



Bratislava End User Workshop – 3rd July 2025 Referential Report

WP5

Climate KIC



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1. About the report

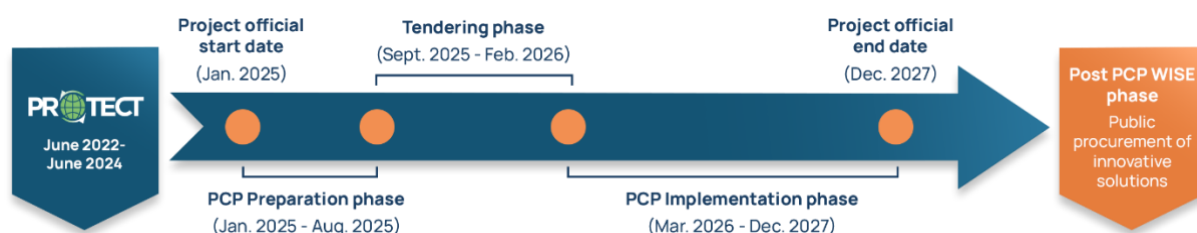
This is an early referential report. It contains the raw outputs of the workshop conducted on the 3rd of July with end users in Bratislava, Slovakia. The report has been created immediately following the workshop with the scope to be able to collect inputs and validation, mainly from secondary buyers from the buyers' group that could attend in person.

As the workshop collected inputs for several tasks of the project, they have each been shared with the relevant partners and will feed into the PCP tender documents and/or relevant deliverables, and where possible have also been attached as an ANNEX of this deliverable. In order to facilitate the validation process, this report also contains some context about the PCP WISE project as well as logistics of the exercises and activities under which the original input has been gathered.

2. Main goals of the PCP WISE project

PCP WISE is a Pre-commercial Procurement (PCP) action funded by the European Commission's Horizon Europe Programme and selected under the call HORIZON-CL6-2024-GOVERNANCE-01-5¹. PCP WISE plays a key role in advancing the European Green Deal's objectives by enhancing the use of Environmental Observation (EO), data and products. The project started in January 2025 and runs for 36 months. PCP WISE has an allocated budget of €19 million, including €12 million for financing the R&D phases of the PCP.

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 PCP instrument. By leveraging space technology and 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.



Ultimately, PCP WISE aims at developing smart, versatile and cross border soil-water-vegetation intelligence warning, management and monitoring systems for both rural and urban areas tailored to end-users' needs. These solutions should not only be systemic (taking

¹ <https://pcp-wise.eu/>



into consideration existing and future portfolio of climate services at disposition of the users and how will the PCP integrate with them) but also tailored (to the specific sets of user needs, with the major challenge to have a broad and diversified user group potentially using the service). Both these points are just a further prove about the need for users to be involved early on into the co-development process and take central stage in shaping the requirements for the PCP which is to be based not only on scientific and market feasibility and needs research but is also supported by real expressed needs.

The end users' involvement in PCP WISE starts with the end user workshops conducted in June-July 2025 with users of the lead buyer of each of the leaders of the 5 buyers groups in PCP WISE and take place in Helsinki (Finland), Lemvig (Denmark), Barcelona (Spain), Bratislava (Slovakia), Kalmthoutse Heide (Belgium/Netherlands).

3. Purpose, agenda and attendance of the PCP-WISE User workshop in Bratislava

The needs of the users of the PCP WISE buyers are among the main drivers for the demand of the services to be developed under the PCP. It is important to ensure that these are captured and contextualised in order to maximise the impact of the future PCP WISE solutions.

The in-person users' workshops are the first opportunity for PCP WISE to encounter local users and to make sure they are aware of the long-term goals and of how the outcomes of their inputs will feed into the tender and beyond. It is also a unique opportunity to get their insights in person and discuss current day-to-day concerns, identify pain points, and plan on how potential PCP WISE solutions could be integrated into their work processes. These priorities were taken into account into planning the structure of the workshop.

Table 1 Agenda for the Stakeholder Workshop in Bratislava

Agenda ²	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

² 030725 Bratislava PPT.pptx



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)	

The **attendees**³ of the workshop which took place in Bratislava on the 3rd of July covered end users from different domains (e.g., Slovak Hydrometeorological Institute (SHMI), Bratislava Water Research Institute, Ministry of Interior, Ministry of Environment, Slovakian Technical University, and the Slovak Water Management Enterprise). They were able to cover water innovation in its three temporal expressions: long-term (climate), crisis (disaster risk management) and regular (day-to-day operations).

4. Workshop and interactive activities

The workshop was planned around several main **interactive activities**, using the sensemaking methodology as the overall structure. Sensemaking in this context refers to the ability to understand the world in order to be able to act in it.

Sensemaking entails several core principles (see Fig. 3) and for the purpose of the stakeholder workshop the goal was to challenge participants to reflect on their role in the system, their perception of the system, and their assumptions about the system from different perspectives. The system in this case referring to the Bratislava end user ecosystem.

