

➤ PCP falls outside the scope of the European Public Procurement Directives

Article 14 D. 2014/24/EU, Article 32 D. 2014/25/EU and Article 25 D. 2014/23/EU

“this Directive shall only apply to public service contracts for research and development services [...] provided that both of the following conditions are fulfilled: (i) the benefits accrue exclusively to the contracting authority for its use in the conduct of its own affairs, and (ii) the service provided is wholly remunerated by the contracting authority”.

➤ The **general principles of the Treaty on the Functioning EU** are applicable.

➤ Communication from the Commission, “**Pre-commercial procurement: driving innovation to ensure sustainable high quality public services in Europe**”, COM(2007) 799 final, 14.12.2007

➤ Commission Staff Working Document, Example of a possible approach for procuring R&D services SEC(2007) 1668

➤ 2014 Framework for **state aid** for R&D&I



Original concept for development target



Focused on floating solar

Multifunctionality of offshore test platforms ?

**Multifunctionality should be an obligation for offshore infrastructure !
(for EU Ocean Pact)**

- Offshore grid connection is main problem
 - Grid connection for solar panels?
 - Grid connection for other sensors/drones?

Focus on the grid connection of an indispensable device like an eVTOL drone

- For future control and enforcement, environmental monitoring, maintenance support, maritime security, interventions in crisis situations.

eafip methodology step-by-step

Preparatory Phase

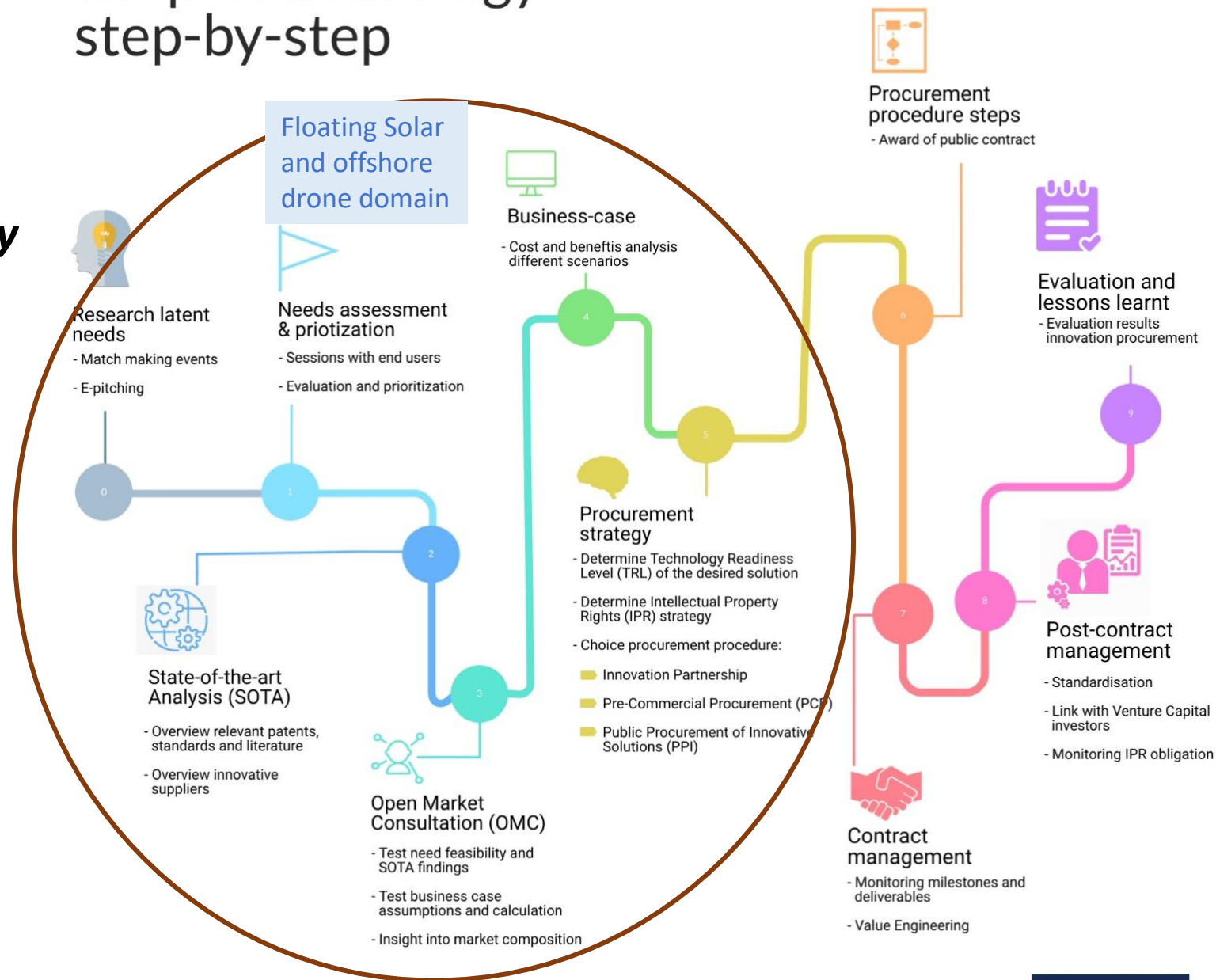
EAFIP Assistance:

- State-of-the-art Analysis (SOTA) on FLOATING SOLAR & OFFSHORE DRONE DOMAIN

with PATENT and STANDARDS SEARCH

+ OPEN MARKET CONSULTATION

ETC.



Thank you for your attention !

- Remind to assess R&D needs and TRL levels for most crucial gaps in development needs & seek for assistance !
- Consider to include “obligatory options” in your recurrent tenders to attract innovation.
- Multifunctionality criteria: if you would currently have (had) included in offshore wind mill construction tenders, please share it as useful examples.

Wendy.Bonne@health.fgov.be

Value based award criteria: examples from the healthcare sector

Caterina Sampol
Hospital Sant Pau

Value-based award criteria in Sant Pau hospital



Techniques to foster Innovation Procurement

Caterina Sampol
Barcelona, September 17th 2025



SANT PAU
Campus Salut
Barcelona



Hospital de
la Santa Creu i
Sant Pau

The Santa Creu i Sant Pau hospital of Barcelona

**A great legacy and
exciting future**



1401
Founding Site



1902
Modernist Site



2009
Current Site



In a place where medicine was practiced 100 years ago, we are now projecting the medicine of the future.

Sant Pau Art Nouveau Site, in which history and innovation go hand in hand, has become a new point of reference in the city of Barcelona.

