PCP WISE

Bratislava Stakeholder Workshop

End user needs, user story lines, and mapping of digitalisation

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Welcome and Housekeeping

- Welcome to the PCP WISE Bratislava Stakeholder Workshop!
- Please sign in at the front

- Enjoy coffee until 9:00
  - There will be another coffee break later, and lunch provided at 12:30

- The presentations will be mostly in English, but feel free to discuss amongst yourselves in Slovak during the group exercises

- WIFI name: TP-Link_ADF6
- Password: 99097417

Agenda	Time
Introduction and setting the scene • What is PCP-WISE? • What is the sensemaking method? • Getting to know each other (ice-breaker)	09:00 – 09:40
Sensemaking WHAT: Problems and priorities Identifying available, used/useable and missing climate data/information that informs the demand for end-user climate services	09:40 – 10:30
COFFEE BREAK (20mins)	
Sensemaking HOW: Boundary conditions The needs and requirements of regional strategies and action plans, linking with policies and orientations at national and at local levels Mapping of digitalisation to assess which stakeholders are involved in climate action, what digital tools they use for data and decision-making, how data is shared across actors, and what digital initiatives support climate adaptation and mitigation	10:50 – 12:30
LUNCH BREAK (1.5h)	
Sensemaking SO WHAT: User Stories Validation of user stories, identifying commonalities between users and comparing user experience Prototyping pen and paper exercise	14:00 – 16:00
Sensemaking NOW WHAT: Next Steps of PCP WISE	16:00 – 16:30
WRAP UP & FEEDBACK (30 mins)	

Introduction and Setting the Scene:
PCP WISE and Sensemaking

09:00 – 09:40

Ministry of Interior, Slovakian Environmental Agency

Climate KIC

PCP WISE general overview

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**.

PCP WISE Consortium

- EU-funded project via Horizon Europe Programme
- Builds on the preparatory action from PROTECT project
- 26 partners covering 9 countries
- 11 Public buyers and 15 support partners
  - Lead buyer: hetWaterschapshuis
  - Project coordination: Barrabés
- Duration: 36 months
- Overall budget: €19M

From PROTECT to PCP-WISE

PCP WISE builds on the results, common challenges and synergies resulting from PROTECT CSA.

PROTECT

Five application domains

- Marine & coastal environment
- Energy & utilities
- Sustainable urban communities
- Agriculture, forestry and other land use
- Civil security protection

3 CHALLENGES

FLOODS

FIRES

RESILIENT INFRASTRUCTURE

One overarching challenge
WATER

PCP WISE

Initially identified 22 uses cases in several domains

- Rural area
- Urban area
- Fast onset crisis
- Low onset crisis

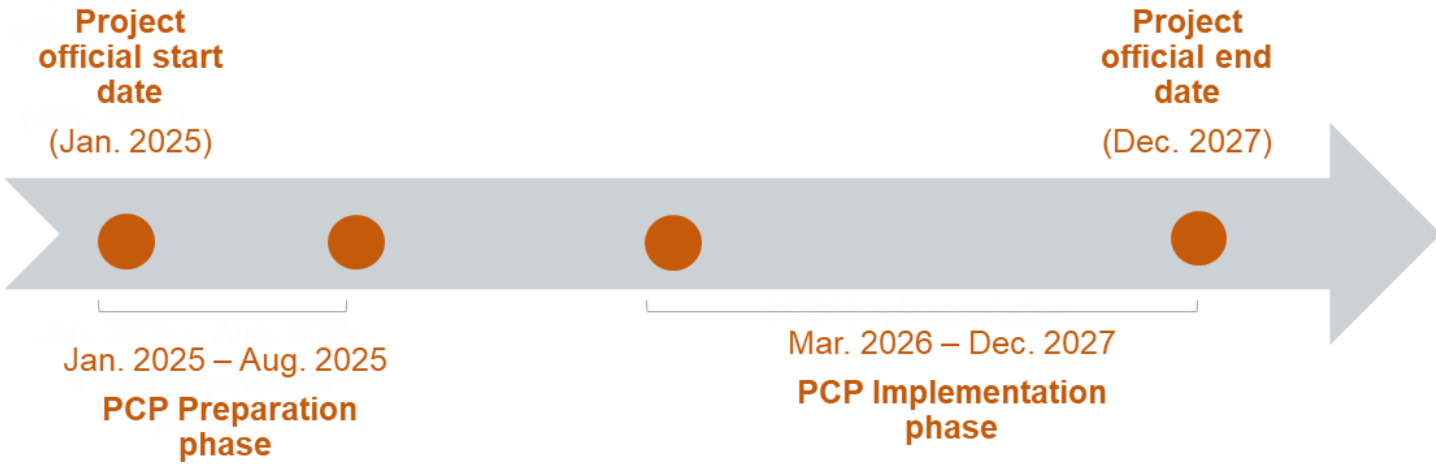
No existing solutions were available on the market or close to market readiness.

Necessity of developing new solutions to address the common challenges defined in the project.

Tackle a "big" challenge that has broad applicability across Europe.

Develop solutions that can be used by a wide range of public buyers.
Ensures the developed solutions are scalable and provide significant benefits across different regions.

PCP WISE Timeline & process



PCP Preparation phase
(Jan 25 – Aug 25)

Use case selection

SOTA analysis

Pilot strategy & test plan

Open market consultation

Procurement Strategy & Tender Documentation Development

Tender documents

Contract notice: Tendering
Sep 25

Evaluation of bids against criteria

Award of Framework Agreements

PCP Implementation
(March 26 – Dec 28)

