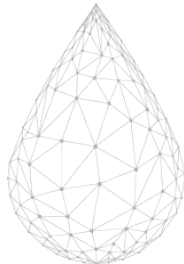




INŠPIRUJME SA

PCP WISE



Innovative ICT procurement for water management

Let's get inspired conference 30.10.2025, Brno, CZ
Jozef Kubinec, Marek Hubáček, Martin Tuchyňa



Funded by
the European Union

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

29/10/2025



Outline

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



Context

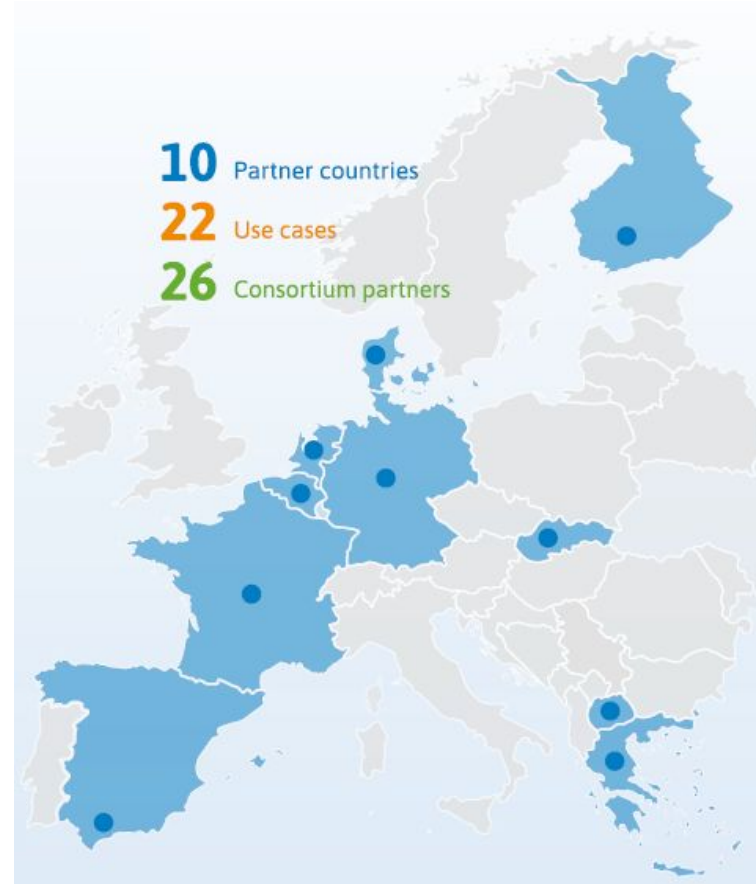




Project ID Card



- 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 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.





Project main aim

What?

How?

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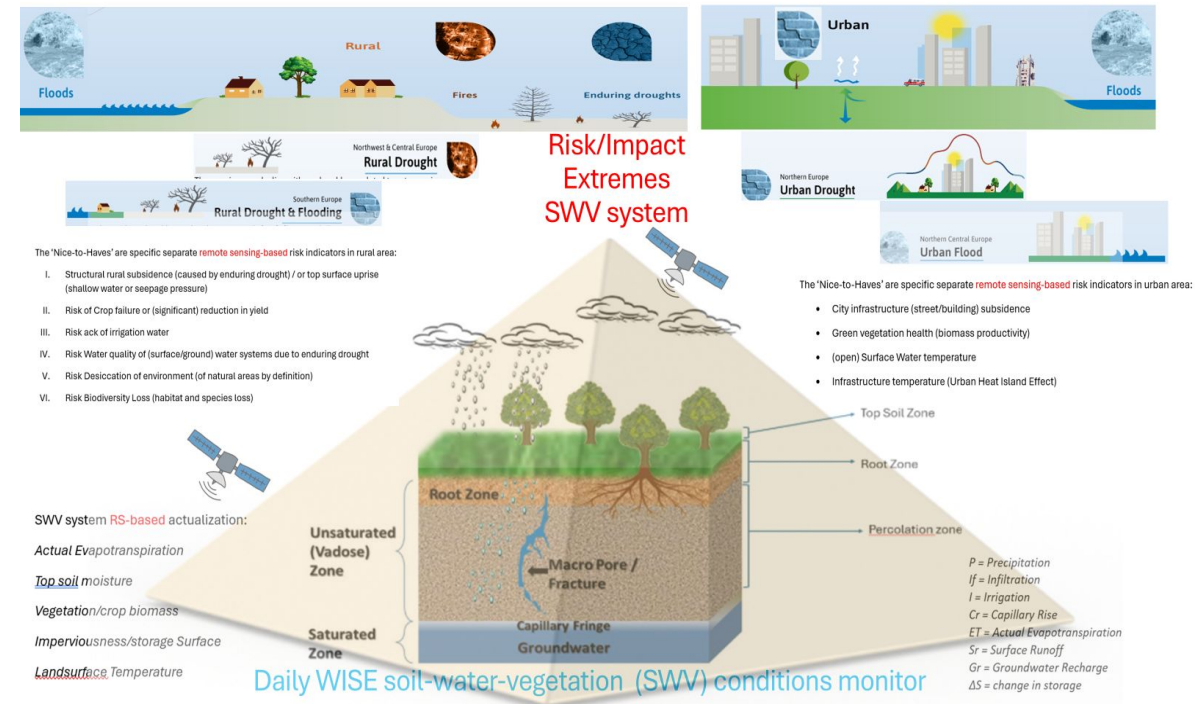