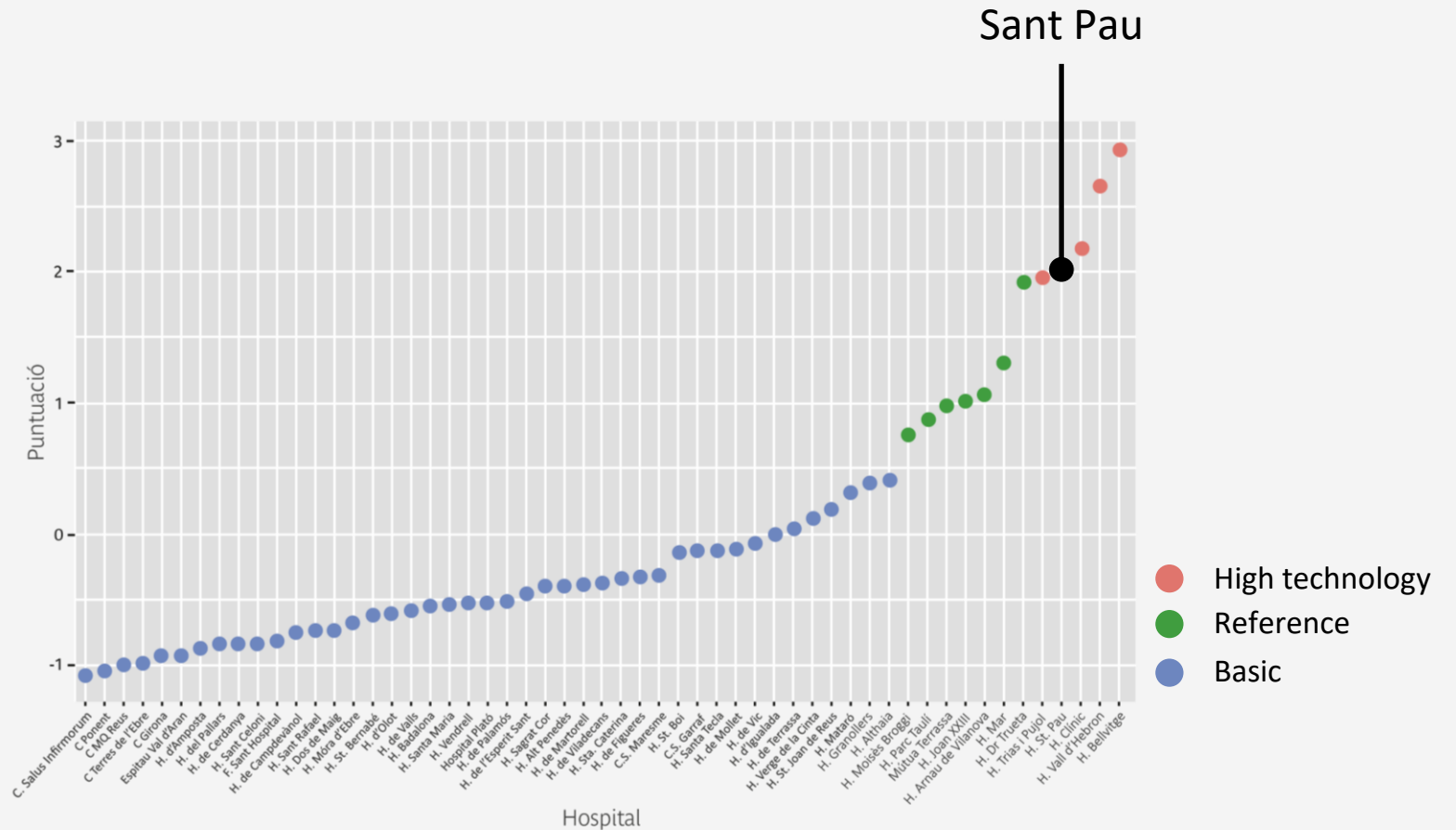




Actual positioning

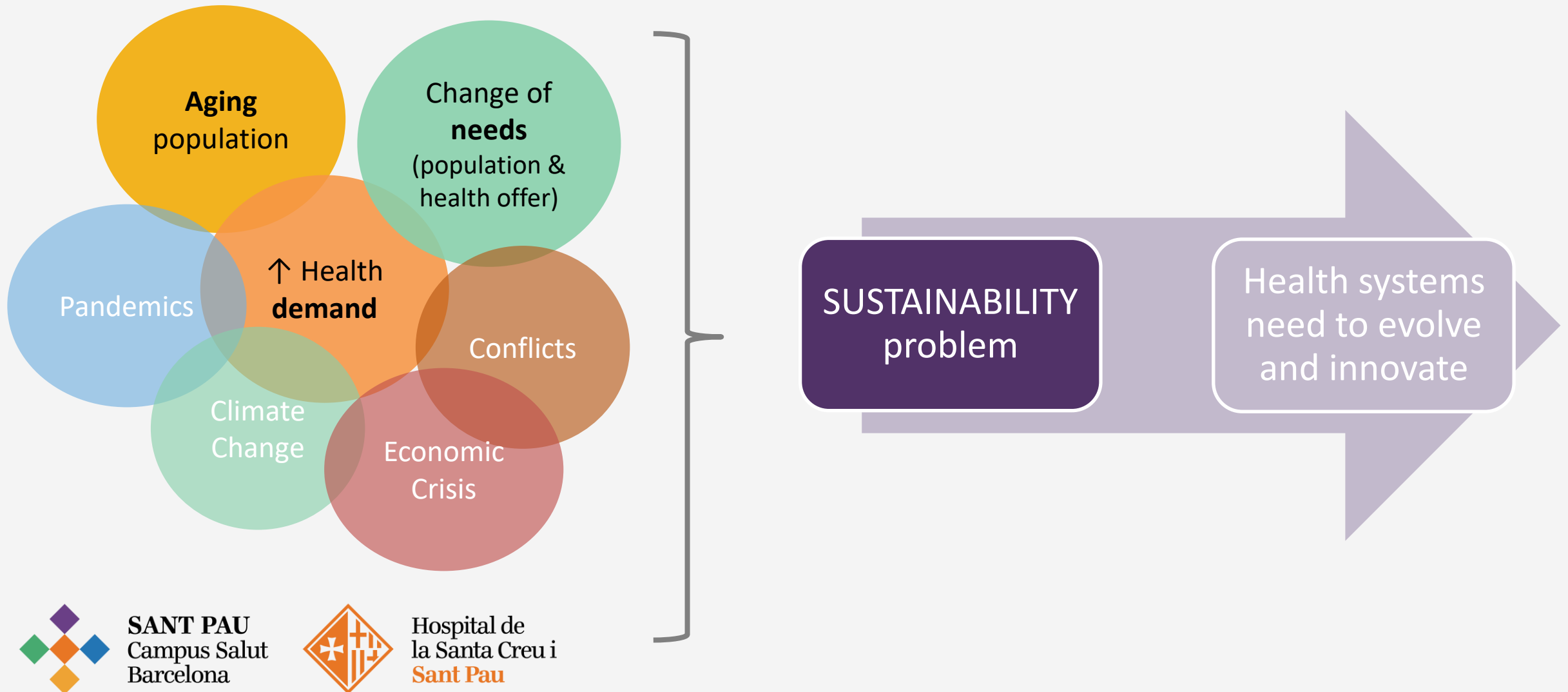
Sant Pau is:

- The fourth **most complex hospital** in Catalonia
- Leader in **safety** and **quality** of care



The complex health challenge requires a paradigm shift

To solve the health challenge requires a paradigm shift



Changing the focus

Value and Results



Activity and volume

Illness



Episode

Quality & Quantity

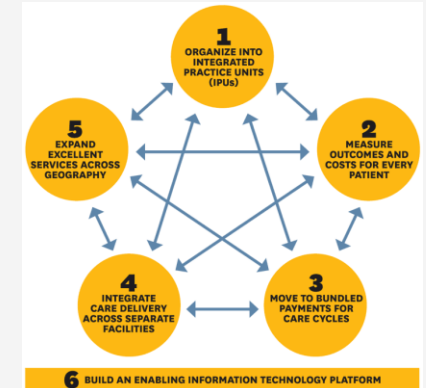


Quality

Involving all stakeholders to create value for patients

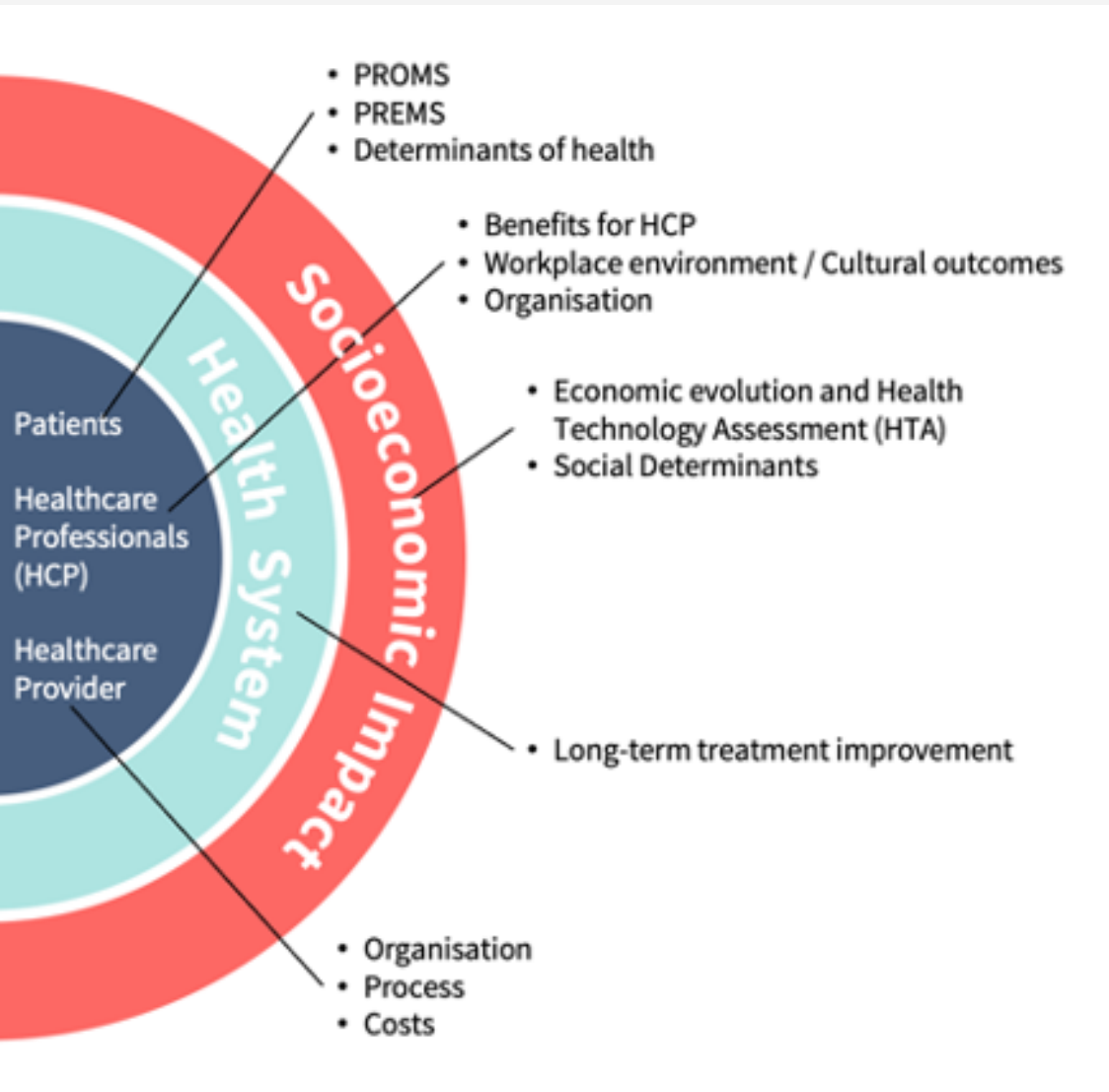
Value-based medicine

$$\text{VALUE} = \frac{\text{Patient-relevant outcomes}}{\text{Costs per patient to achieve these outcomes}}$$