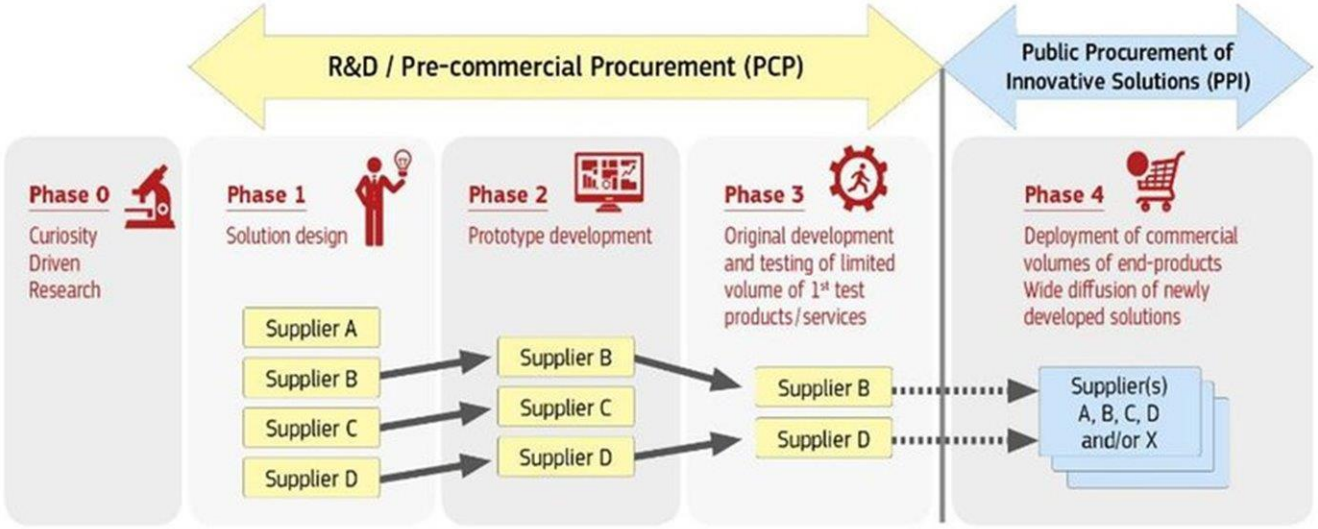
Phase 1: solution design

Phase 2: prototype development lab tests

Phase 3: test/validation

Evaluation – end of phase report

Innovation Procurement



"Innovation Procurement happens when public buyers acquire the development or deployment of pioneering innovative solutions to address specific mid-to-long-term public-sector needs." ***(EAFIP Toolkit | Research and Innovation)***

Innovation procurement is a tool for addressing pressing societal challenges across various sectors: Health care, climate change, energy efficiency, transport, security etc.

Goal: To identify and implement new solutions in sectors where current commercially available products do not meet the specific needs of the public sector.

Budget

PCP Phase	No. Contractors	Budget per contractor	Total budget
Phase 1	5	300.000	1.500.000
Phase 2	3	2.400.000	7.200.000
Phase 3	2	1.532.669,4	3.065.338,8
		TOTAL	**11.809.088**

Project’s mission and 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

Expected Outcomes for Stakeholders

Enhanced Decision-Making	Improved Tools	Proactive Crisis Management	Innovative Solutions	Enhanced Resilience
Access to real-time and historical data to support effective water management and crisis response.	Development of user-friendly dashboards and information products tailored to local needs.	Better anticipation and management of extreme events like floods, droughts, and heatwaves.	Development of advanced products and services to tackle urban and rural water issues, such as droughts and flooding.	Improved tools for managing water resources and responding to climate-related crises, ensuring long-term resilience.

Earth Observation data & Climate Services

Satellite Data Integration

PCP WISE leverages data from Earth observation satellites to monitor key environmental variables such as soil moisture, temperature, and precipitation patterns.

Hydrological Modeling

Advanced hydrological models combine satellite data with ground measurements to provide accurate assessments of water balance and predict potential risks.

Climate Scenarios

The project incorporates climate change scenarios to simulate and improve threshold criteria for water-related risks, enhancing long-term planning capabilities.

User-Friendly Interfaces

Climate services developed through PCP WISE will feature intuitive dashboards and tools, making complex data accessible to decision-makers and stakeholders.

Climate change challenges

The overarching challenge is to control & manage our

'soil-water-vegetation-atmosphere' system

to prevent extremes & improve water distribution

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.

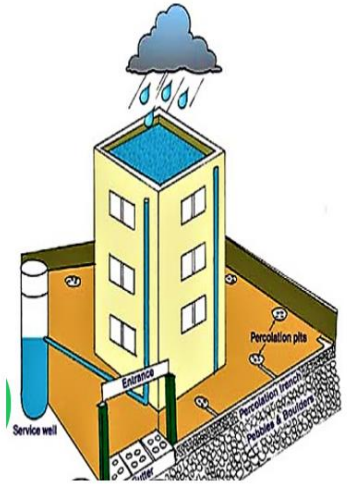
G2 example: Too much, too fast

Urban floods are increasing due to:

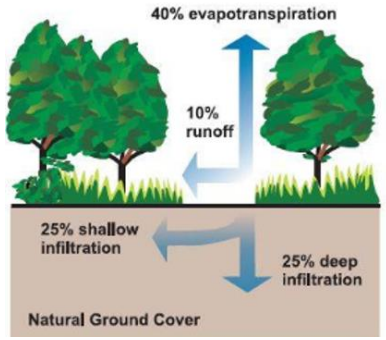
- Rising river levels
- Seepage and sea level rise
- Climate change and more intense rainfall
- Urbanisation, land subsidence, loss of green space and poor drainage systems

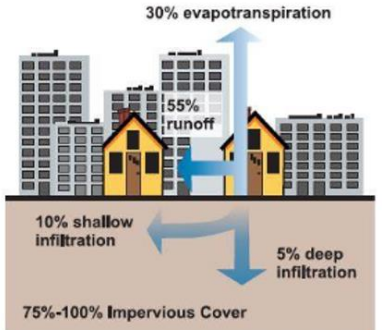
Impacts:

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

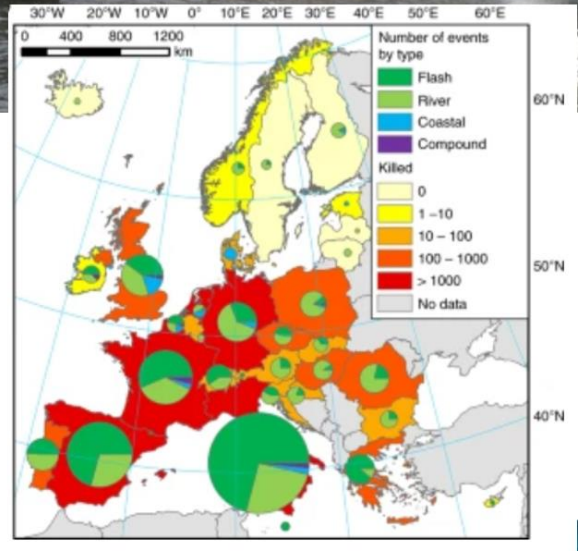


Urban Flooding





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



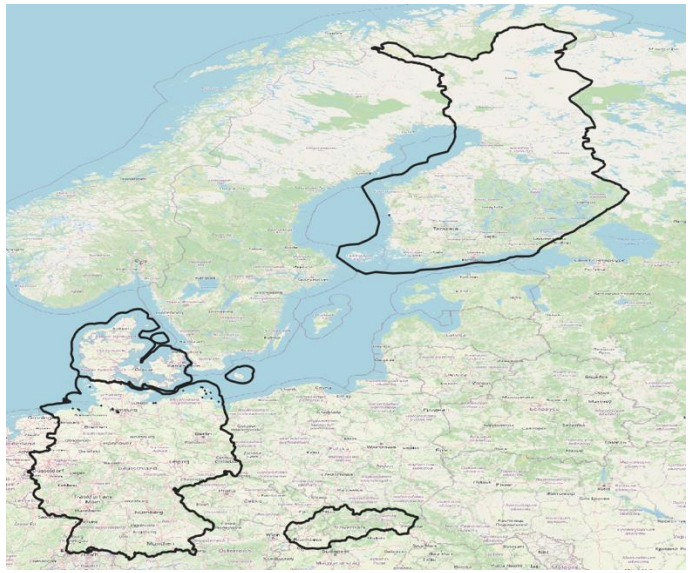
G2 coverage and test site(s)

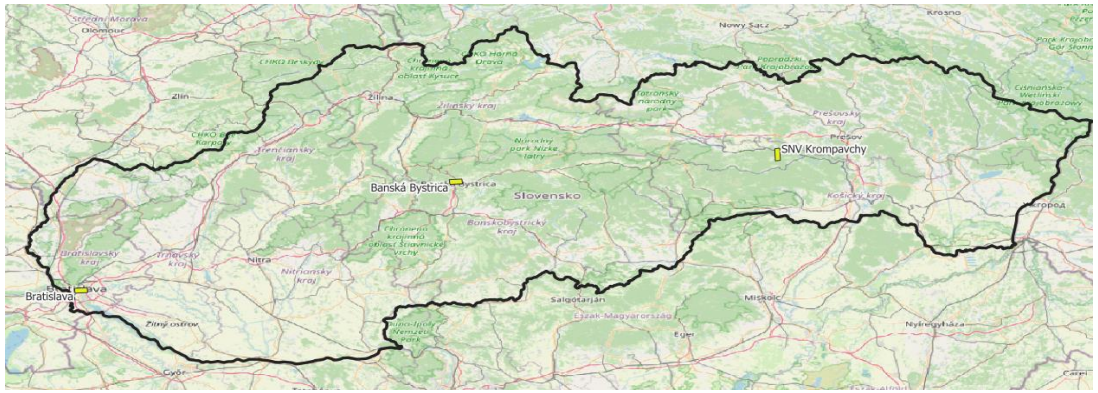
Group / cluster 2 Countries / Partners

- Slovakia (SEA, MoE, ISEMI)
- Finland (Forum Virium)
- Denmark (Klimatorium)
- Germany (THW)

Test sites (SK):

- Bratislava
- Banska Bystrica
- Spisska Nova Ves (Krompachy)
- ?



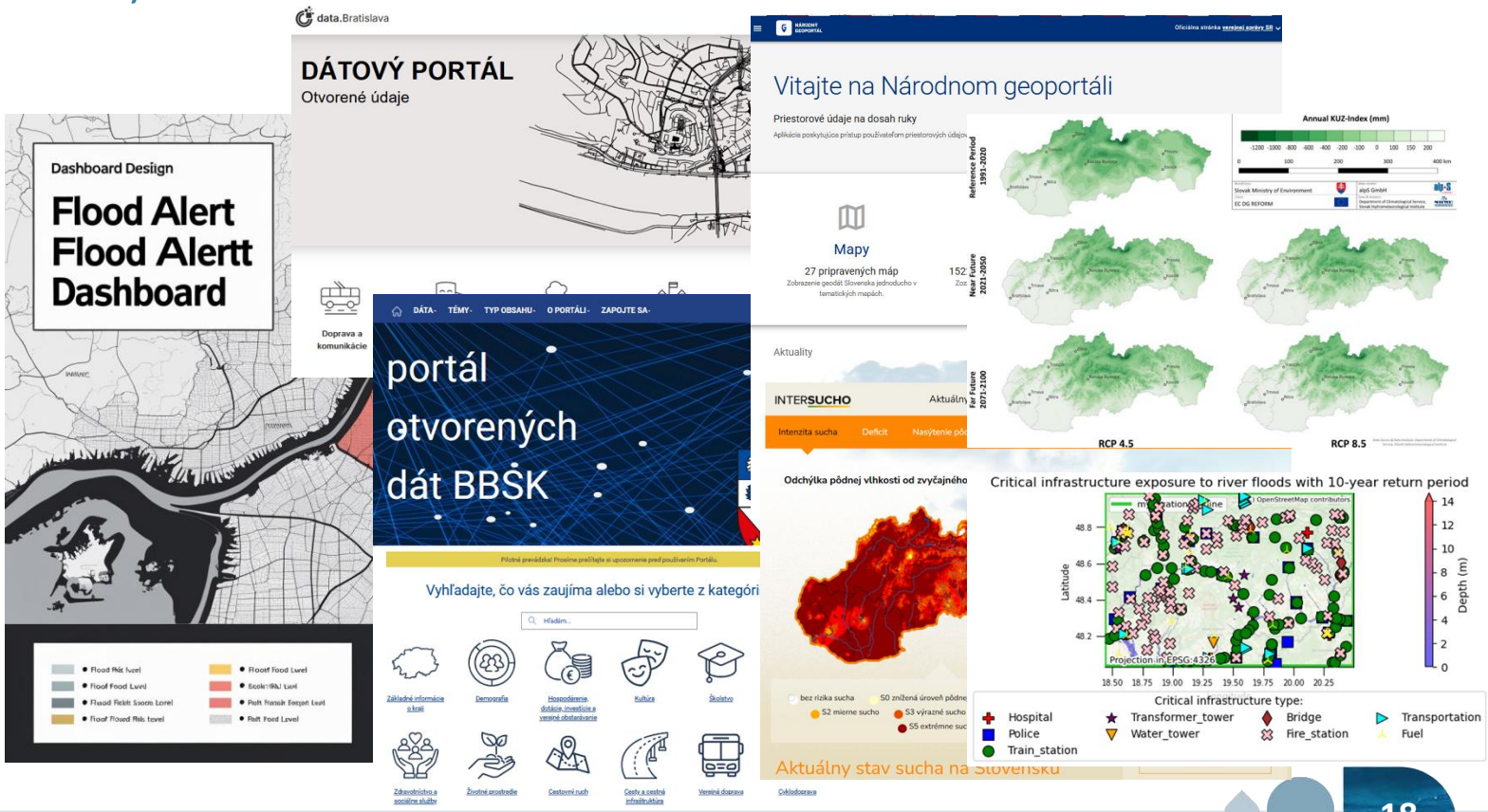


Expected cluster outcomes

New reliable data resources accessible for stakeholders (history / status / forecasts)

