PCP WISE

Innovative ICT procurement for water management

Let's get inspired conference 30.10.2025, Brno, CZ

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Funded by the European Union

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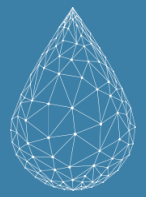
Outline

- Context
- Motivation (Why?)
- Scope (What?)
- Approach (How?)

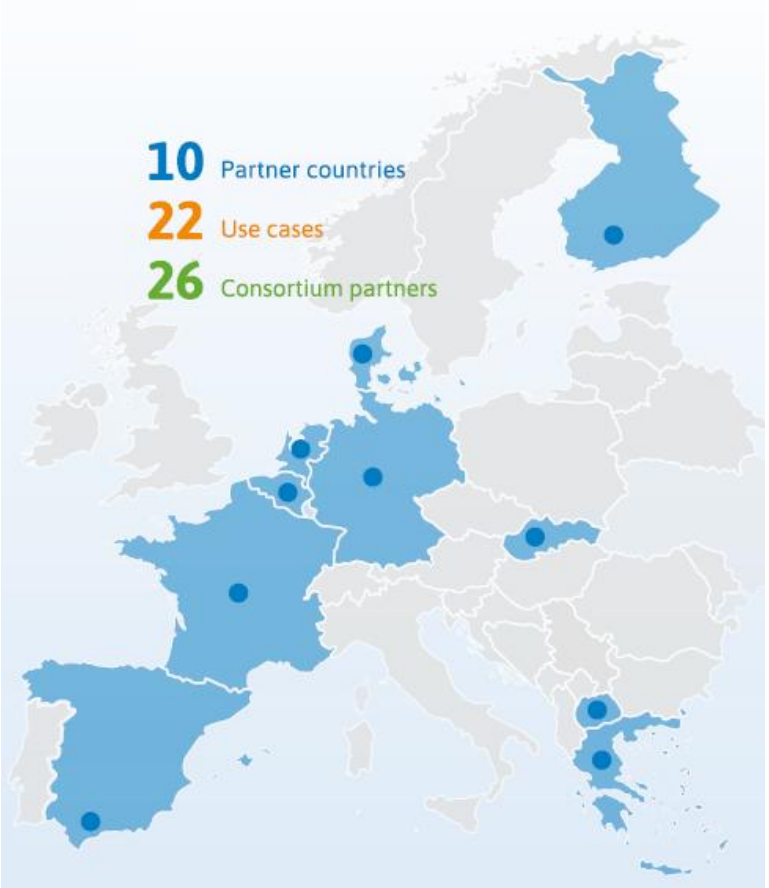


Context

PCP WISE

Project ID Card

- EU-funded project via Horizon Europe Programme
- Innovative procurement of information technology solutions for water management & climate change resilience
- 26 partners covering 10 countries
- 12 Public buyers and 14 support partners
- Duration: 36 months (2025-2027)
- Overall budget: €19M (11,8 for PCP)
- Project coordination: Barrabés
- Lead buyer: hetWaterschapshuis



Project main aim

What?

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 data, PCP-WISE seeks to address critical challenges related to floods, fires, and infrastructure impacts both in rural an 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.