A real solution for the necessary transformation of health systems

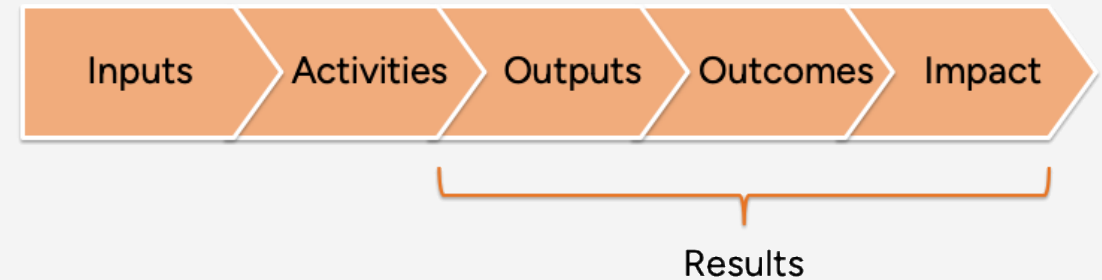
Value-based Procurement



Demand –driven public contracts “permeable to value”, through the whole contract life cycle

Considering the perspective of all stakeholders impacted by the contract

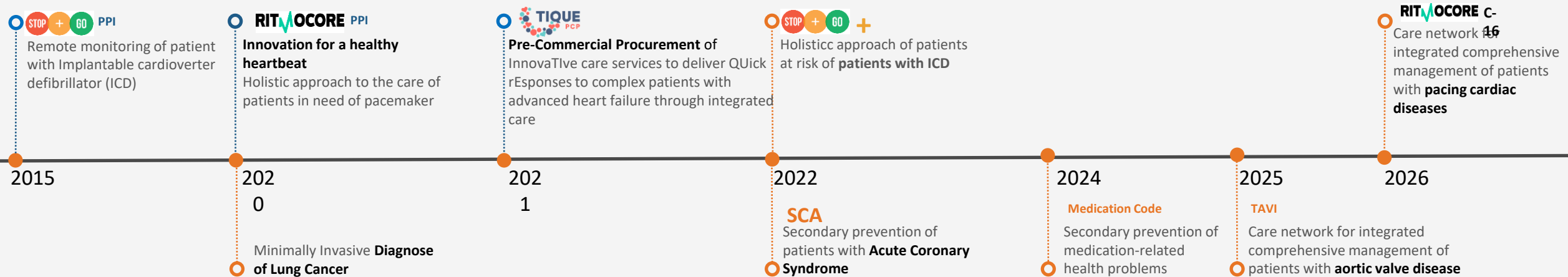
Long-term outputs, health outcomes, and performance indicators



Value-Based Procurement step-by-step

- 1 Clinical need**
 - Well defined need & determinants
 - Expected value for all stakeholders
- 2 Feasibility study**
 - Industry
 - Science & Innovation
 - Available budget
- 3 Value-based KPIs**
 - Activity
 - Quality outcomes
- 4 Award criteria focussed on outcomes**
 - Risk-Sharing
 - Activity follow-up
- 5 Contract regulation fostering collaboration**
 - Technical board
 - Support technology

Value-based Procurement in Sant Pau



We started in 2015 with a simple project

Some examples



SANT PAU
Campus Salut
Barcelona

The enablers ...



Remote monitoring of patient with Implantable cardioverter defibrillator (ICD)