- Flood warnings
- Flood hazards & risks
- Weather
- Water level
- Soil moisture
- Precipitation
- Evapotranspiration
- Rainfall deficit
- Etc.

Dashboards, apps and services supporting analytics and communication

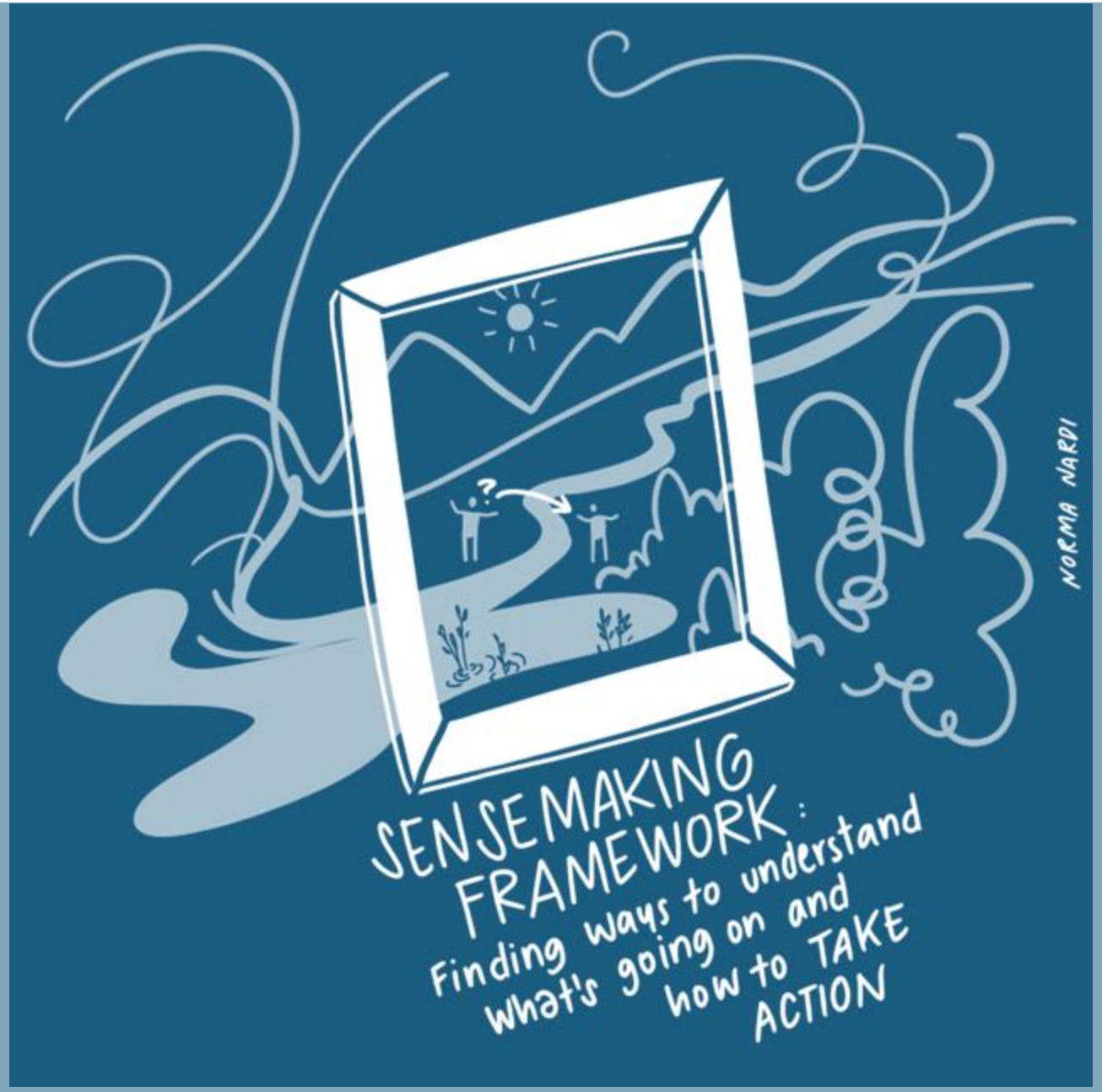


Your inputs from today...

- ... Will **directly inform the PCP WISE tender**
- ... Will send a clear signal to the market of providers
- ... Will ensure that the procured solutions meet your unique climate and water challenges
- ... Will ensure that the products and services created meet the **real needs** you expressed here today