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What?
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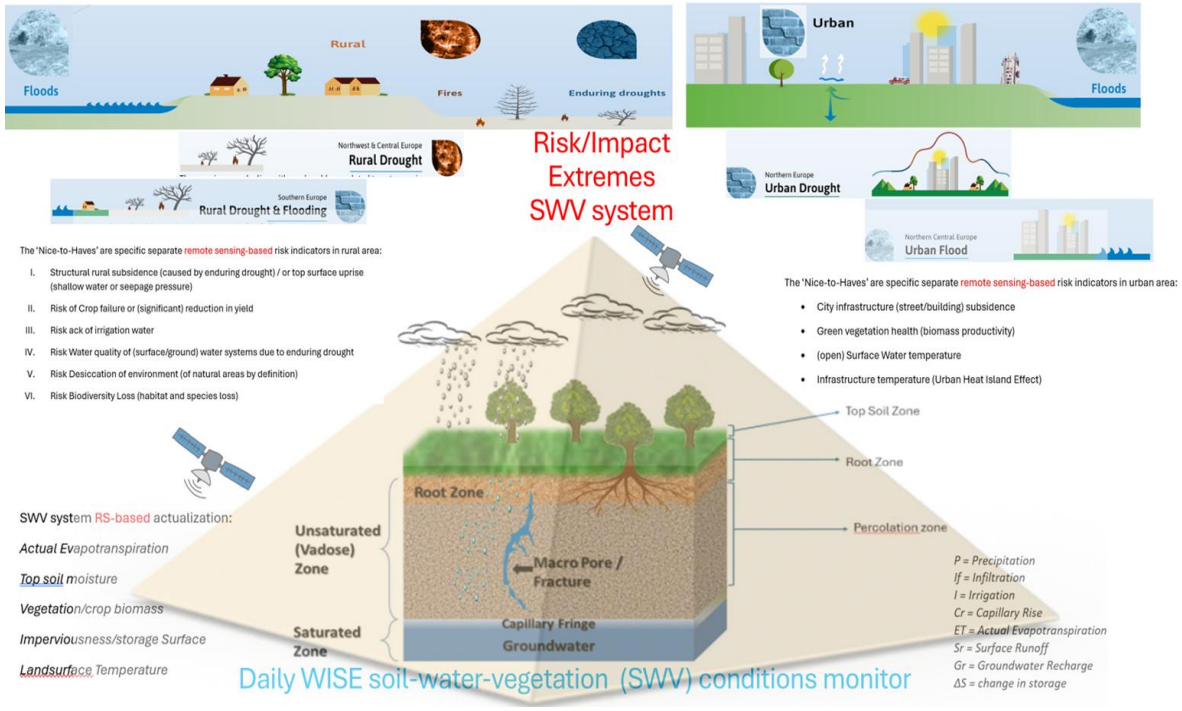
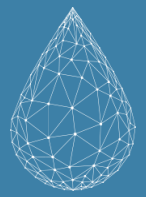
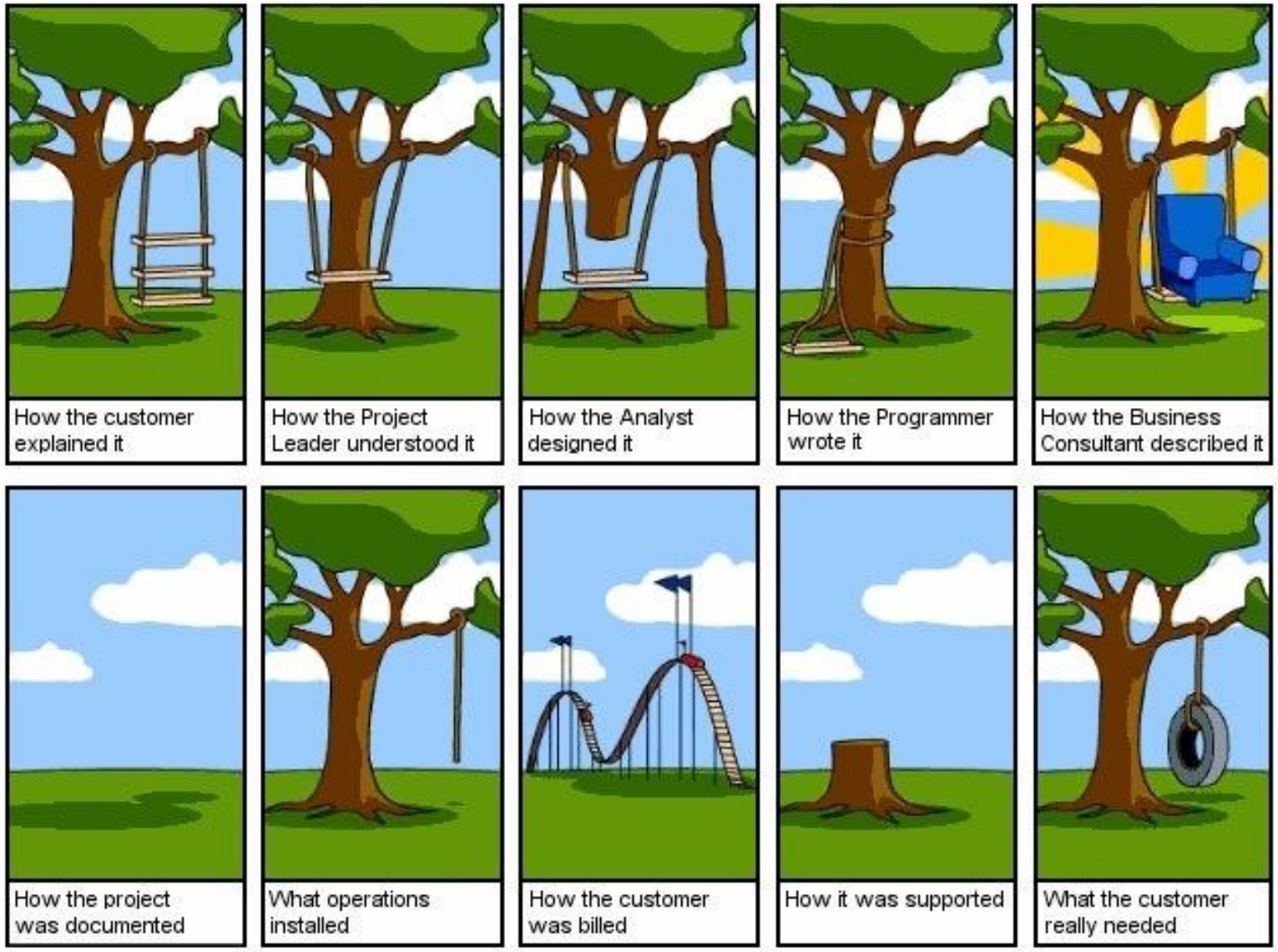


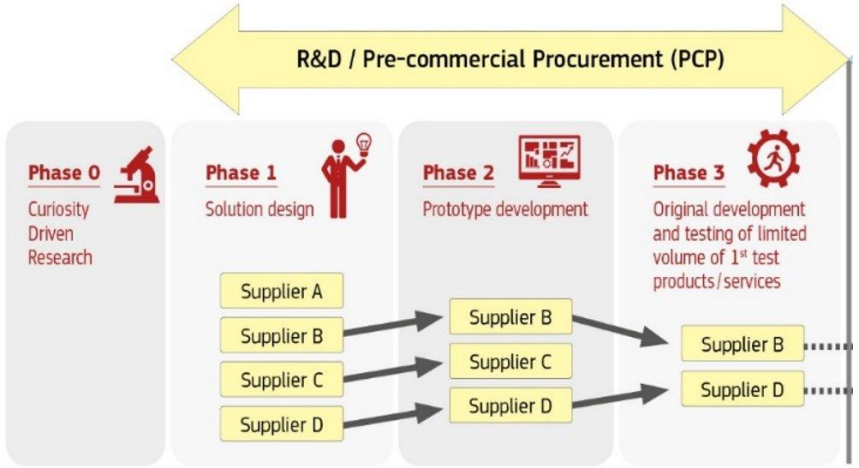


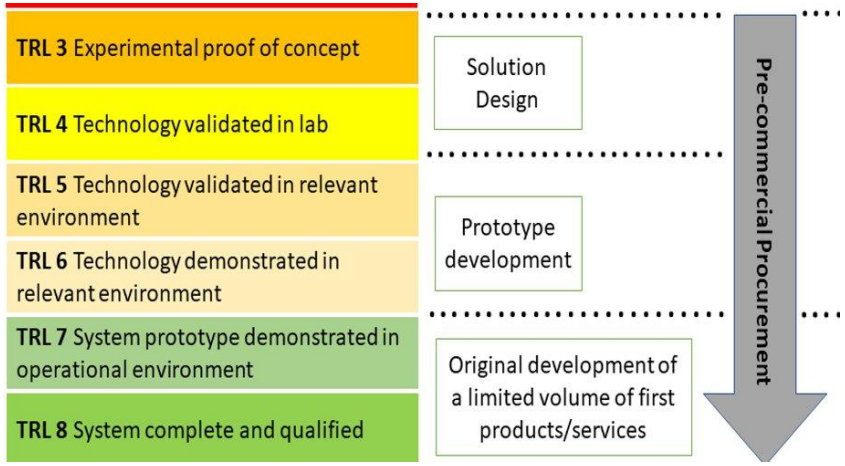
Motivation (Why?)