Holistic approach to the care of patients in need of pacemaker



Clinical need

Prioritise the main problems to address

Dispersion of follow-up

Commuting

Interventionism teams

**Improving the
response at the
Emergency Room**



Family overload

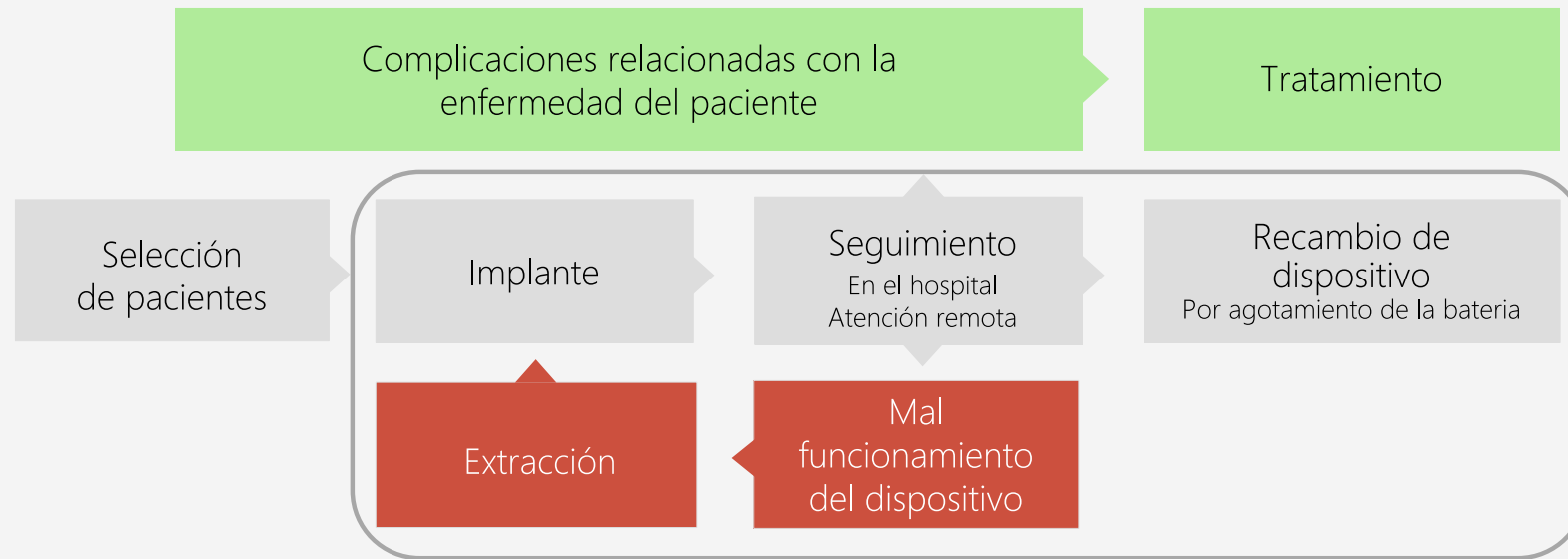
Healthcare teams overload

**Support technologies “No”
high-end**

**Lack of a value measuring
information system**

Misalignment Provider – Administration – Clinicians

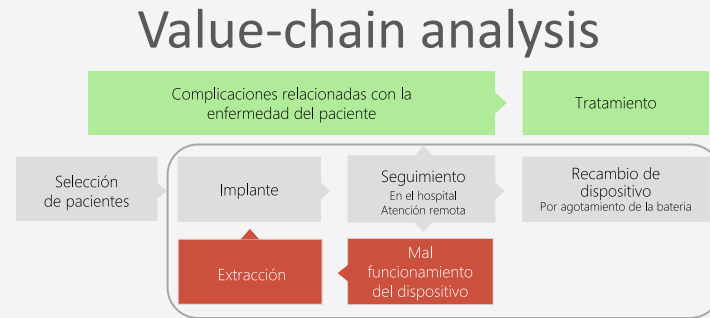
A well-defined need



Identify problems & bottle necks in the Value-chain of the whole care process

Feasibility study

What is needed



Expected activities

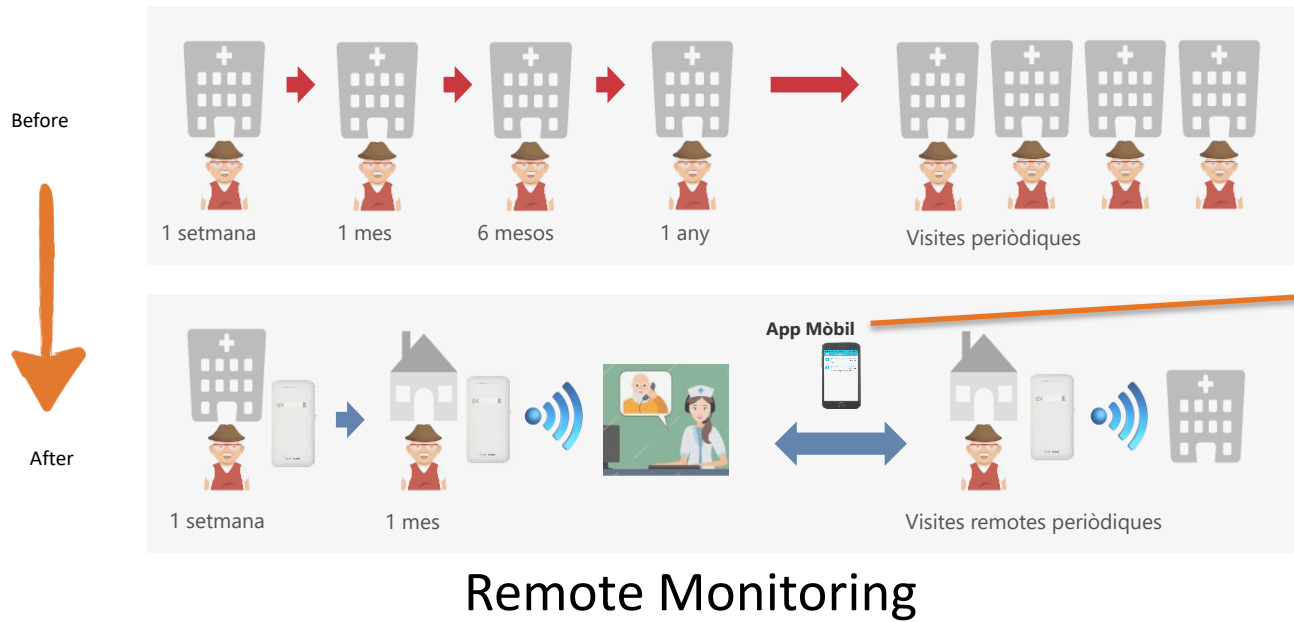
ACTIVITAT DE REFERÈNCIA SANT PAU		PREVIST (100% activitat)	
TIPUS D'ACTIVITAT	PES	NOMBRE	VALOR
TERÀPIA PERSONALITZADA (PROCEDIMENTS)			57.580,0
Implant marcapassos unicamerals	100	95	9.500,0
Recanvi marcapassos unicamerals	90	42	3.780,0
Implant marcapassos bicamerals	140	147	20.580,0
Recanvi marcapassos bicamerals	110	63	6.930,0
Implant marcapassos sense cables	280	53	14.840,0
Recol·locació electrodes	20	15	300,0
Extracció electrodes	110	15	1.650,0
SEGUIMENT I COORDINACIÓ ASSISTENCIAL			4.945,5
Seguiment presencial a l'hospital	1,5	2472	3.708,0
Seguiment remot	1	464	464,0
Seguiment presencial infermeria	0,5	103	51,5
Seguiment presencial NO hospitalari (Atenció Primària)	2	361	722,0
ACTIVACIÓ DEL PACIENT			7.410,0
App, monitorització remota, formació per al pacient i el seu entorn			
Nous dispositius	15	391	5.865,0
Dispositius ja implantats	15	103	1.545,0
TOTAL ACTIVITAT			69.935,5

What the market can offer

Which is the available budget

How we will measure the success

Patient pathway transformation



Patient activation & feedback

4:20

CUESTIONARIO DE SATISFACCIÓN

Información sobre su enfermedad del corazón

Ayuda

1.1 Pienso que, actualmente, mi enfermedad del corazón está bien controlada

0 1 2 3 4

1.2 Cuando tengo dudas sobre el dispositivo implantado sé con quién debo hablar

0 1 2 3 4

1.3 El personal sanitario me ha explicado con detalle cómo ayuda el dispositivo a controlar mi corazón

0 1 2 3 4

Sección referente a la comodidad del transmisor

Ayuda

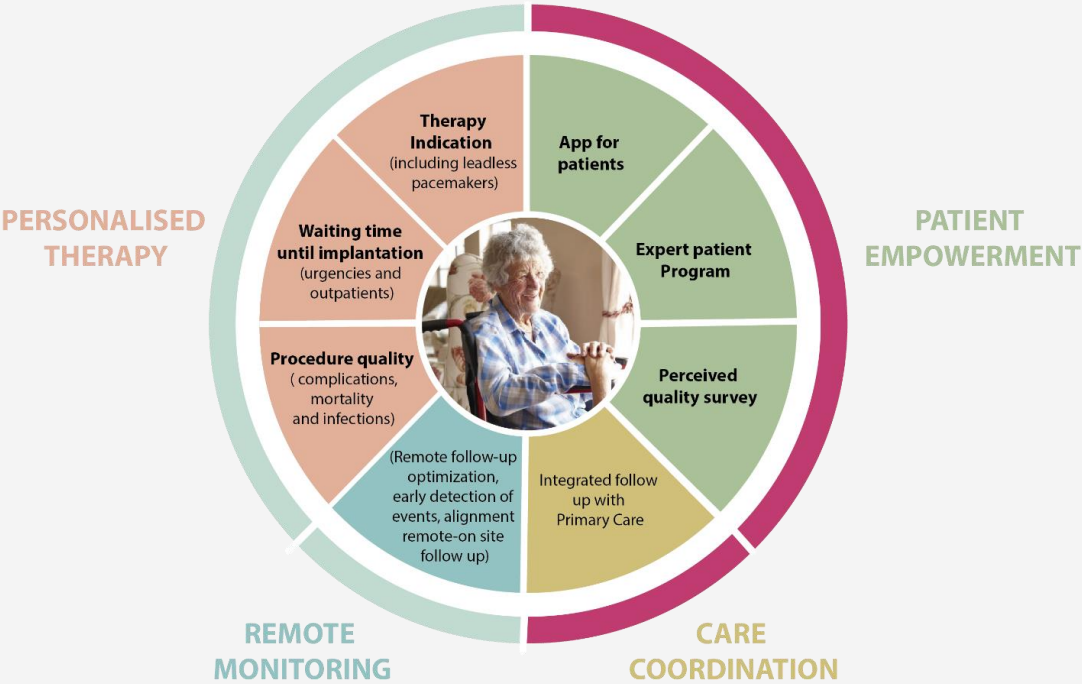
Home icon, App icon, Profile icon, More icon

> 30% reduction of hospital visits

> 90% of patients joining the remote monitoring program

Value-based KPIs

Focusing on quality



QUALITY KPIS				SUPPLIER INFLUENCE		OBJECTIVE
TERÀPIA PERSONALITZADA	PTx	Inici de la recollida de dades	Descripció	Pes	40	
Indicació per l'implant de marcapàs						
Indicació / Prescripció adequada de l'implant de marcapassos permanents	PT1	6	Índex d'indicació / prescripció d'implant de marcapassos segons les guies clíniques europees de pràctica vigent	Baix	1	≥ 80%
Implant de marcapassos "leadless"	PT2	0	Grau de compliment de l'índex d'implant de marcapassos "leadless" segons els volums ofertats	Mig	2	50 leadless / 380 Total
Gestió de l'implant de Marcapassos						
Implant en pacients hospitalitzats	PT3	6	Temps d'espera des de la indicació / prescripció fins l'implant del marcapàs ≤ 2 dies laborables, en pacients ingressats AMB electrode d'estimulació temporal	Baix	1	≥ 70%
	PT4	6	Temps d'espera entre la indicació i l'implant, en pacients hospitalitzats SENSE electrode temporal ≤ 3 dies laborables	Baix	1	≥ 70%
Procedimento d'implant						
Implant en pacients no hospitalitzats	PT5	6	Temps d'espera entre la indicació i l'implant en pacients NO hospitalitzats (objectiu ≤ 45 dies laborables)	Baix	1	≥ 70%
	PT6	0	Existència de complicacions greus 90 dies després de l'implant	Baix	1	≤ 7%
Qualitat de l'implant	PT7	0	Mort relacionada amb l'implant, als 30 dies	Baix	1	≤ 2%
	PT8	0	Incidència d'infecció del dispositiu als 3 mesos des de l'implant	Mig	2	≤ 3%
MONITORITZACIÓ REMOTA				Pes	40	
Seguiment dels pacients amb Marcapassos						
Optimització del seguiment dels pacients amb marcapassos a través de la Implementació del programa de monitorització remota	RM1	0	Proporció de pacients que s'inclouen monitorització remota en primoimplants	Alt	3	≥ 60%
	RM2	0	Reducció del nombre de visites presencials cada any del contracte després del segon any, tenint com a referència el primer any de contracte	Mig	0	A partir 2º any
Detecció precoç d'esdeveniments rellevants a través de la monitorització remota	RM3	6	Detecció de fibril·lació auricular de debut i inici recent, dins el primer mes des de l'inici de l'episodi	Alt	3	≥ 80%
	RM4	6	Detecció de l'umbral d'estimulació auricular i ventricular elevat (>2.5V), dins el primer mes des de l'inici del problema	Alt	3	≥ 80%
Nivell de concordança entre el CAMR i la unitat clínica de seguiment hospitalari	RM5	6	Taxa de discrepància en la categorització d'una transmissió per part del Centre d'Ajuda a la Monitorització Remota i l'hospital	Mig	2	≤ 15%
Optimització dels paràmetres de programació dels marcapassos	RM6	6	Taxa d'activació del control automàtic de captura (monitor/encés) al canal ventricular en primoimplants	Alt	3	≥ 70%