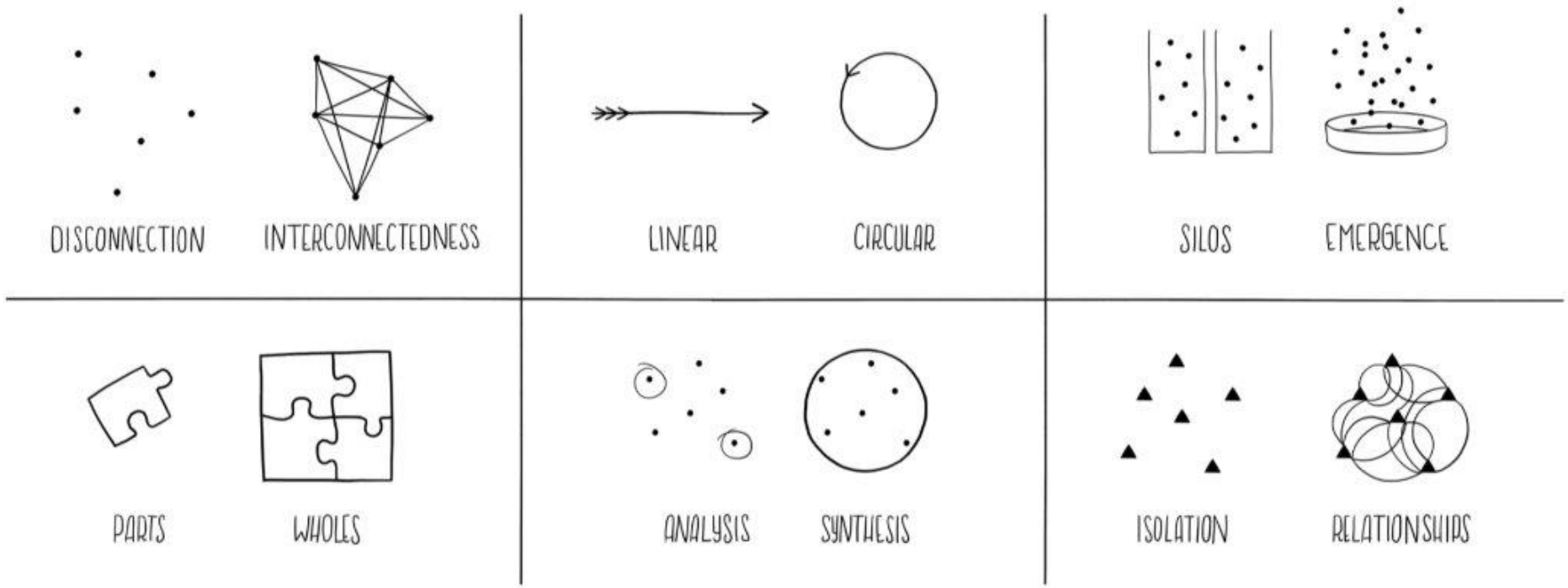
SENSE

MAKING



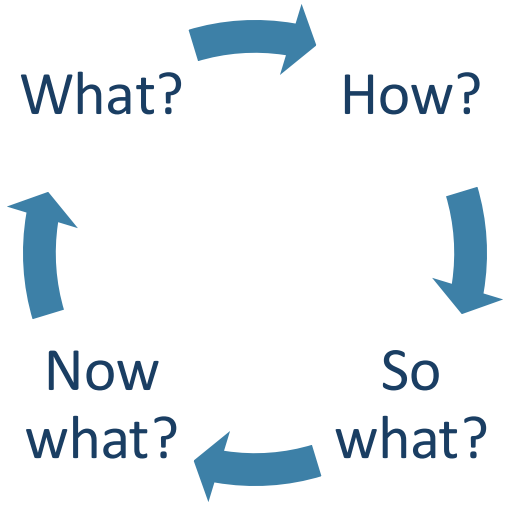
Sensemaking:
The ability to understand the world so you can act in it

TOOLS OF A SYSTEM THINKER



DISRUPT DESIGN

How will we apply this today?



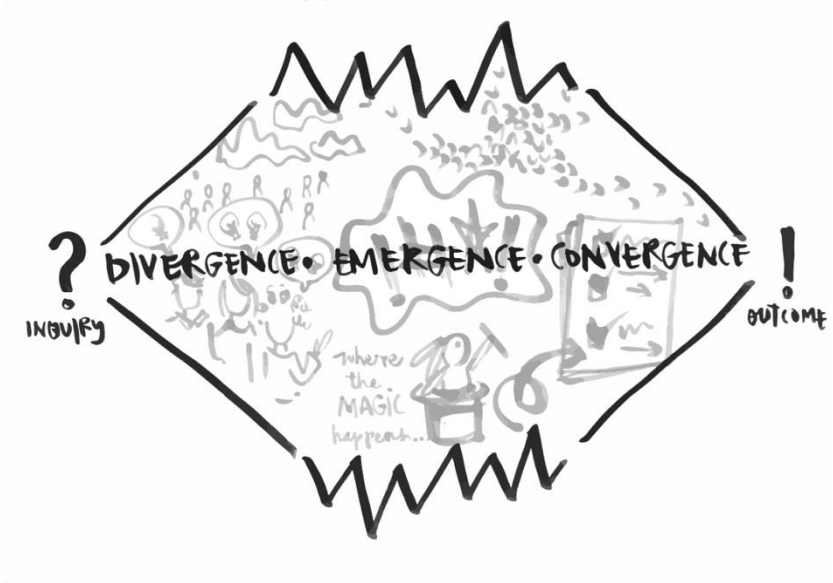
Understanding Needs: Sensemaking helps you understand the needs and challenges of the project to identify what the project aims to achieve and the problems it needs to solve

Exploring Solutions: Sensemaking allows you to explore different solutions and technologies to evaluate which options are most promising and feasible.

Asking questions

Discussing in small groups

Challenging your assumptions



Learning new things

Sharing knowledge

Continuing to inquire

Ice-Breaker

15 mins

Getting to know each other

Briefly introduce yourself and explain, which of these categories you best fit in and why:

CRISIS

I work on crisis, hazard, disaster risk reduction or management (e.g., floods)

REGULAR

I work on regular water management (e.g., water quality)

CLIMATE

I work on climate topics (e.g., adaptation, drought, water scarcity)

PCP WISE

Sensemaking WHAT: Problems and priorities

09:40 – 10:30

Climate KIC

Introducing small group sessions on problems and priorities

- Divide into small groups
- Each group should have one representative of the mentioned categories (crisis, regular, climate)
- If you have more than one person from the same organisation, try to split to different groups.
- Collect your ideas on post its

- Nominate one person to feed back to the plenary (in English)

WHAT water-related climate/crisis/regular management information do you have or not have?
WHAT problems do you have with using or accessing the information?