PCP WISE


How the customer explained it
How the Project Leader understood it
How the Analyst designed it
How the Programmer wrote it
How the Business Consultant described it
How the project was documented
What operations installed
How the customer was billed
How it was supported
What the customer really needed

Pre Commercial procurement Approach





PCP is a public procurement of **Research and Development (R&D) services** characterized by:

- **competitive development** in phases
- **risk-benefit sharing** under market conditions Public procurer does not pay the full cost of the R&D performed under the contract
- a **clear separation** between the procurement of the R&D from the **deployment of commercial volumes of end-products**
- **Exempted** from public procurement rules

Pre Commecial Procurement Benefits

For contracting authorities

An **unmet need** is identified , for which no market ready products exist.

Improves the **quality and efficiency of the public services**.

Helps to achieve the desired degree of interoperability from the beginning and **reduce the risk of vendor lock-in**.

Allows obtaining **better quality products** at **lower prices**.

Reduces risk of failure in follow-up PPI procurements.

License-free usage for procurers

For suppliers

Accelerates the process of bringing scientific results to market.

Shortens time-to-market for innovative products and services.

Facilitates the **access of new innovative players** (e.g., start-ups, SMEs) to the public procurement market.

Stimulates **company growth** and attracts **private investment.**

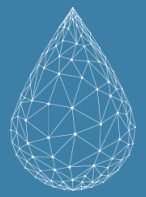
Ownership of the generated Intellectual Property Rights remain to the Contractors that generated them during the PCP.

For the society

Better use of taxpayers' money, to buy **innovative products.**

Helps tackle **environmental and social challenges** through new and innovative practices.

Creates high-added-value jobs in Europe and contributes to sustainable economic growth.



Scope (What?)

PCP WISE

Climate change challenges

The overarching challenge is to control & manage our

'soil-water-vegetation-atmosphere' system

to prevent extremes & improve water distribution

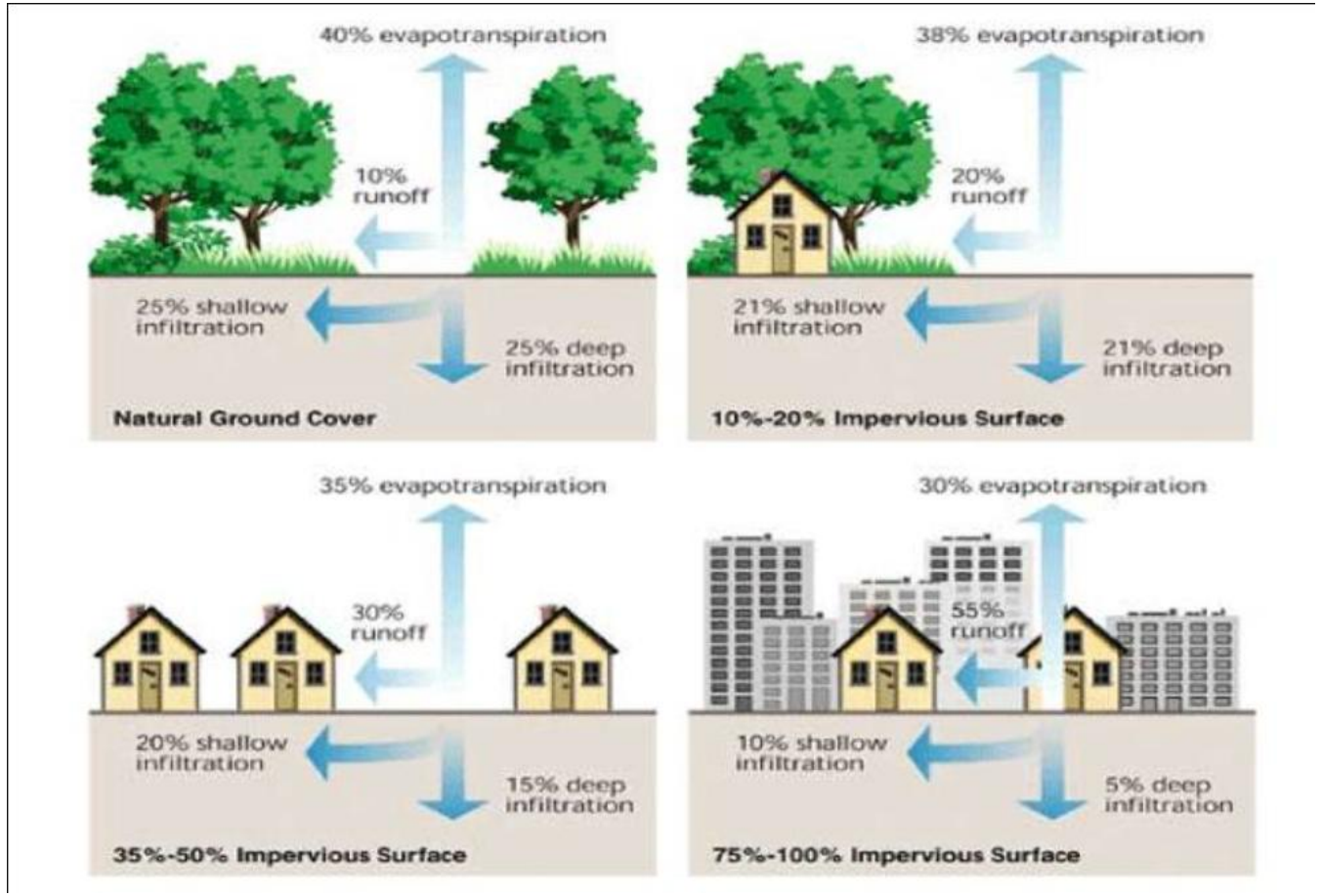
Urban water management vs Rural

To show the difference in urban area with natural area (*):

- Infiltration (shallow/deep)
- Evapotranspiration
- Runoff component

(*) Impervious surface (also in Copernicus) definition:

Impervious surfaces are mainly artificial structures—such as pavements (roads, sidewalks, driveways and parking lots, as well as industrial areas such as airports, ports and logistics and distribution centres, all of which use considerable paved areas) that are covered by water-resistant materials such as asphalt, concrete, brick, stone—and rooftops. Soils compacted by urban development are also highly impervious.