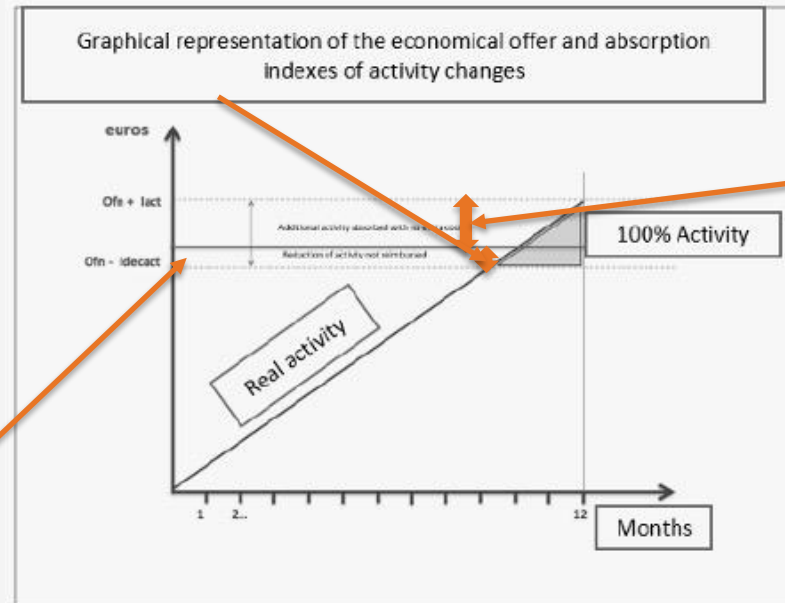
Award criteria focussed on results

Reducing the weight of price

Fixed payment for the overall activity to be performed the provider guarantees provision for a level of activity with fluctuation margins set out in the contract

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TOTAL ACTIVITAT			69.935,5

Annual activity of the contract
(100% activity)



Absorption rate

Activity above the 100% activity the provider will absorb

Compensation rate

If the annual activity does not reach the expected 100% - Compensation rate, the provider shall compensate with improvements related to the subject matter of the contract

Activity fluctuation of + 10% - 10%

Special needs coverage

the provider guarantees that a defined percentage of activity will be dedicated to covering special needs, while also offering access to breakthrough innovations.

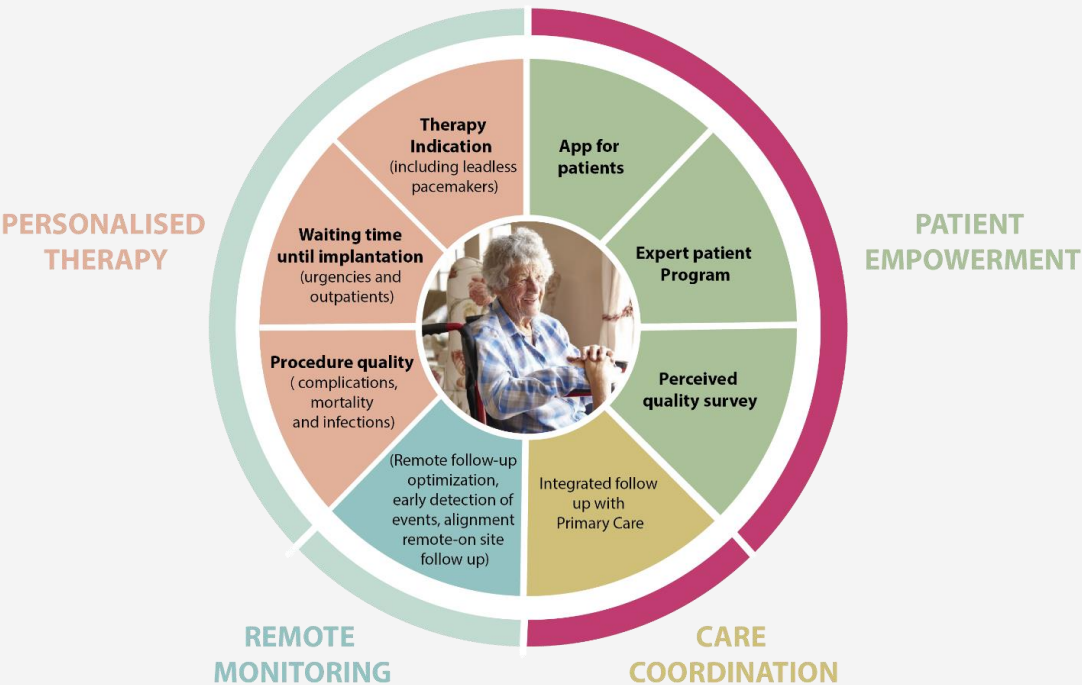
> 10% for special needs

Contract regulations focussing on outcomes

Risk Sharing

5% of contract value contingent upon the achievement of quality objectives

Measurable Key Performance Indicators (KPIs) focusing on quality outcomes



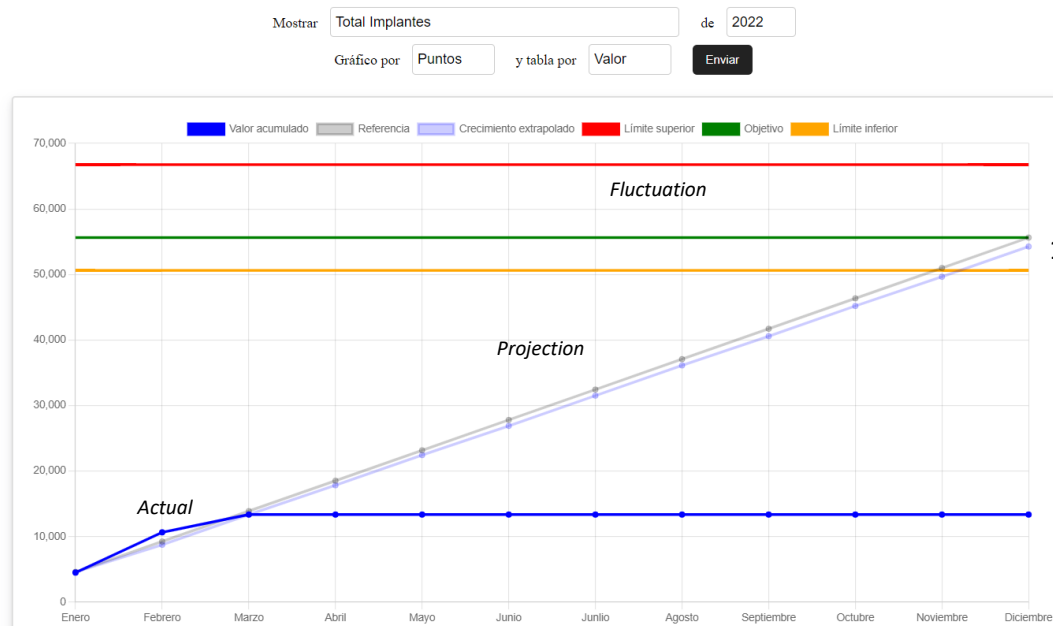
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Implant de marcapassos "leadless"	PT2	0	Grau de compliment de l'índex d'implant de marcapassos "leadless" segons els volums ofertats	Mig	2
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	PT4	6	Temps d'espera entre la indicació i l'implant, en pacients hospitalitzats SENSE electrode temporal ≤ 3 dies laborables	Baix	1
Procedimento d'implant					
Implant en pacients no hospitalitzats	PT5	6	Temps d'espera entre la indicació i l'implant en pacients NO hospitalitzats (objectiu ≤ 45 dies laborables)	Baix	1
	PT6	0	Existència de complicacions greus 90 dies després de l'implant	Baix	1
Qualitat de l'implant	PT7	0	Mort relacionada amb l'implant, als 30 dies	Baix	1
	PT8	0	Incidència d'infecció del dispositiu als 3 mesos des de l'implant	Mig	2
MONITORITZACIÓ REMOTA				Pes	40
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Detecció precoç d'esdeveniments rellevants a través de la monitorització remota	RM3	6	Detecció de fibril·lació auricular de debut i inici recent, dins el primer mes des de l'inici de l'episodi	Alt	3
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Optimització dels paràmetres de programació dels marcapassos	RM6	6	Taxa d'activació del control automàtic de captura (monitor/encés) al canal ventricular en primoimplants	Alt	3

Annual Evaluation & Revision

Follow-up and Evaluation

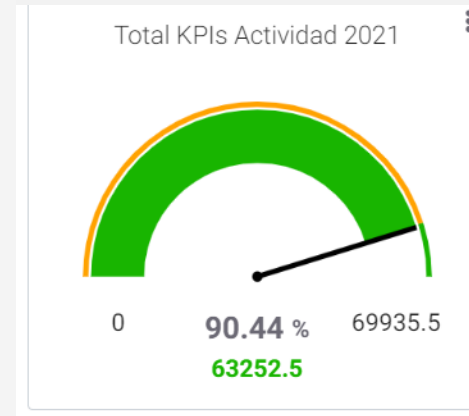
The Technical Board for contract monitoring comprising supplier & hospital staff