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What?
How?
Why?





Motivation (Why?)





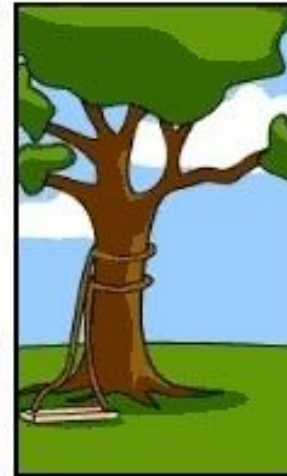
How the customer explained it



How the Project Leader understood it



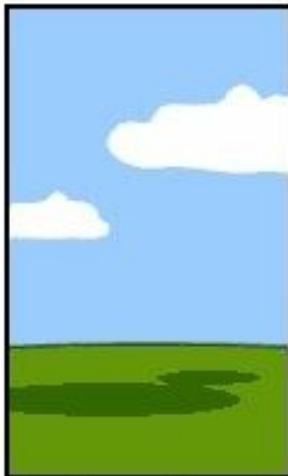
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



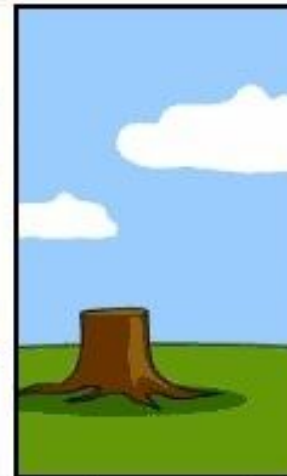
How the project was documented



What operations installed



How the customer was billed



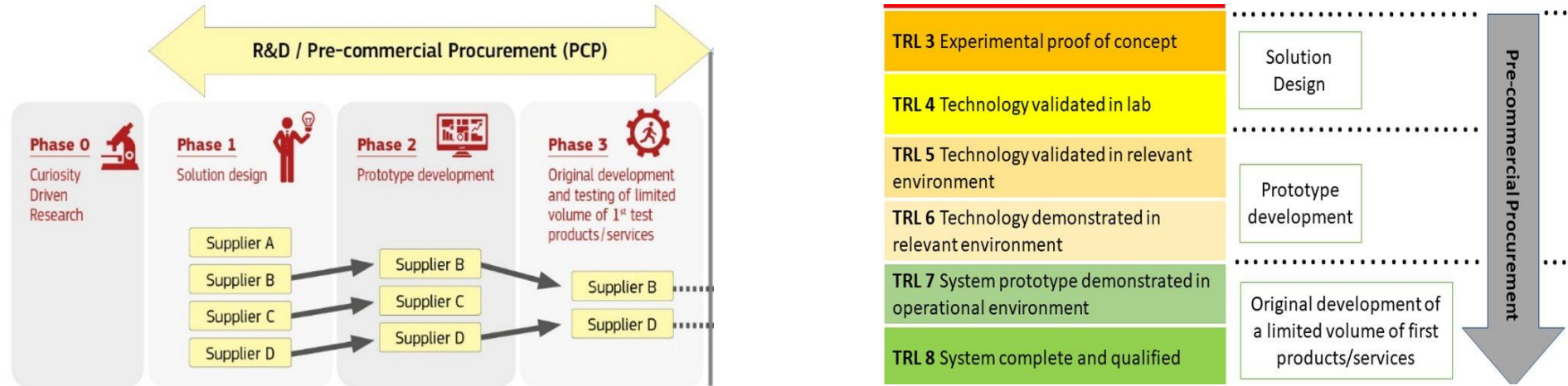
How it was supported



What the customer really needed

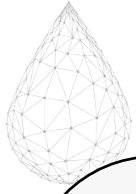


Pre Commercial procurement Approach



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 Commercial 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?)