Demand driven use case cluster groups

Urban and Rural usecases (Flood & Drought) 5 groups

Urban		Rural	
G1: Helsinki (2)	F & D	**G3: Kalmthout Belgium/NL (1)**	**D**
Rotterdam (1)	F	SK:BB (Slovakia)	F & D
Haarlem (NL) (1)	F & D	**G4: Catalunya, Spain (1)**	**D**
G2: SK:Bratislava(1)	D	Central Macedonia, Greece (1)	F & D
Helsinki (2)	D (F)	Lower Saxony, Germany (2)	**F & D**
Lemvig, (Dk) (1)	D	**G5: Lemvig Area (living Lab, Dk)**	**D**
THW (DE)		HDSR subsidence (NL) (1)	D
		Lower Saxony, Germany (2)	D

Use Case 1: Urban Drought (North Europe)
It focuses on urban drought issues in North-Western Europe, dealing with water distribution problems in city undergrounds due to various human and external factors. This use case aims to mitigate water shortages impacting infrastructure and living conditions.

Use Case 2: Urban Flooding (North-Central Europe)
It addresses urban water excess in Eastern and Northern Europe, where the abundance of water affects city infrastructure. This use case focuses on managing water storage and infiltration issues exacerbated by regional factors like sea-level rise.

Use Case 3: Rural Drought (Northwest-Central Europe)
It tackles rural drought in North-Eastern Europe, where extreme climate variations impact agriculture and nature, leading to issues like wildfires and production losses.

Use Case 4: Rural Drought & Flooding (Southern Europe)
It deals with rural drought and flooding in Southern Europe, where structural drought periods and intense rainfall affect agricultural processes and cause significant production challenges.

Use Case 5: Rural Drought & Flooding (Northern Europe)
It focuses on rural drought and flooding in North-Eastern Europe, addressing problems caused by extreme groundwater conditions that impact land use and infrastructure. This use case aims to manage soil moisture conditions to prevent issues like organic oxidation and underground peat fires.

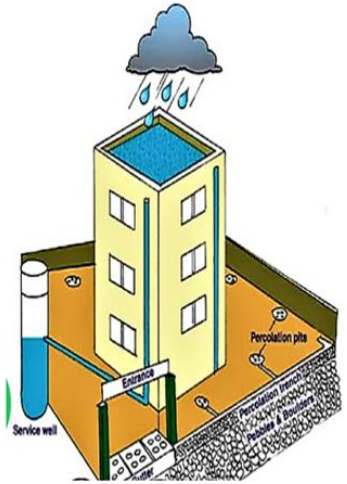
G2 example: Too much, too fast

Urban floods are increasing due to:

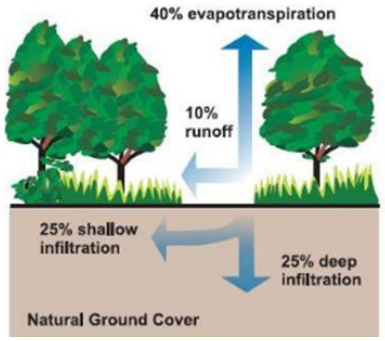
- Rising river levels
- Seepage and sea level rise
- Climate change and more intense rainfall
- Urbanisation, land subsidence, loss of green space and poor drainage systems

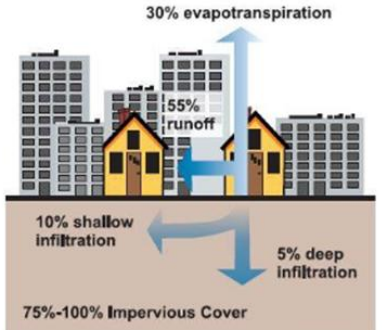
Impacts:

- Homes/buildings
- Transport
- Public Utilities & Services
- Human health and lives

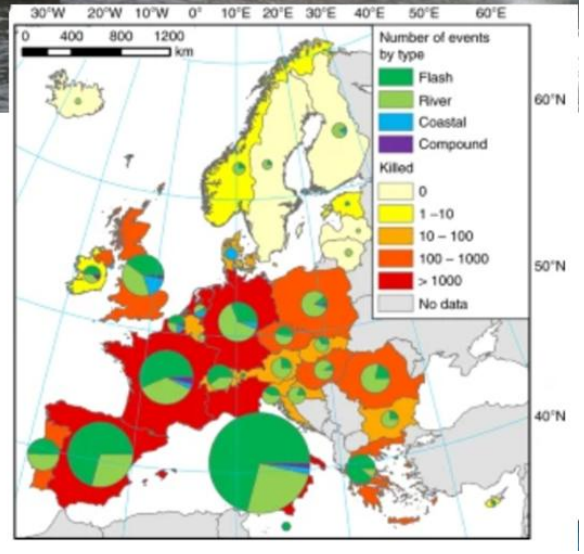


Urban Flooding





Total number of flood events and fatalities (unadjusted, reported values) between 1870 and 2016, by country. Source of data: HANZE database



The story of Bratislava

Bratislava faces flood risks from both river and rainfall (river floods and flash floods).

Key vulnerabilities:

- Public utilities (water, gas, electricity infrastructure, etc.)
- Public services (transport, health, social services, education)

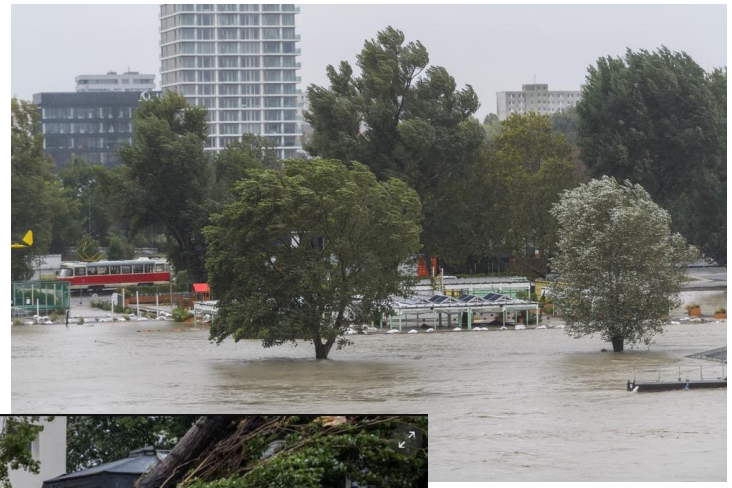
Stakeholders are with limited capabilities and data

to assess and manage risks and increase resilience.