Control panel

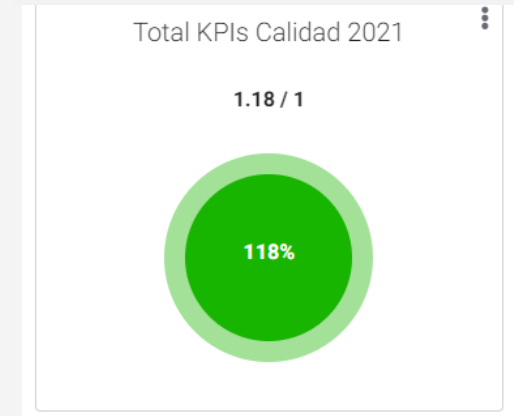


Automatic KPIs collection & evaluation

Activity



Quality



For each Pillar



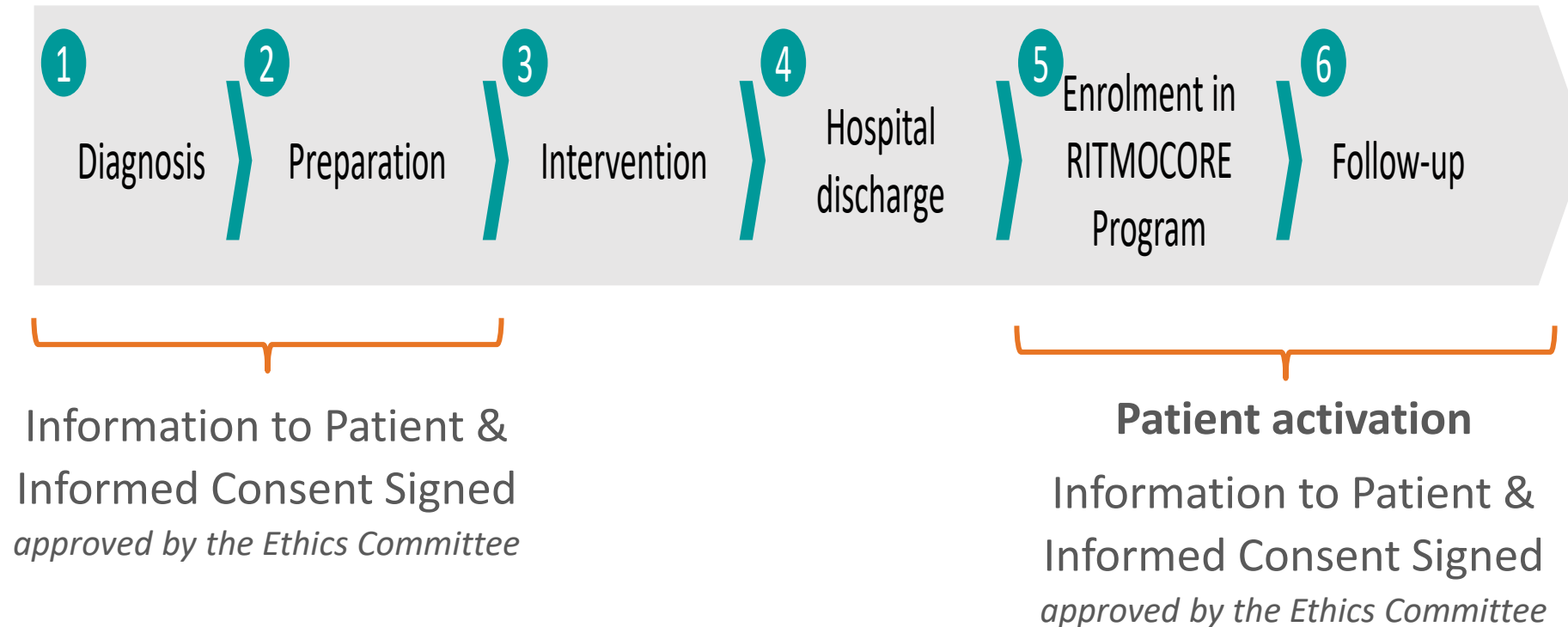
For each KPI



Specific IT System for on-line follow-up

Ethics compliance

Patient activation & feedback



Ethic compliance process approved by the hospital Ethics Committee

What have we achieved?



> 2,000

Patients in the remote monitoring Programme

96%

Urgent implants < 48 hours

0.4%

Complications

VS

95%

Patients in the Remote-control Programme

1.75%

Standard average

19%

Reduction of Hospital Visits

100%

Reports in the Catalan Shared Electronic Health Record

3.6 over 4

Patients' Satisfaction



A multidisciplinary team with clinical leadership



Lessons learnt



Lessons learnt

It is not easy

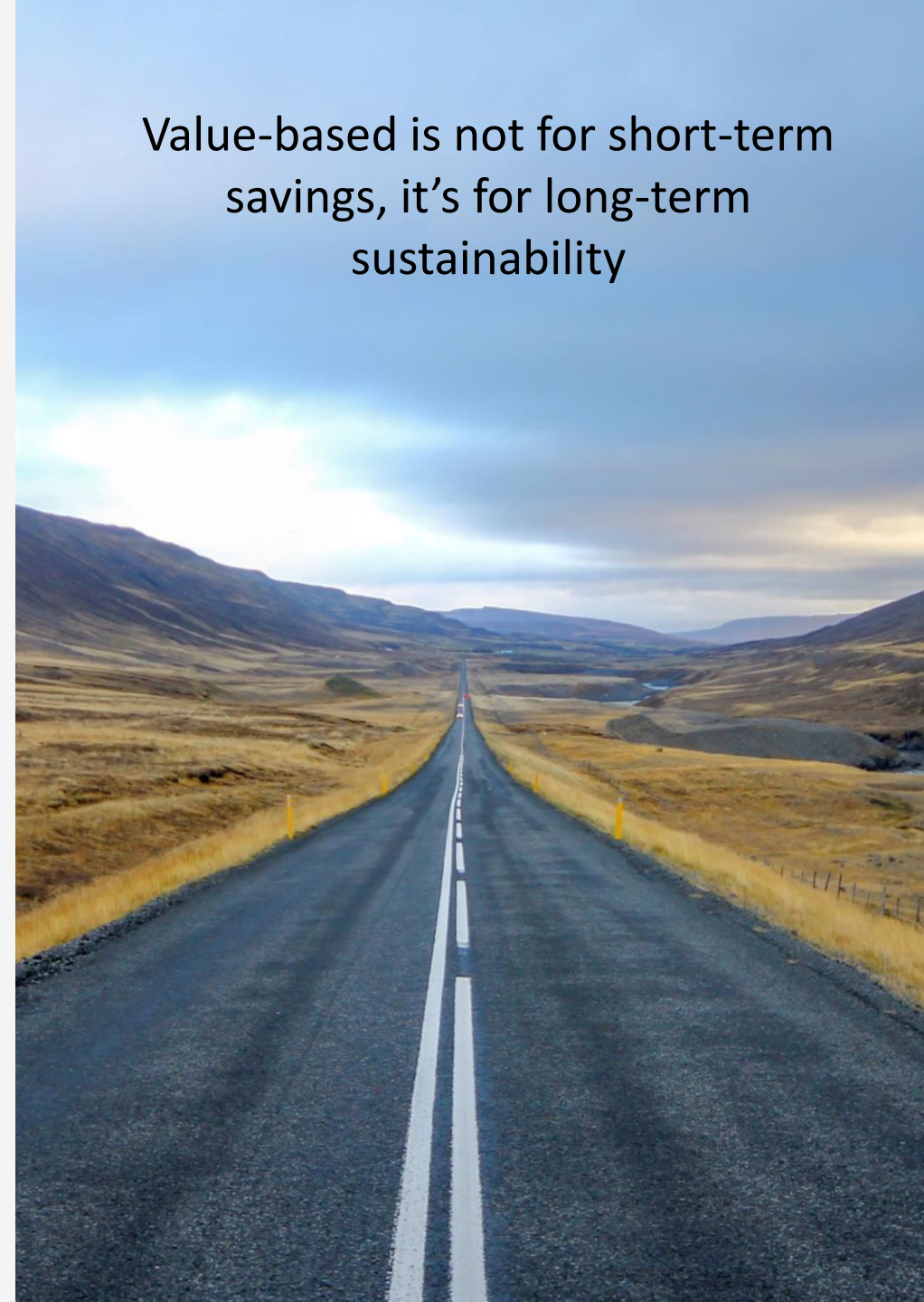
Resistances to change are big
Internally and from the market

Radical changes should be done step by step

Focus on the mid- and long-term benefits

Clinical leadership is key

Value-based is not for short-term
savings, it's for long-term
sustainability



But it's worth it

RITMOCORE



<https://www.youtube.com/watch?v=HfcSC7wzzZI>

Thank you
Merci
Gracias
Gràcies



Hospital de
la Santa Creu i
Sant Pau



Institut
de Recerca [®]
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Campus
d'Aprenentatge
Sant Pau



Fundació
Privada Hospital
de la Santa Creu i
Sant Pau

IPR distribution in innovation procurement: examples from PCP and PPI projects

Beatriz Gómez Fariñas
Corvers Procurement Services B.V.



IPR distribution in innovation procurement: Examples from PCP and PPI projects

Dr. Beatriz Gómez Fariñas, Corvers Procurement Services B.V.

EAFIP webinar, 17 September 2025

Intellectual Property Rights in Innovation Procurement

- Public procurers confront with the issue of the management of intellectual property rights (IPRs) and confidentiality. Their approach to IPR is important in several ways:
 - ✓ It impacts suppliers' interest to participate in the innovation procurement
 - ✓ It prevents breach of third party rights
 - ✓ It ensures suitable return on the investment (particularly in case of large budget procurements)
- PCP and PPI are distinct from other forms of public procurement because they involve either the research and development of innovative solutions (PCP) or the early use or adoption of such technologies (PPI).