Climate change challenges



The overarching challenge is to control & manage our

'soil-water-vegetation-atmosphere' system

to prevent extremes & improve water distribution



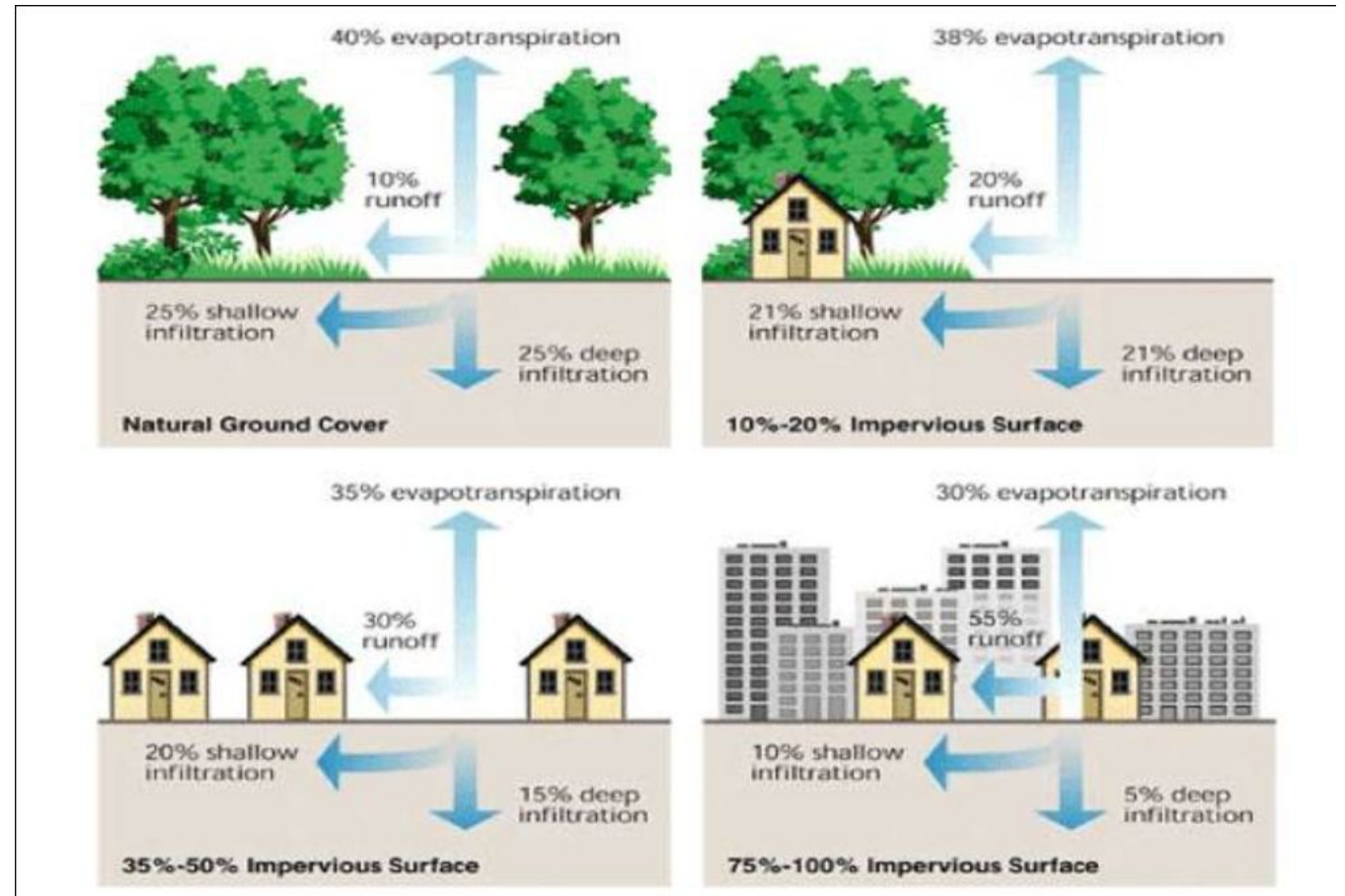
Urban water management vs Rural

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.