Expectations:

- Better data access & utilisation
- Improved visualisation & communication

Photograph: TASR
Source: SME



Photograph: Tomáš Benedikovič/AFP/Getty Images
Source: The Guardian

The story of Bratislava

When did the Danube in Bratislava rise to its highest levels?

* According the predictions from Slovak hydrometeorological institute

Source Pravda 2024

The story of Bratislava

Floods 09/2024

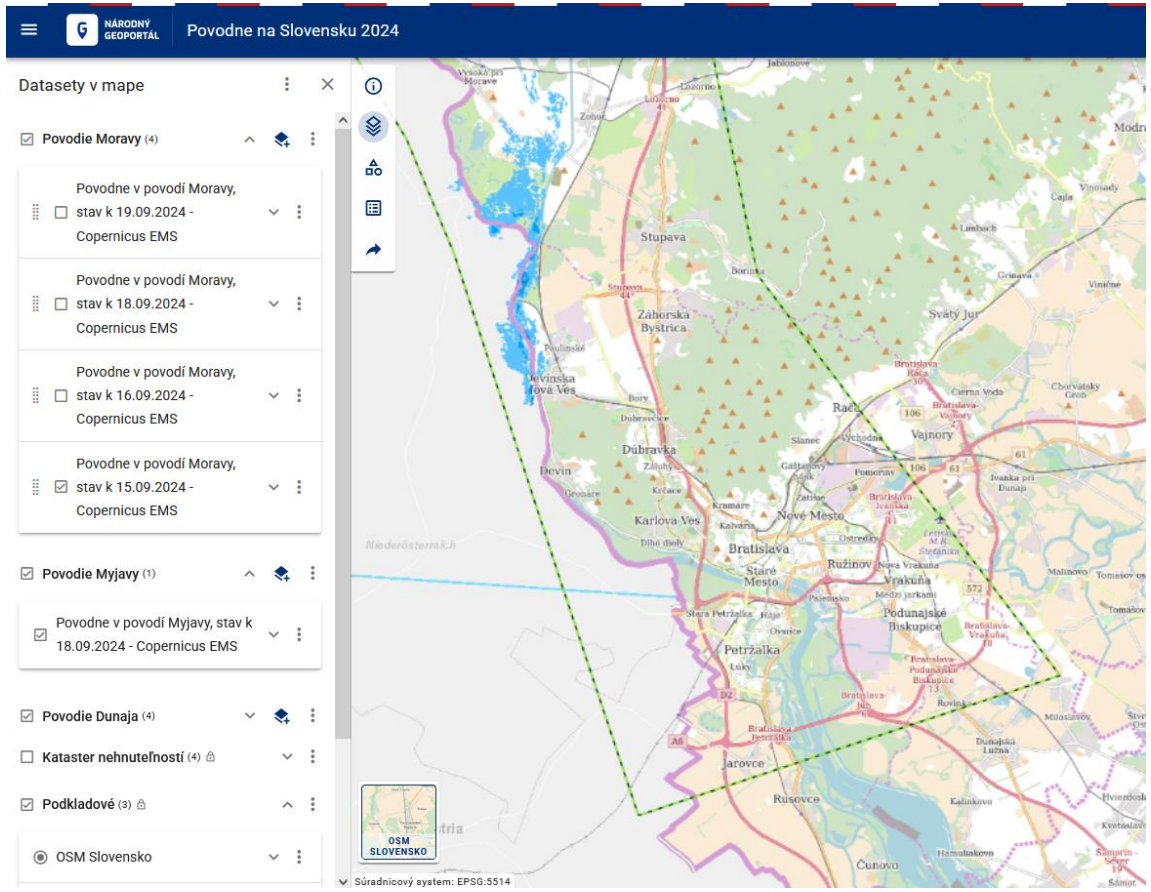
Source: National Geoportal

MINISTERSTVO ŽIVOTNÉHO PROSTREDIA SLOVENSKEJ REPUBLIKY