"The funny walk and tuxedo feathers are my intellectual property and trademark. If you want to look or act like me, you have to pay me a million dollars."

Overview of Intellectual Property Rights (IPRs)

Technologies – including software – are subject to a great number of intangible rights.

IPR Type	Duration (y)	Applicability	Costs (€)
Copyright	Life + 70	Automatic	N/A
Patent (European)	20	On registration	≈25k
Registered Design	25	On registration	≈1.5k
Database right	15	Automatic	N/A
Trademark (EU)	N/A	On registration	≈2.5k
Trade secret (not IPR)	N/A	By contract	N/A

Six IPR regimes:

- Trade secrets not normally classified as 'IPR' → require contract law for their enforcement + not exclusive rights (unlike the other rights) → relative rights.

Relevant IPRs in an ICT context

Copyright

Intellectual property that protects original works as soon as an author fixes the work in a tangible form of expression.

Exclusive rights during a limited period of time.

Data base sui generis right

Protection that the maker of a database gets if he proves a qualitatively and/or a quantitatively *substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part of the contents of that database.*

Patents

Legal protection of inventions that are new, non-obvious to an expert and have industrial application.

Exclusive right to manufacture, use and distribute the invention for a limited period of time → exact details of the invention are disclosed to the general public.

Trade secrets

Most common way of protecting IP in a public tender, by keeping it a secret (signing Non-Disclosure Agreement (NDAs))

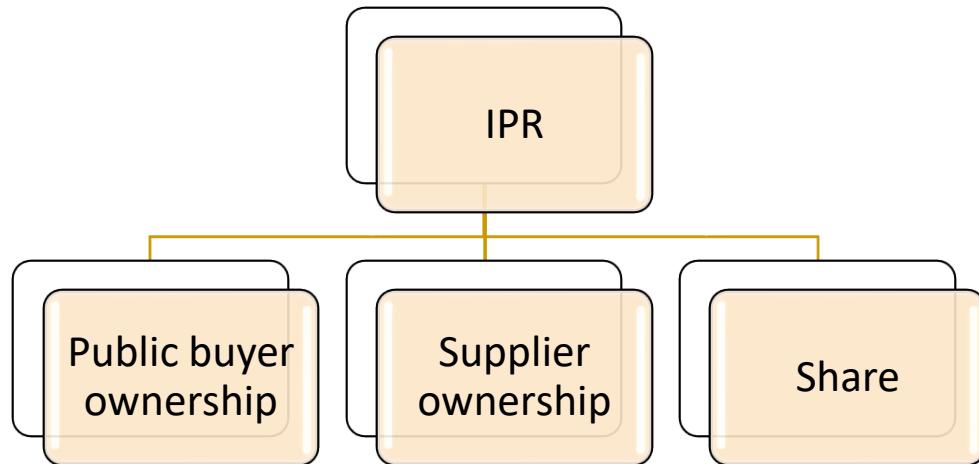
Trade secrets are not disclosed to the public and are not subject to an expiry date. This protection applies as long as the invention remains secret.

Types of IPRs

- **‘Background IPR’** – Pre-existing intellectual property and trade secrets produced before the project and which the parties (procurer and vendors) bring to the PCP or PPI procurement.
 - They may be built-upon, modified or improved during the procurement.
 - Background IP remains the property of the party who generated it.
 - Access rights may need to be granted to public procurers to ensure they are able to conduct the activities they are involved in during the PCP/PPI project (e.g., analysing and testing of solutions) and to use the PCP/PPI results, which incorporate Background IPR.
- **‘Foreground IPR’** – Intellectual property and trade secrets produced in and during the PCP or PPI.
- **‘Sideground IPR’** – Intellectual property and trade secrets produced during the period of the PCP/PPI procurement but not in the activities covered by the PCP/PPI procurement contract itself.
 - Sideground IPR remains the property of the party who generated it.
 - Access rights may need to be granted to public procurers to ensure they are able to conduct the activities they are involved in during the PCP/PPI project (e.g., analysing and testing of solutions) and to use the PCP/PPI results, which incorporate Sideground IPR.

IPR distribution in PCP and PPI

IPRs distribution possibilities



- **Supplier ownership:** Technology providers retain ownership of the Intellectual Property Rights (IPRs) that they generate during the PCP/PPI and will be able to use them to exploit the full market potential of the developed solutions.
- **Public buyer ownership:** The public buyers retains the IPRs of the solution. Higher prices and low incentives for technology providers to participate. Only recommended when there is a good reason to do so in view of the relevant public interests (e.g. highly sensitive information).
- **Shared IPR:** The public buyers may decide to keep an “IPR %” to have control over strategic decisions and technologies (e.g. defence or security domain).

IPR distribution

EXAMPLE of guidelines on IPR strategy

“Ministry of Defense (MOD)’s standard policy in regard to IPR resulting from contract work (for all types of procurement contracts, including both PCP and PPI type contracts) is to place ownership of these results in the hands of the contractor, whilst securing a free license to use the results for the normal purposes of internal use and of competitive contracting in favour of goods and services needed by MOD.

For contracts that finance R&D, MOD can secure a right to commercial exploitation levy for hardware or software developed under MOD contract, payable when the contractor exploits these by making commercial sales of the product or by licensing them for production or use by anyone else.”

Source: The UK Ministry of Defence Guide to Intellectual Property (September 2013).

The government adopts as “default regime” in all its public procurement contracts to leave IPR ownership with contractors (to get better/cheaper offers, leave IPR handling costs to suppliers and stimulate commercialisation). The default regime is applicable in all public procurement contracts, with a limited set of exception cases.

Source: USA Bayh-Dole Act (transposed into FAR Part 27 - Patents, Data, and Copyrights).

Example IPRs vested on the contractor (I)

PREVENT PCP

Augmenting the security in public transport (detection of potentially dangerous unattended items, identification and tracking of perpetrators, and advanced crisis management system)

- Each contractor will keep ownership of the Intellectual Property Rights (IPRs) attached to the results they generate during the PCP implementation. The offered price is expected to take this circumstance into account.
- The contractors shall be responsible for the management of all the rights on the results that it holds and shall bear any associated costs including for the protection, examination, grant, maintenance, defence and litigation of the rights on the results.
- The contractors are expected to start commercial exploitation of the results at the latest 4 years after the end of the framework agreement.
- The public buyers have the right to:
 - ✓ access the results, on a royalty-free basis, for their own use.
 - ✓ grant upon notification to the contractors (or to require the contractors to grant) non-exclusive licences to third parties to exploit the results under fair and reasonable conditions (without the right to sub-license).
 - ✓ require the contractors to transfer ownership of the IPRs back to the public buyer if the contractors fail to comply with their obligation to commercially exploit the results or use the results to the detriment of the public interest.

More information: www.prevent-pcp.eu

Example IPRs vested on the contractor (II)

IMPRESS PCP

Development of an interoperable platform for Transmission Electron Microscopy (open hardware and open software)

- Each contractor will keep ownership of the Intellectual Property Rights (IPRs) attached to the results they generate during the PCP implementation. The offered price is expected to take this circumstance into account (at least 10% discount of the total price).
- All the results generated during the PCP will be stored in “FAIRcube”, which is the first open knowledge and innovation hub for TEM designed to share scientific, technological, and operational data in an accessible repository based on FAIR principles.
- After the completion of phase 3, technology providers who have completed phase 2 and phase 3 will be required to share publicly technical information about their prototypes, including API definition and documentation.
- The Contractor will ensure full compliance with the open source software licenses to be applied to all APIs, and Creative Common Licences for all API documentation and hardware designed specifications.
- The technology provider shall be responsible for the management of all the rights on the results that it holds and shall bear any associated costs including for the protection, examination, grant, maintenance, defense and litigation of the rights on the results.
- The contractors are expected to start commercial exploitation of the results at the latest 4 years after the end of the framework agreement.

More information: www.e-impress.eu/pcp

Example shared IPRs

Governmental Agency in the Defence Sector

Development of brain computer interfaces

- Strategic technology to be developed in a sensitive domain.
- It was important for the Governmental Agency to keep certain control over key strategic decisions.
- Confidentiality of the R&D activities. This can be guaranteed by signing Non-Disclosure Agreements (NDAs) with participants.
- Other authorities from the same country would be able to further develop the solution and purchase it. They would not have to pay again for the solution developed up to the reached TRL.
- The Governmental Agency could have a veto right if the supplier intends to further develop its solution and commercialize it in certain countries outside the European Union or in case the technology provider intends to merge with other companies from those countries.

IPR compensation

- When leaving IPR ownership to the technology providers, there should be a **financial compensation** that reflects the market value of the benefits received (IPR ownership rights) and the risks assumed by the participating providers.
- **Ex ante financial compensation** – Price reduction on the price for performing the R&D during the PCP.

Technology providers have to indicate two prices in their offers: (1) the price that would have been quoted in case the IPRs would have been allocated completely to the procurer and bidders would have therefore had no opportunity to exploit the project results; (2) the price that is quoted with the current allocation of IPR related rights as in the PCP, where contractors retain their IPR ownership and can exploit the project results.