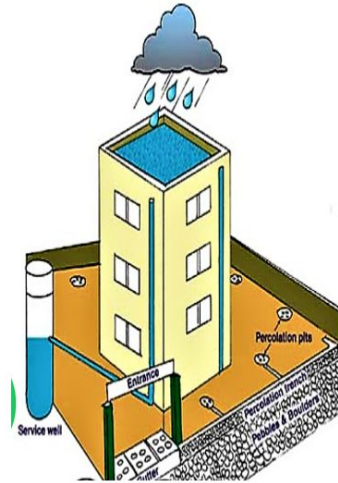
G2 example: Too much, too fast

Urban floods are increasing due to:

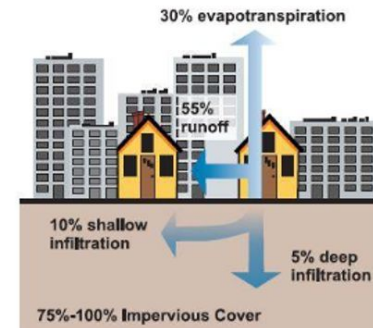
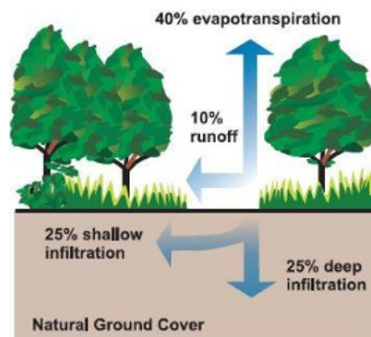
- Rising river levels
- Seepage and sea level rise
- Climate change and more intense rainfall
- Urbanisation, land subsidence, loss of green space and poor drainage systems

Impacts:

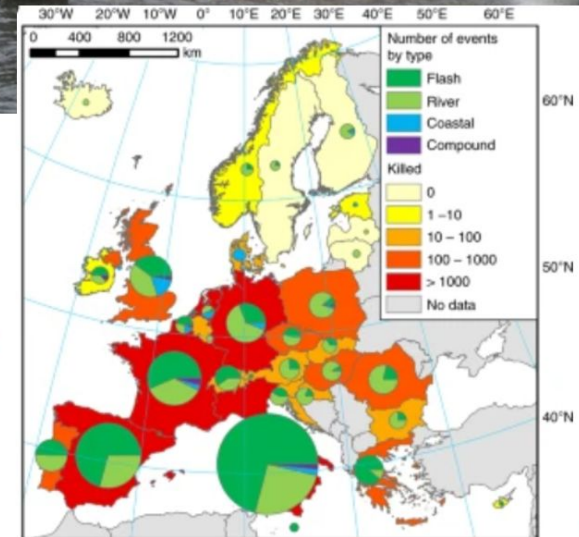
- Homes/buildings
- Transport
- Public Utilities & Services
- Human health and lives



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](#)



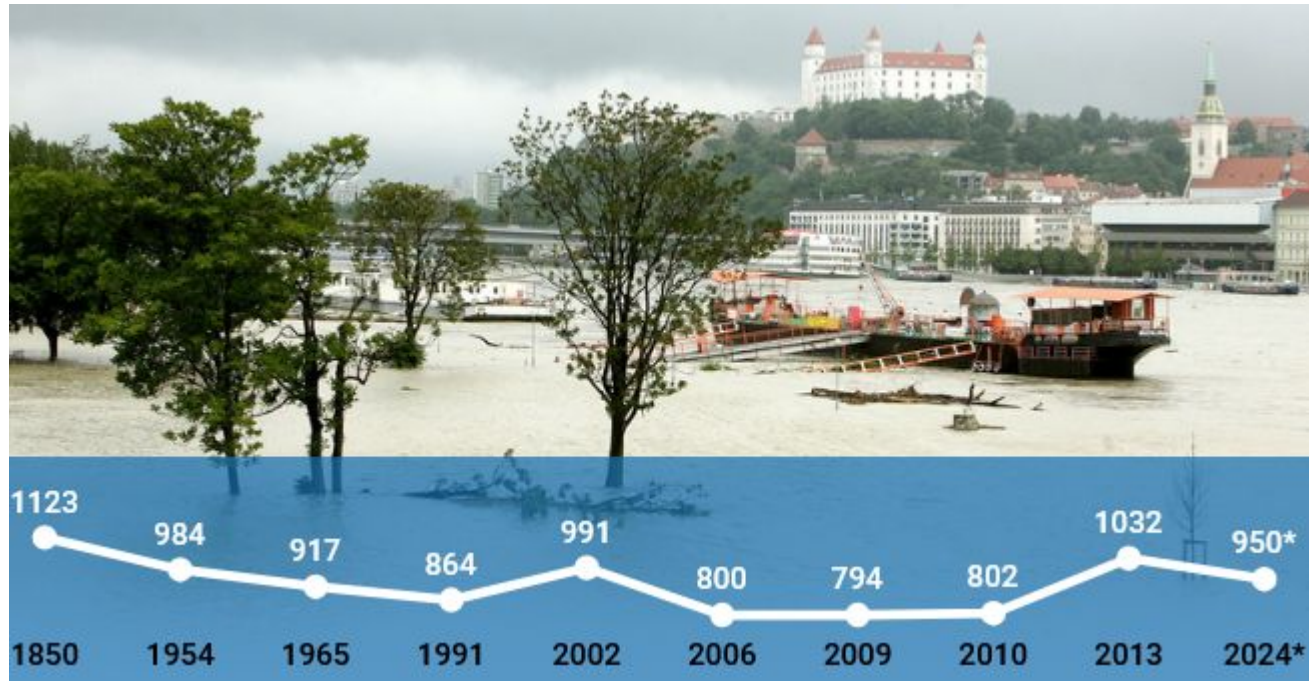
Photograph: Tomáš Benedikovič/AFP/Getty Images
Source: [The Guardian](#)