The story of Bratislava

Floods 09/2024

15.09.2024

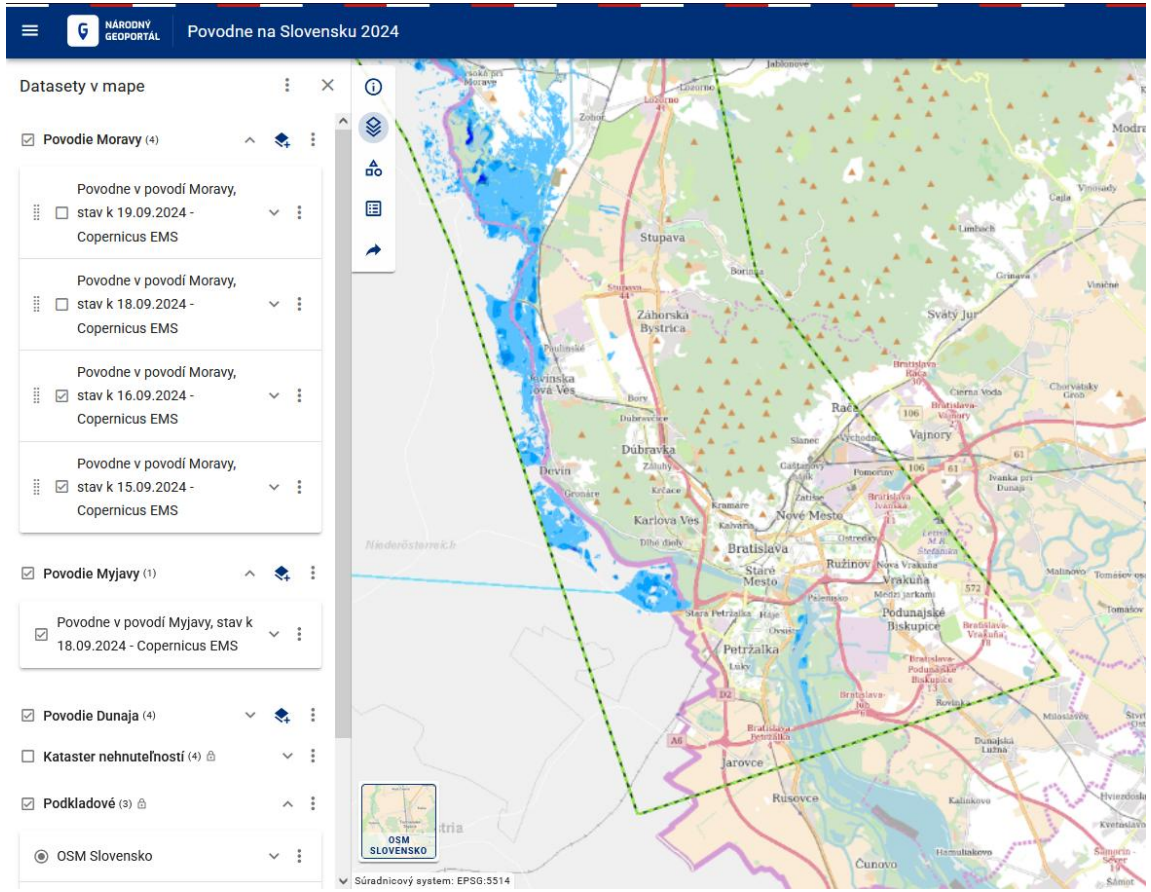


Source: National Geoportal map app using Copernicus Emergency management service

The story of Bratislava

Floods 09/2024

16.09.2024



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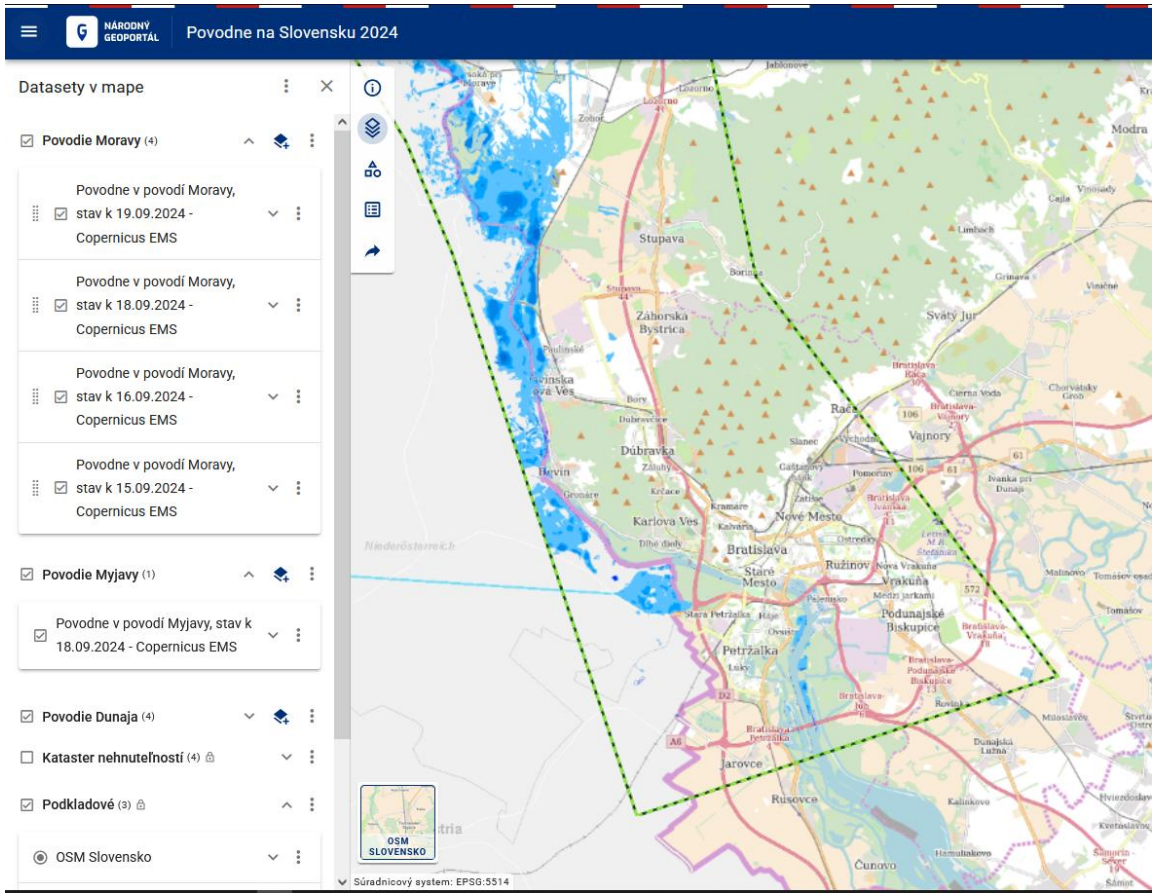
The story of Bratislava

Floods 09/2024

19.09.2024



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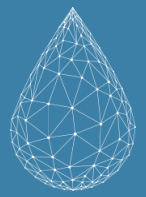
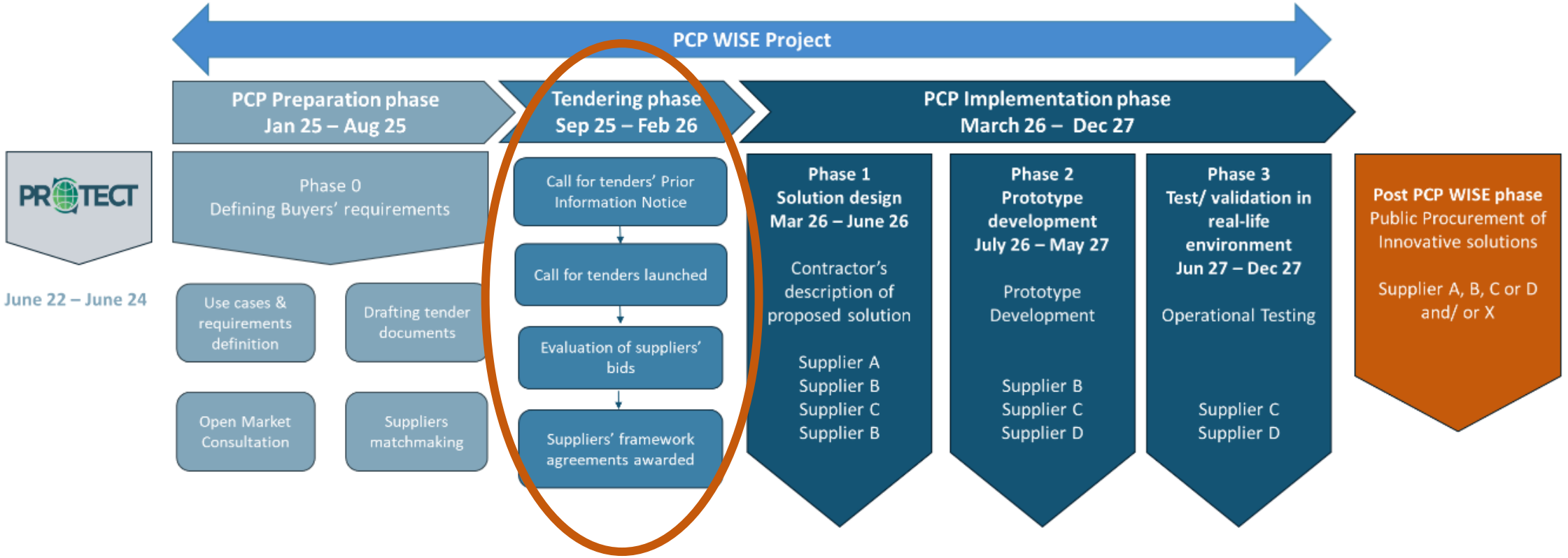