Points to report on:

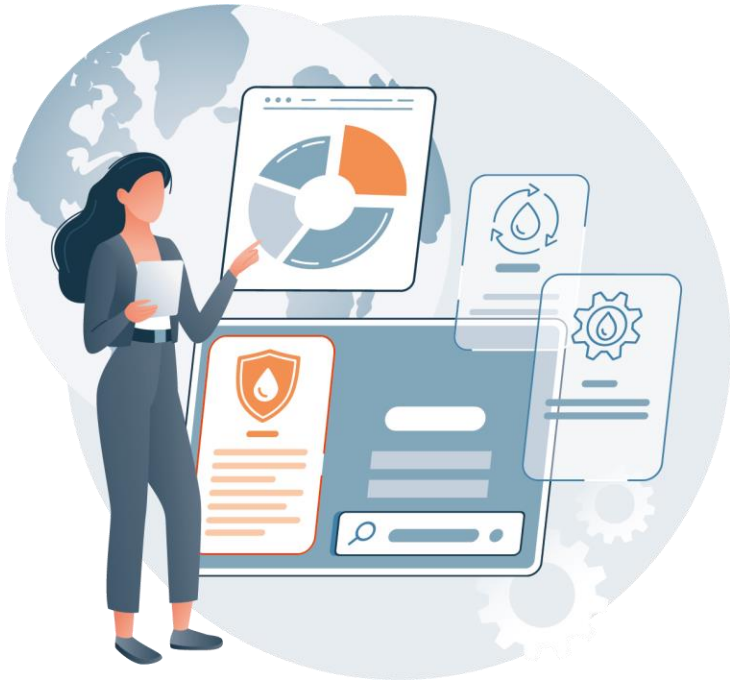
- ***What were the main outcomes?***
- ***What surprised you?***
- ***What is something new you learned?***

Feedback to the plenum
15 mins

What were the main outcomes?

What surprised you?

What is something new you learned?



Coffee Break

15 mins

Sensemaking HOW: Policy Alignment

11:15 – 11:40

Climate KIC

The importance of aligning tool portfolios with climate adaptation and mitigation strategies

- PCP WISE has the stated **goal of supporting climate adaptation** efforts in Europe

- We need to ensure that the specifications that feed into the tender align with your demands – **BUT ALSO** align with climate adaptation and mitigation strategies/goals that apply to the test sites

- Therefore, we ask you to reflect on the role that climate adaptation and mitigation plays in your work and the tools you use

Introduction of group exercise on climate adaptation policy

- Split into small groups and discuss the questions handed out to you (each group should have one climate person)

- Nominate one person to feed back to the plenary (in English)

HOW do the tools you use support national/regional/local adaptation strategies and action plans?

HOW could those plans be better supported with information provided through PCP WISE?

Points to report on:

- How familiar are you with adaptation and mitigation strategies for your region?

- What surprised you?

- What is something new you learned?

Feedback to the plenum
15 mins

How familiar were you with adaptation and mitigation strategies for your region?

What surprised you?

What is something new you learned?

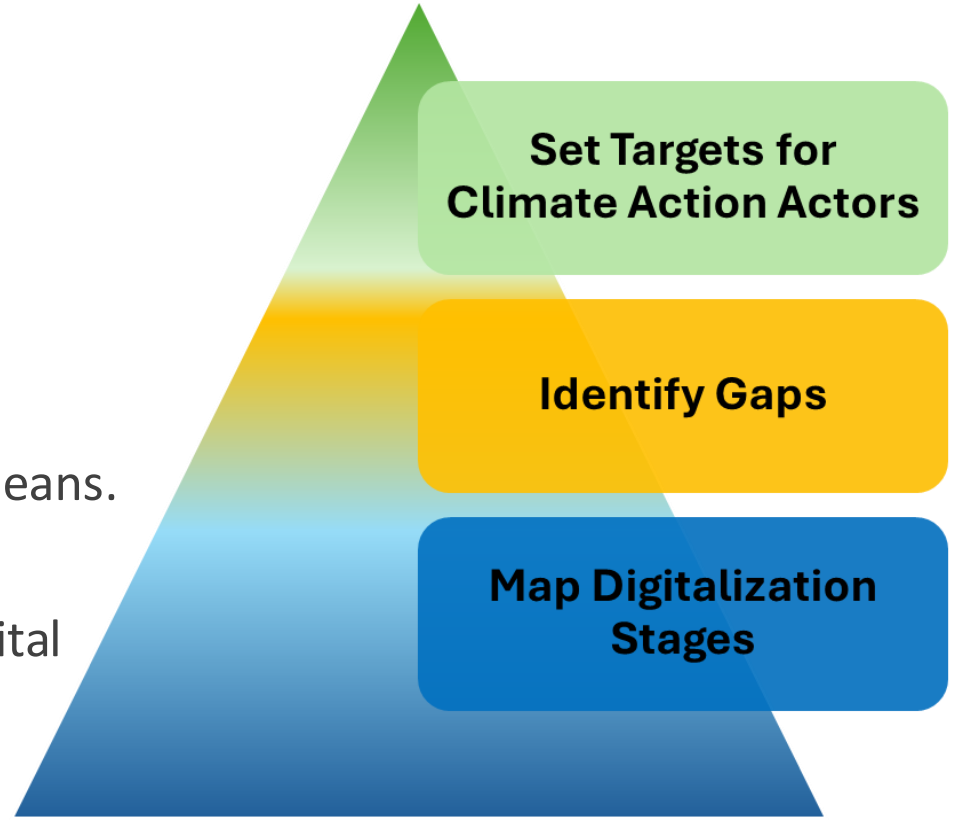
Sensemaking HOW: Mapping of digitalisation

11:40 – 12:30

UT-ITC

Mapping of digitalisation

- Map Digitalization Stages
  - **Purpose**: Understand where each buyer group (e.g. public authorities, agencies) stands in their digital journey.
- Identify Gaps
  - **Purpose**: Detect what is missing to enable effective climate adaptation and mitigation through digital means.
- Set Targets for Climate Action Actors
  - **Purpose:** this guides implementation and aligns digital transformation with climate policy objectives.



Introduction of group exercise on mapping digitalisation

- Split into small groups and discuss the questions handed out to you
- Capture your group's feedback through an online survey on Wooclap
- Nominate one person to briefly feed back to the plenary

Wooclap

Join this Wooclap event

1 Go to wooclap.com

2 Enter the event code in the top banner

Event code
PCPBRATISLAVA

Enable answers by SMS

Lunch Break

1.5 h

Sensemaking SO WHAT: User Story Lines

14:00 - 16:00

Climate KIC

SO WHAT can PCP WISE do for us?

SO WHAT impact can my user story have within the PCP WISE project?