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



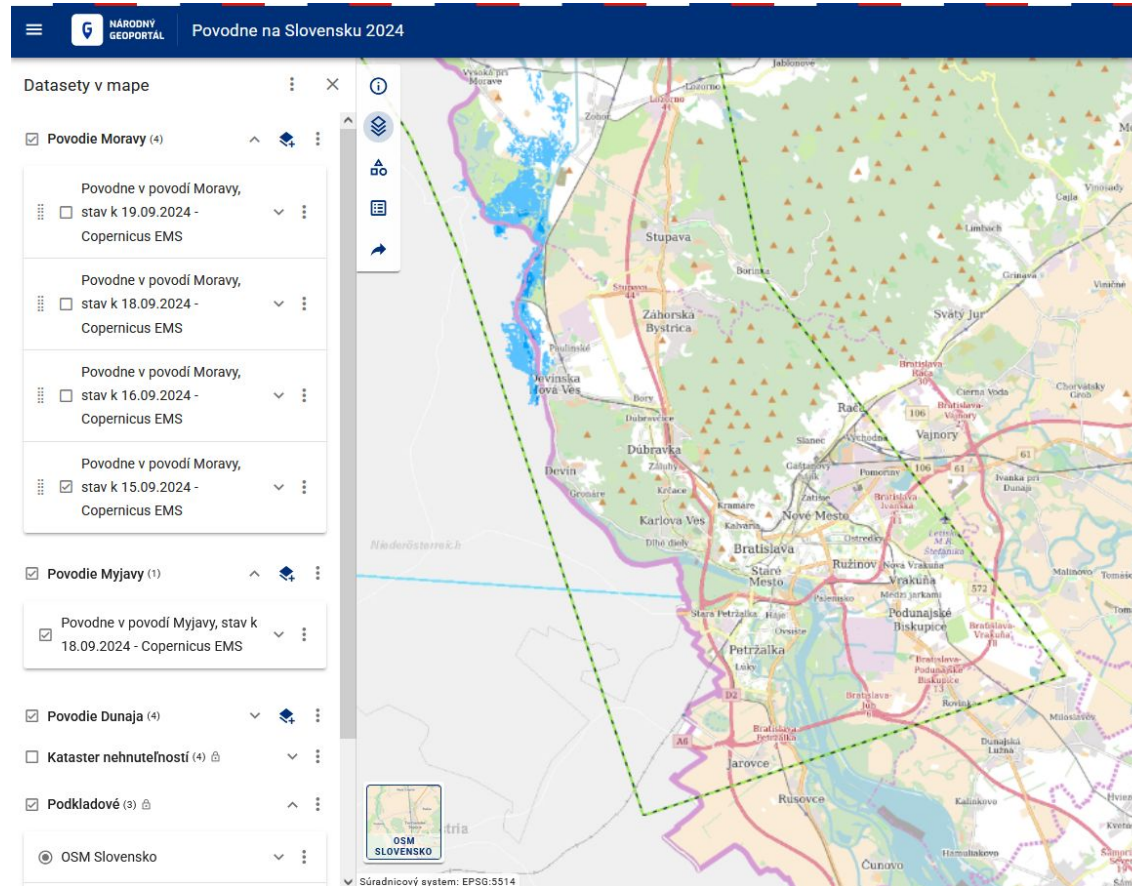
Source: [National Geoportal](#)