Approach (How?)

PCP WISE

Timeline


PCP WISE Project
PCP Preparation phase
Jan 25 – Aug 25
Tendering phase
Sep 25 – Feb 26
PCP Implementation phase
March 26 – Dec 27
PROTECT
June 22 – June 24
Phase 0
Defining Buyers' requirements
Use cases & requirements definition
Drafting tender documents
Open Market Consultation
Suppliers matchmaking
Call for tenders' Prior Information Notice
Call for tenders launched
Evaluation of suppliers' bids
Suppliers' framework agreements awarded
Phase 1
Solution design
Mar 26 – June 26
Contractor's description of proposed solution
Supplier A
Supplier B
Supplier C
Supplier B
Phase 2
Prototype development
July 26 – May 27
Prototype Development
Supplier B
Supplier C
Supplier D
Phase 3
Test/ validation in real-life environment
Jun 27 – Dec 27
Operational Testing
Supplier C
Supplier D
Post PCP WISE phase
Public Procurement of Innovative solutions
Supplier A, B, C or D and/ or X

Finances and Specific Timeline

Total project budget: €19M (PCP funding: €12M)

Competitive, phased approach:

Design Phase – March to June 2026
5 contractors, €300K each (€1.5M total)

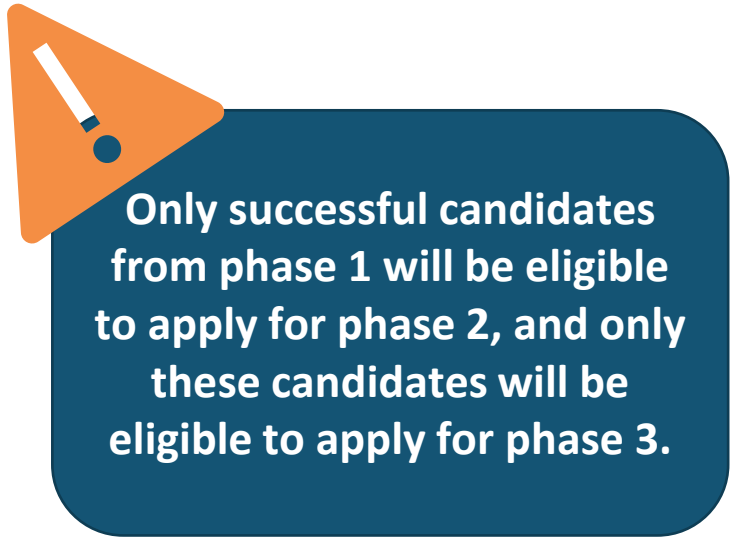
- Demonstrate the technical, financial and commercial feasibility
- Elaborate the solution design and determine the approach

Prototype Development – July 2026 to May 2027
3 contractors, €2.4M each (€7.2M total)

- Develop, demonstrate and validate prototypes in lab conditions

Field Testing & Validation – June to December 2027
2 contractors, €1.5M each (€3M total)

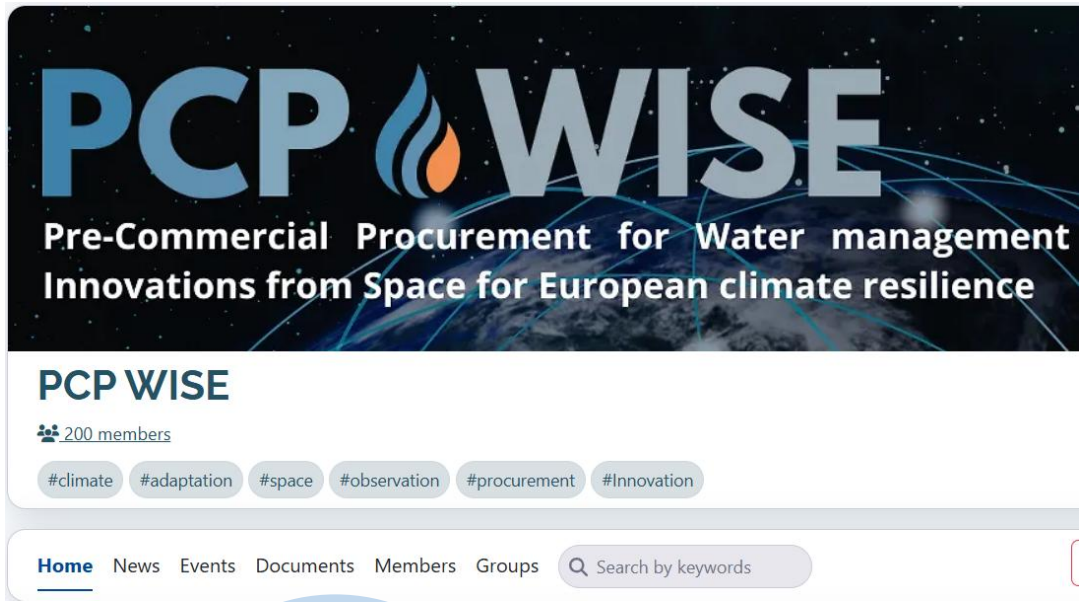
- Development and field-testing of a limited set of first services in 5 testing sites located in 5 EU Member States



Type of consortium needed (not required)

1. Civil engineers
2. Climate services and technologies innovators
3. Earth Observation data specialists and remote sensing companies
4. AI/ data science experts
5. Digital twin/ GIS developers
6. Hydrologists and environmental modelers
7. Meteorologists
8. Legal and contracting skills (European standards, AI, IPR, etc.)
9. And space data-driven starts or consortia combining all these skills

Who is the PCP WISE Community of Practice?