³ [Attendance list Bratislava.pdf](#)



By pairing participants from different backgrounds and asking them to discuss questions that would trigger reflection of their own biases and preconceptions, the participants were encouraged to network, learn new things, find out new and perhaps surprising information and exchange knowledge, lessons learned, and best practices with each other.



Figure 2 Sensemaking Core Principles in the context of PCP WISE

The sensemaking methodology was structured around asking a series of recurring and iterative framing questions (see Fig 4). Below the context of these questions is elaborated on further.

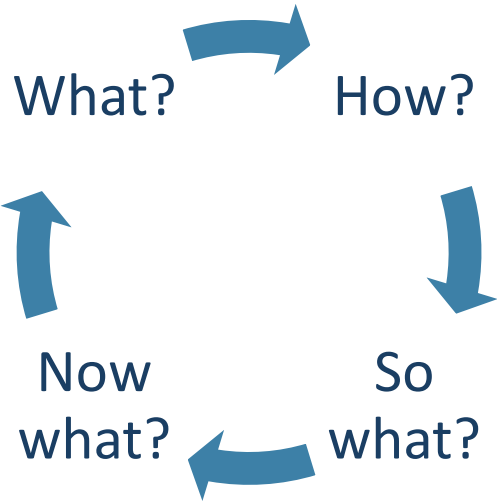


Figure 3 Iterative Sensemaking Question Structure



4.1 Sensemaking WHAT: Problems and priorities

The goal of the task was identifying available, used/useable and missing climate data/information that informs the demand for end-user climate services.

Participants were divided into small groups, with each group having at least one representative of the mentioned categories (crisis, regular, climate).

The groups were then invited to reflect on the following sensemaking questions:

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

The **outcomes** of the task are presented below.

Group 1: (Partners: SHMI, ministry of environment, water research institute)

- What works: Meta data, soil, land, surface temperature data. PDAPI (tender process launched, should be available in 2025/26) common space for data sources to facilitate data flow between the organisation under the Ministry of environment of the Slovak republic (MoE) as well as other external integrations. Partial usage of remote sensing data (e.g. Copernicus), sometimes Slovak hydrometeorological institutes uses EUMETSAT satellites,
- What doesn't work: Easy access to public data, data quality, data sharing limitations and lack of clear data responsibility/competence. Reduced no. of monitoring stations due to budget reductions causing downgrade of resolution, issues with data interoperability, vegetation and soil moisture issues, increased fire risk due to increasing frequency of drought and limited rainfall, limited human resources/expertise in data. There has been also identified issues with the data integration as well as with visualisation and interpretations.
- User feedback: MoE (environment): Initiative Intersucho⁴ is the voluntary network effective in collecting drought information for the SHMI (Slovak Hydrometeorological Institute), only expert groups (e.g., farmers, companies) that collect soil moisture site-specific data. Remote sensing data, validated by Brno university / ChechGlobe resulting in the development of 1km resolution soil map. There is no soil moisture map of high resolution, and the maps developed by the university (third party) do not adhere to FAIR principles. If public is interested, the maps are made available as images via web map application, and machine readable datasets are made via specific licensing conditions at a cost.

Group 2: (Partners: Ministry of environment, SHMI, fire fighters)

- Close collaboration between the fire fighters and SHMI but in a passive way, only when crisis occur is there collaboration, without systematic information and communication technology (ICT) support. Fire fighters do not need forecast data, they require real-life

⁴ <https://www.intersucho.sk>



data. There is need for data integration, for data from several ministries and institutes, but the fire fighters cannot use maps that are not integrated.

- ISEMI were surprised that data is facilitated via calls between colleagues (fire fighters// SHMI) to give warnings.
- In practice, the notification is automated to be sent twice a day, but when emergencies occur outside of the two-time intervals, the SHMI calls the fire fighter department directly.
- Emergencies are communicated at the district level via Radio, SMS alerts occur sometimes from insurance companies for people with policies. Current debate in Ministry of interior of the Slovak republic, that the emergency alerts should be done by the public authority rather than private insurance company and there is no opt out for receiving these messages.

Group 3: (Partners: university, SHMI, water, crisis management district office, water management enterprise)

- No data on flash floods, only data for critical rainfall and large rivers (e.g., Danube).
- There is data on drinking water and irrigation (more crucial for Slovak agricultural sector), but it is not publicly available.
- There is also confusion regarding which ministry owns which dataset, and which department is responsible for what kind of data (issues of accessibility)
 - Water data is also at times controlled by third parties that own public contracts and, in these cases, public cannot easily access these data without cost.
- Example from Water Management enterprise: invasive species need to be relocated to other areas, however there is no standardised way of processing these data (e.g. in excel, scanned copies of site visits).