 **MINISTERSTVO
ŽIVOTNÉHO PROSTREDIA
SLOVENSKEJ REPUBLIKY**



The story of Bratislava

Floods 09/2024
15.09.2024

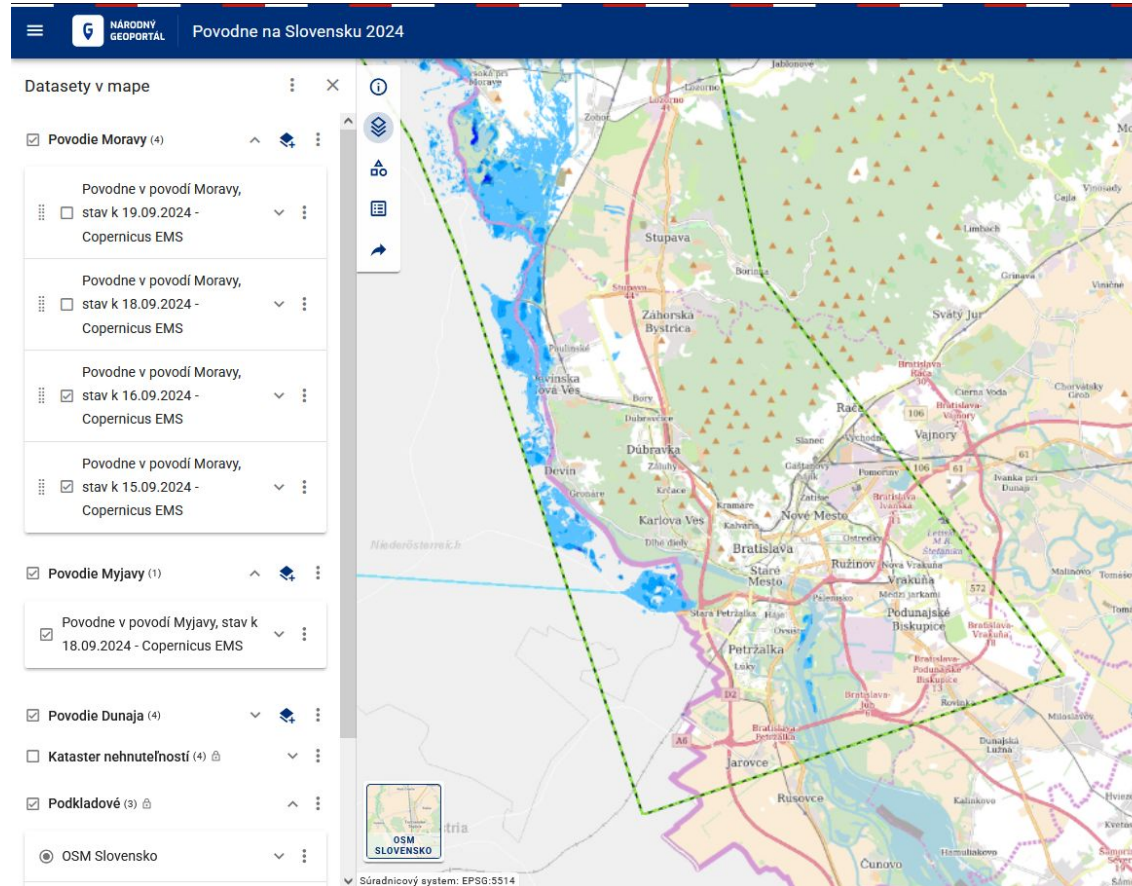


Source: [National Geoportal map app using Copernicus Emergency management service](#)