PCP WISE at the local level

- The water distribution in European River basins is of **transnational importance** in the era of dynamic climate change and there is increasing pressure on the water availability by numerous sectors (industry, agriculture, nature, consumption, etc).
- The consequences of **local shortage or abundance of water in our soils** (groundwater and aquifer systems) and surface waters are increasing and **result in extreme situations** (flooding, wildfires, water quality, productivity, etc.)
- The current European climate tools available give relevant insight into the large-scale trends on water related issues but are **too generic** (but serve as relevant boundary conditions) for local and operational management.
- PCP WISE can **complement** these existing services and **support** local operational measures in the context of national and European frameworks of adaptation and mitigation

Pain Points & Technical Requirement – Testing our Assumptions

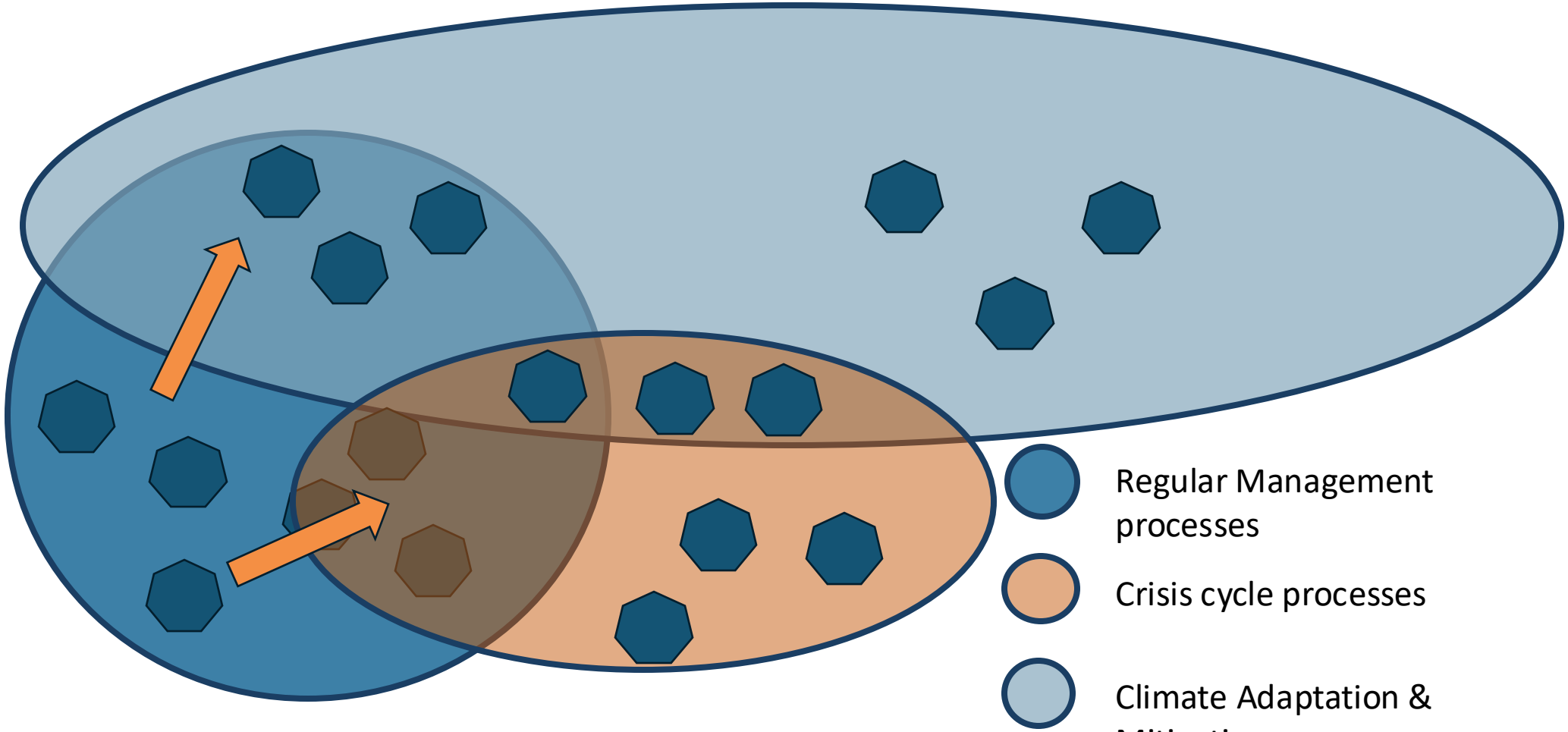
Bratislava Pain Points:

- City water balance
- Flooding (fast onset)
- Risk assessment

- **Technical requirements: Regular (day-to-day):**
  - Management/measures: water, infrastructure, green areas, heat, energy, etc.
- **Technical requirements: Crisis (short-term):**
  - Risk reduction/measures, risk priorities/crisis handling, critical infrastructure, vulnerable population, etc.
- **Technical requirements: Climate (long-term):**
  - Evaluation/measures adjustment/hindsight, scenario/forecast, etc.

Understanding changing stakeholder needs

Under certain conditions, organisations (people) change their working procedures from regular to Short Term (crisis) Action mode or to Long Term (climate) Strategy mode



The purpose of User Story Lines

- User Story Lines help our technical partners to understand your needs and translate them into technical requirements. These requirements define the technological boundaries for the software that subsequently should provide value to you, the end users.
  - Suitable technologies
  - Allow integration
  - Standard operation procedures and guidelines
- The User Story Lines help us to understand the **reasons** organisations transition between categories and what this means for their data needs, i.e. how to **tailor the function** of the PCP WISE base information to each local problem and the related stakeholders
- This understanding could help in tailoring the needs & furthermore the **necessary (technical) requirements** to the PCP WISE information production that will be outlined in the tender
- The end users will need to **build their own intelligence** based on the PCP WISE information, which therefore has to fit into the end user's traditional working procedures

User Story Line Process

Drafting

Buyers put together user story line drafts in advance of the workshops, including pain points, technical and non-technical requirements, and acceptance criteria for different categories of users

Validation

The workshops serve as an opportunity to validate these USL drafts with the end user community and make final edits, changes, or additions

Integration

The USL requirements are translated into technical specs and fed into the PCP WISE tender by the end of July

The Bratislava User Story Lines

- Drafting story lines for diverse groups of users, their pain points, their technical/non-technical requirements, acceptance criteria etc.
- User groups included for Bratislava:

- *National authorities (e.g. SK Ministry of environment)*
- *Capital City of Slovakia and Metropolitan institute of Bratislava*
- *Private Companies*
- *Citizens*

Group exercise: User Story Line validation

- Group around the user story that represents you best (there is also a blank version if none of them do)
- Work together on the user story, imagine you are a schoolteacher marking homework
- You can make suggestions, additions, and edits directly on the printed-out story

Do PCP-WISE user stories accurately understand and include your user needs?