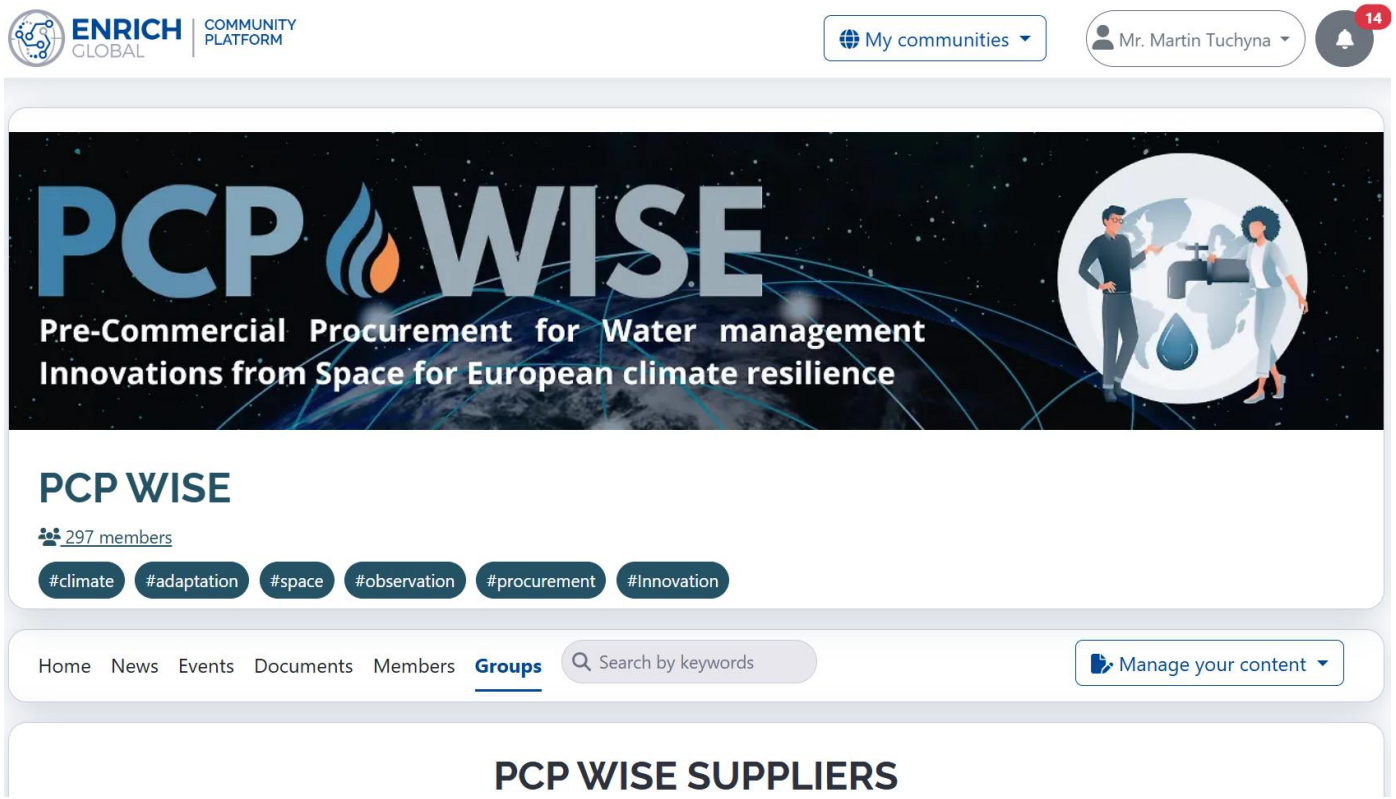


200+ members !

3 Key categories

SUPPLIERS	REPLICATORS	FOLLOWERS
SMEs & startups	Public from national, regional, and local levels	EU-funded projects, networks & initiatives
Large companies	Water authorities & Environmental agencies	EO, Climate and Innovation Procurement Experts
RTOs	Private buyers	End-user communities

CZ & SK suppliers wanted !



Key Dates at a Glance

5 September 2025 – Publication of contract notice in **TED**

6 September 2025 – Tender documents available for download both on the Lead Buyer's e-procurement platform and on the PCP WISE website

15 September 2025 & 11 November 2025– Info webinars

24 October 2025 – Deadline for submitting questions about the Tender documents

30 October 2025 - Deadline for hWh to publish replies to questions

7 January 2026 (17:00) – Deadline for submission of Suppliers' bids

9 January 2026 – Opening of tenders received

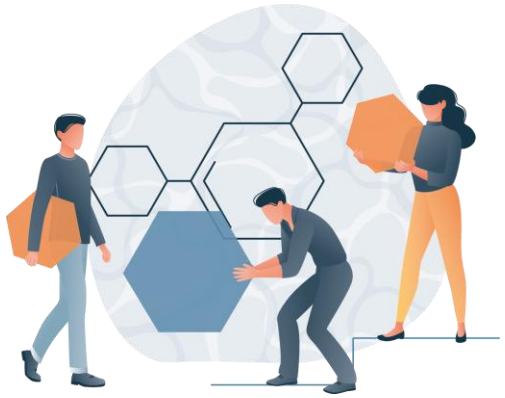
2 March 2026 – Signature of framework agreements and phase 1 specific contracts with selected suppliers.

Publication of the contract award notice in TED.

Subsequent phases begin **in July 2026** (**Phase 2**) and **June 2027** (**Phase 3**). Please refer to the **Tender Document Part 1** for the complete time schedule.

Find us and Get involved

Stay Informed



Participate in Workshops

Explore the Technology and take part in our Stakeholder Observatory Group

Get involved

https://pcp-wise.eu

Join our community and stakeholder observatory group:
https://egcp.enrich-global.eu/communities/pcp-wise

PCP WISE

European Commission

Contact us: info-PCP-WISE@group-gac.com
Follow us on LinkedIn: PCP WISE
Join the PCP-WISE Community: Link