The story of Bratislava

Floods 09/2024
16.09.2024

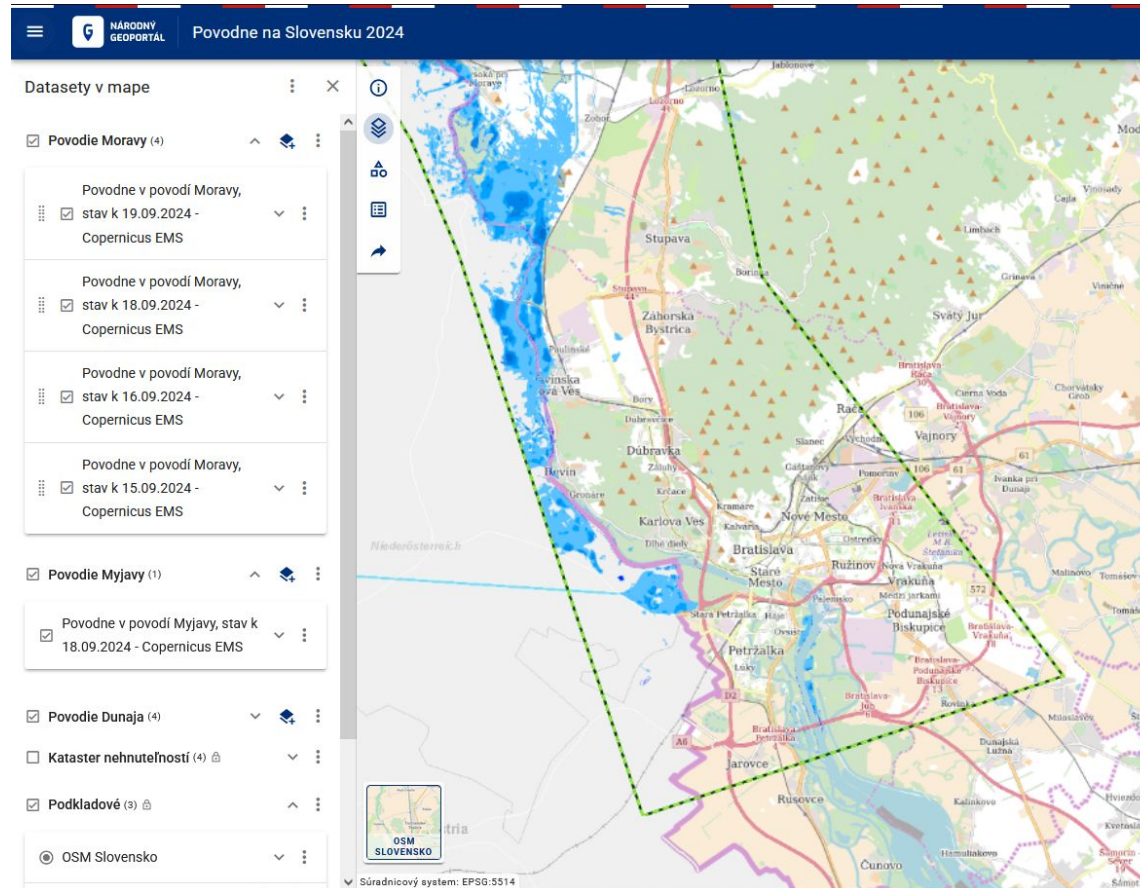


Source: [National Geoportal map app using Copernicus Emergency management service](#)



The story of Bratislava

Floods 09/2024
19.09.2024



Source: [National Geoportal map app using Copernicus Emergency management service](#)