If not, what can be improved?

What differences did you have in your group? What commonalities?

Pen+Paper Prototype

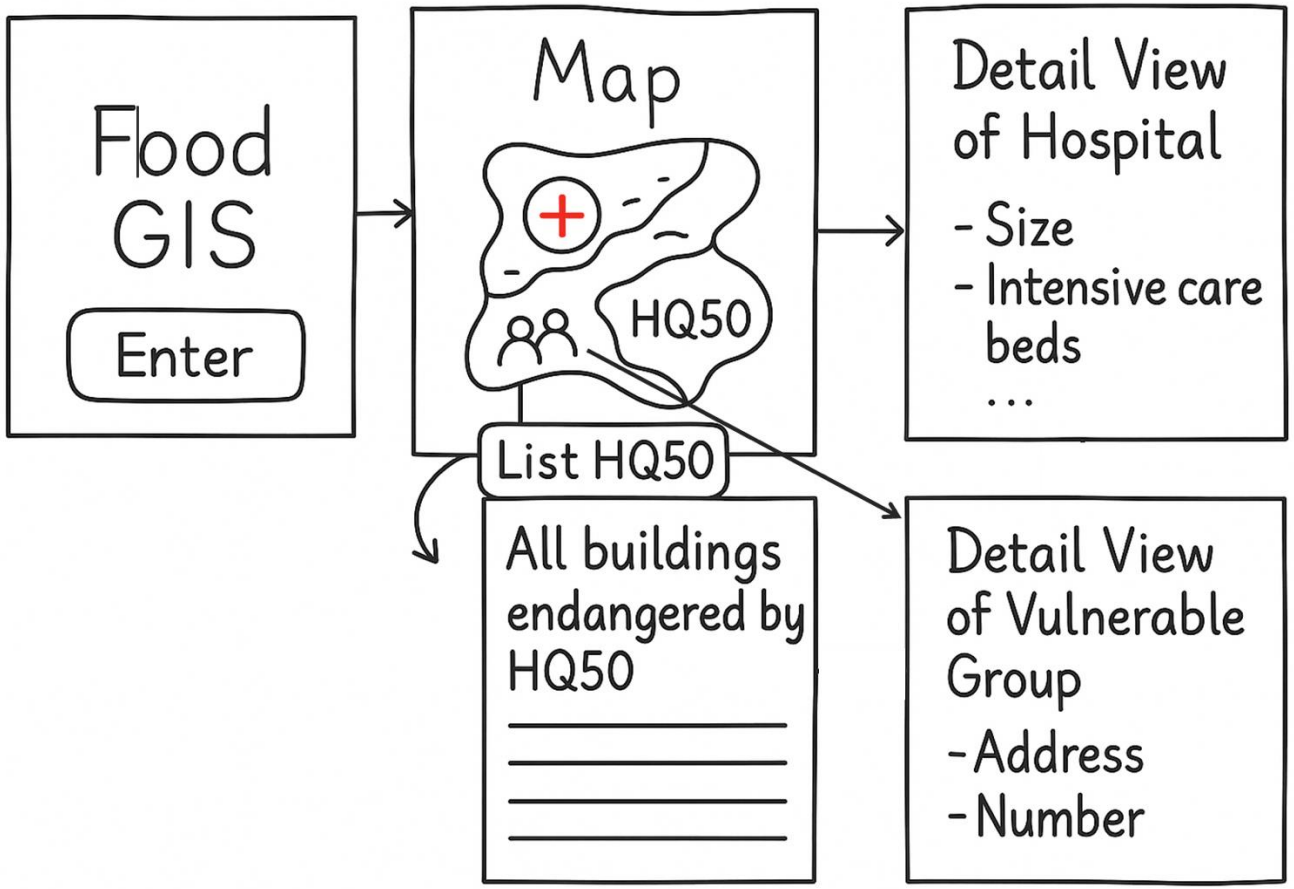
Goal: design a pen and paper prototype with the most important function the new tool should provide to you.

Setting the scene...

- **Environment** Where will you be using the software? Are you inside or outside? Is it a noisy environment? Do you have internet connectivity?
- **Device** Are you using a desktop computer in the office or a tablet in the field?
- **Pain-point** What is the issue that you have in the moment? What software could help you solve your problems?

Let's grab pen and paper, draw a sketch!

Pen+Paper Prototype: Example



Feedback to the plenum
15 mins

Explain your pen+paper prototype!

Sensemaking NOW WHAT: Next Steps

16:00 – 16:30

Climate KIC

NOW WHAT will happen to the input provided here today?

NOW WHAT can we expect from PCP WISE in the coming months?

Your inputs from today...

- ... Will **directly inform the PCP WISE tender**
- ... Will send a clear signal to the market of providers
- ... Will ensure that the procured solutions meet your unique climate and water challenges
- ... Will ensure that the products and services created meet the **real needs** you expressed here today

What's next: User workshop in October 2025

What and where

→October 2025, in person (precise date and location TBD)

Attendees (invite only)

Users and buyers, potential replicators

Goals of the workshop

→share and learn about barriers and supporting factors for the implementation of the water related PCP-WISE solution(s);

→ introduce the capabilities and benefits of EO-based hydrological services;

→building awareness and confidence in how EO data can support real decision-making and how to integrate EO products.

→Feed into prototype development

→And more!

What's next: Stay in touch with PCP WISE

Coming soon

→Launch of the **Call for Tenders** (5 September 2025)

→**Stakeholder workshop** (October 2025)

→PCP WISE **Academy training** and PCP WISE **Helpdesk**

Join the PCP WISE Community Platform

→ Create your profile, showcase your expertise, and connect with **suppliers** and **public buyers**.

Stay up-to-date

Through the PCP WISE website, LinkedIn and the newsletter

Reach out & Get the info you need

→Ask a question via the **e-Procurement Portal** email: **info-PCP-WISE@group-gac.com**

Wrap Up and Feedback

16:30 – 17:00

Climate KIC