- **Ex post financial compensation** – Royalties on sales/profits made by technology providers by commercialising R&D results that are generated during the PCP e.g. from selling products or licensing out IPR
- The rights and obligations of the parties with regard to IPR (including the terms and conditions of IPR ownership and licensing) have to be made available to bidders before the bidding for the PCP contracts begins by being published in the PCP call for tender documents.

Royalties

- **‘Royalties’ or licensing fees** refer to the revenue the parties to a contract may expect to pay or be paid under a licensing contract for use of the technology.
- The procurer and R&D service provider may come to an agreement whereby instead of reducing the value of exclusive development by the allocated IPR value, the parties agree on a royalty scheme once the solution is commercialized.
- It is also possible that the public buyer will be entitled to royalties from the commercialization of the technology on the market by the technology provider – for example, when the public buyer contributed to generate Background or Foreground IP to the technology, and in situations of joint ownership.
- Royalty rates should be decided before the technology provider brings the technology to market, although the royalty clause should provide some flexibility to respond to changing market conditions.

The Contractor is obliged to pay to the Procurer X amount/percentage of the revenues received by commercializing the resulting solutions/methods/processes to third parties (with a maximum of X€).

Example of royalties in PCP



- PCP to develop prognostic tools for stage 2 cancer patients.
- Allocation of ownership rights to the companies in return for a **percentage of the net profits** of the commercial exploitation of the R&D results developed during the contract (**not exceeding 20%**).
- SERGAS keeps the option to **retrieve the ownership** of the IPR rights in the case that the company does not exploit it.



- PCP to develop a solution for automated moving of hospital beds.
- Allocation of ownership rights to the companies in return for **1% of revenues**.
- The PCP contracts with suppliers foresee the possibility for the procurer to **monitor - during and after the PCP - the IPR/commercialization approach and revenues** obtained by vendors.

Mandatory licensing to third parties under FRAND conditions

- After a PCP, the public buyer obtains a ‘free license’ to use the PCP R&D results. Generally, this license is restricted to ‘internal use’ only and does not include the right to sublicense.
- The tender documents should indicate that every technology provider that participates in the PCP is ‘automatically’ required to grant the public purchaser license free rights to its results free of charge.
- The PCP contract can also include a clause requiring technology providers to give non-exclusive licenses to third parties upon request of the public buyer. The purpose of such a clause is to safeguard a competitive supply chain for the public buyer.
- Such licenses are not required to be ‘free use’, but under FRAND terms and according to ‘market conditions’.
- FRAND means **Fair, Reasonable, and Non-Discriminatory**.
- Technology providers that participate in a PCP are not automatically obliged to grant non-exclusive licenses to third parties to exploit its results. This obligation needs to be explicitly included in the tender documents.



IPRs licencing

- A license is an agreement between the holder of intellectual property rights (the licensor) and a second party (the licensee), so that the former keeps the ownership of the rights while the latter can use them under certain condition.

<i>Exclusive license:</i>	An exclusive license is a license that that gives the public procurer the sole right to use the intellectual property rights. The license will not be given to any other party.
<i>Non-exclusive license (user rights):</i>	The public procurer would normally require the owner of the IPR (usually the solution provider) to grant a non-exclusive license to the public procurer to use the solution (also referred to as 'user rights'). This may be granted in exchange for a licensing fee bundled into a price of a procurement, or on an on-going royalty-bearing basis. The non-exclusivity of the license allows the solution provider to commercialize the solution further on the market by granting user rights to other parties.
<i>Non-exclusive license (with the right to sub-license):</i>	In addition to the above, or alternatively, the public procurer may request the right to grant 'sub-licenses' as part of its non-exclusive license, and itself grant commercialization rights to third party suppliers. If this right is included in the PPI contract it will result in having to pay a higher price to the PPI solution provider as such clauses reduce the exclusivity of the IPR owner.

How to choose the correct license

- ✓ Different types of licences depending on the access restrictions, compatibility, possibility to modify the solution, etc.
- ✓ The public buyer can ask the technology providers to use a certain type of license (e.g. open software licence).
- ✓ Essential to have a team of people with expertise in IPRs.
- ✓ Tools to support parties in this process.



[Joinup Licensing Assistant](#) – European Commission

AFL-3.0 Academic Free License v3.0

Can

Use/reproduce, Distribute, Modify/merge, Sublicense,
Commercial use, Use patents

Must

Incl. Copyright, Royalty free, Disclose source, SaaS/network

Cannot

Hold liable, Use trademark

Compatible

Permissive, GPL, Other copyleft, Linking freedom, For software

Law

Licensors law, Venue fixed

Support

OSI approved, FSF Free/Libre

Licence comment:

Written by Lawrence Rosen (attorney, formal counsel of the Open Source Initiative), AFL-3.0 gives recipients a copyright and allows for a patent on the software so long as they include the original software, any of its copyrights or trademarks and a note saying that you modified it (as the case may be). Nearly identical as the Open Software License (same author), but not reciprocal: it is permissive (widely compatible), interoperable and doesn't force derivative works to use the same licence. Applicable law and venue are those of the licensor.

☐ Add to compare list

Compare

[Licence Text](#) 

Apache-2.0 Apache License, Version 2.0

Can

Use/reproduce, Distribute, Modify/merge, Sublicense,
Commercial use, Use patents, Place warranty

Must

Incl. Copyright, State changes, Include licence

Cannot

Hold liable, Use trademark

Compatible

Permissive, GPL, Other copyleft, Linking freedom, For software

Law

Not fixed/local

Support

Strong Community, OSI approved, FSF Free/Libre

Licence comment:

Apache-2.0 is a permissive licence. For OSI it supported by an important community of developers. You can do what you like with the software, as long as you include the required notices. Compared with the MIT, recipients receive a patent licence from the contributors of the code. Applicable law / competent court are not specified

☐ Add to compare list

Compare

[Licence Text](#) 

Can	AFL-3.0 ⓘ	Apache-2.0 ⓘ
Use/reproduce	✓	✓
Distribute	✓	✓
Modify/merge	✓	✓
Sublicense	✓	✓
Commercial use	✓	✓
Use patents	✓	✓
Place warranty		✓
Must	AFL-3.0 ⓘ	Apache-2.0 ⓘ
Incl. Copyright	✓	✓
Royalty free	✓	
State changes		✓
Disclose source	✓	
Copyleft/Share a.		
Lesser copyleft		
SaaS/network	✓	
Include licence		✓
Rename modifs.		
Cannot	AFL-3.0 ⓘ	Apache-2.0 ⓘ
Hold liable	✓	✓
Use trademark	✓	✓
Commerce		
Modify		
Ethical clauses		
Pub sector only		
Sublicence		

Compatible	AFL-3.0 ⓘ	Apache-2.0 ⓘ
None N/A		
Permissive	✓	✓
GPL	✓	✓
Other copyleft	✓	✓
Linking freedom	✓	✓
Multilingual		
For data and metadata		
For software	✓	✓
Law	AFL-3.0 ⓘ	Apache-2.0 ⓘ
EU/MS law		
US law		
Licensor's law	✓	
Other law		
Not fixed/local		✓
Venue fixed	✓	
Support	AFL-3.0 ⓘ	Apache-2.0 ⓘ
Strong Community		✓
Governments/EU		
OSI approved	✓	✓
FSF Free/Libre	✓	✓

Key takeaways

- ✓ Most innovation procurement projects (PCP/PPI) deal with IPR (background/foreground).
- ✓ An adequate management of IPRs is important to optimise the results of the innovation procurement procedure and safeguard the rights of third parties.
- ✓ It is essential to have a team of people with expertise in IPRs.
- ✓ The IPR conditions should be determined and published in advance.
- ✓ The conditions imposed by the public buyers should be proportionate and facilitate the scale up of the solutions.



THANK YOU FOR YOUR ATTENTION!



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A group of business professionals in a meeting. A man in a dark suit and striped tie is on the left, gesturing with his hand. A woman in a grey blazer is in the center, looking at a tablet. Another person is on the right, also looking at the tablet. There are coffee cups on the table. The text "Discussions and Q&A" is overlaid in the center.

Discussions and Q&A

Conclusions

Ana Lucia Jaramillo V.
Corvers Procurement Services BV

Conclusions

- **The EU Innovation Act** seeks to: (1) Increase total public and private procurement investments; (2) Provide fast track procedure for buying R&D services; (3) Incentivise innovation-minded private sourcing strategies (especially when they use public funding or operate critical infrastructures)
- **SMEs and startups are important players** in the provision of innovative solutions. Their participation can be incentivised by innovation-friendly tenders that give them a fair opportunity.
- **Functional specifications foster Innovation** as these describe the problem and what the solution needs to do avoiding overspecification.
- **Joint-cross border procurement** can foster interoperability and strengthen the EU industry based on common needs of public buyers from several EU MS.
- **Innovation-friendly IPR regimes** allow innovators to develop new solutions that can be protected and further exploited.
- **Value for money** is more important than price.



Apply for free assistance



For more information – see: www.eafip.eu

Or apply directly via:

<https://ec.europa.eu/eusurvey/runner/EAFIP2024>



Thank you for your attention

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