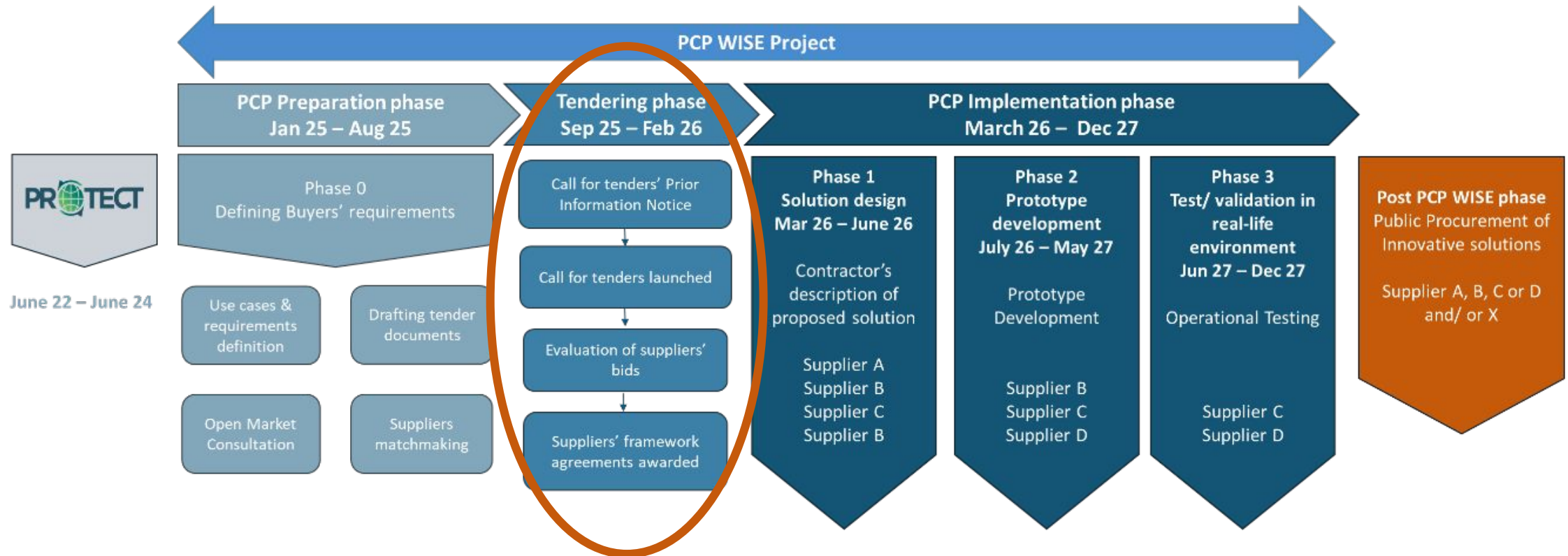


Approach (How?)





Timeline



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



Only successful candidates from phase 1 will be eligible to apply for phase 2, and only these candidates will be eligible to apply for phase 3.



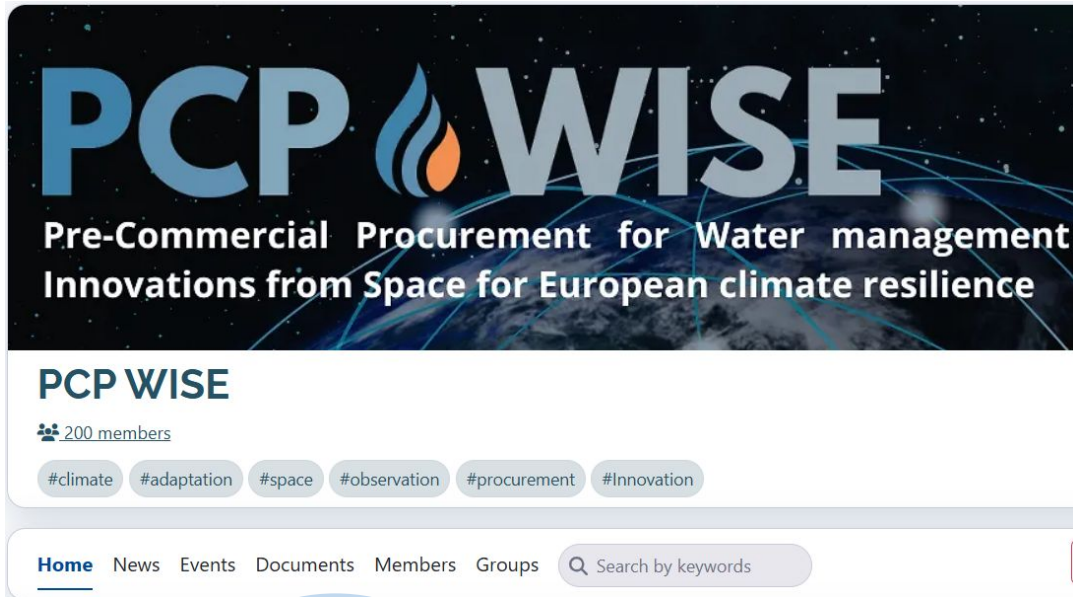
Type of consortium needed (not required)

- 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

SMEs & startups

Large companies

RTOs

REPLICATORS

Public from
national,
regional, and
local levels

Water authorities
& Environmental
agencies

Private buyers

FOLLOWERS

EU-funded
projects,
networks &
initiatives

EO, Climate and
Innovation
Procurement
Experts

End-user
communities



CZ & SK suppliers wanted !



 **ENRICH**
GLOBAL

COMMUNITY
PLATFORM

My communities ▾

Mr. Martin Tuchyna ▾

14

PCP WISE

Pre-Commercial Procurement for Water management
Innovations from Space for European climate resilience



PCP WISE

297 members

#climate #adaptation #space #observation #procurement #Innovation

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PCP WISE SUPPLIERS



Important Dates

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

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