Summary of WHAT: Problems and priorities:

- Data availability is improving, but remains fragmented and inconsistently accessible.
- Major challenges persist with data access, integration, interoperability, and institutional responsibilities.
- Emergency communication and data use are reactive and lack systematic, automated support.

An overview of the groups contribution is in Annex 1.

4.2 Sensemaking HOW: Mapping of digitalisation

This exercise required some technical knowledge about the existing systems and processes. It aimed at understanding where each buyer group (e.g. public authorities, agencies) stands in their digital journey in order to identify gaps (i.e., What is missing to enable effective climate adaptation and mitigation through digital means?) and set targets by guiding technical implementation and aligning digital transformation with climate policy objectives.



The feedback was gathered directly through the online survey platform Wooclap⁵ which is also open for input from stakeholders and their colleagues for two weeks after the workshop. Initial responses indicate that government agencies and public sector institutions—such as the Slovak Hydrometeorological Institute—are the most actively engaged in climate action, with partial involvement from research institutions and the private sector. Digital tools in use include standard GIS and analytics platforms, along with national data portals like rpi.gov.sk and data.slovensko.sk, and domain-specific platforms such as klima-adapt.sk. However, digital efforts are largely uncoordinated, with key interoperability challenges related to data formats, APIs, licensing, and metadata documentation. These findings are **preliminary**; further stakeholder engagement and analysis will be conducted under the associated task to refine the conclusions.

An overview of the groups contribution is in Annex 2.

4.3 Sensemaking HOW: Policy

Policies relevant to Bratislava's water management, disaster risk management/reduction, and climate change adaptation were evaluated in terms of their relevance to the stated pain points of the Bratislava use case (see table 1): Rural water balance; Rural subsidence; Drought; Surface-near groundwater; Risk assessment (flooding).

Table 2 Climate Adaptation, Water & Disaster Risk Management Strategies (Bratislava)

Document Name	Key Goals (Adaptation / Water Management / Disaster Risk Reduction)	Deadline	Governance Level	Responsible Agency	Relevance to City Water Balance, Flooding (Fast Onset), Risk Assessment
Climate Risk and Vulnerability Assessment (Slovakia)	- Identify climate risks and vulnerabilities across 15 sectors - Support National Adaptation Strategy (NAS) and Plan (NAP) - Promote	2100 (long-term projections)	National	Ministry of Environment of the Slovak Republic (with EU support)	High: Includes detailed analysis of urban heat, drought, water scarcity, and flood risks

⁵ <https://app.wooclap.com/PCPBRATISLAVA?from=qr-code>



	cross-sectoral adaptation planning				
Bratislava SECAP (Sustainable Energy and Climate Action Plan)	- Achieve 55% GHG reduction by 2030 - Improve stormwater management - Enhance green-blue infrastructure - Increase resilience to heatwaves and floods	2030	Municipal (City of Bratislava)	Bratislava City Council, Climate Office	High: Focus on stormwater retention, urban heat island mitigation, and flood resilience
District Office Activity Overview (Prehľad činností okresného úradu)	- Coordinate flood response and civil protection - Manage crisis and emergency planning - Oversee local disaster risk reduction activities	Ongoing	District / Regional	Ministry of Interior of the Slovak Republic	Medium: Operational role in flood response and emergency coordination at district level

1. Climate Risk and Vulnerability Assessment (Slovakia)

Relevance: High

- **Flood Risk (KR-WM-1):** Identifies a very high risk to population and infrastructure from both pluvial (surface) and fluvial (river) flooding by 2100 under all scenarios.
- **Urban Vulnerability:** Urban areas are highly vulnerable to flash floods, heatwaves, and droughts. Infrastructure and health systems are at risk.
- **Risk Assessment Framework:** Includes sector-specific key risks (e.g., wastewater systems, groundwater depletion) and strategic directions for adaptation.
- **Nature-Based Solutions:** Emphasizes the role of green infrastructure and healthy ecosystems in flood mitigation and water retention.
- **Strategic Direction SD-WM-1:** Calls for protection of people and infrastructure from flood events through improved planning and infrastructure.



2. Bratislava SECAP (Sustainable Energy and Climate Action Plan)

Relevance: High

- **Stormwater Management:** Introduces systemic water retention measures to reduce runoff into sewers and prevent local flooding.
- **Urban Green Infrastructure:** Includes green islands, lowered curbs, and vegetation zones to absorb rainwater and reduce flood risk.
- **City Forests:** Plans to restore ponds and wetlands, build amphibian hatcheries, and install forestry drains to retain water.
- **Risk Mapping:** Uses updated vulnerability maps (heat and torrential rainfall) to guide infrastructure and social policy planning.
- **Climate Office Role:** Coordinates implementation and monitoring of adaptation measures, including flood resilience.

3. District Office Activity Overview (Prehľad činností okresného úradu)

Relevance: Medium

- **Flood Response Authority:** District heads chair flood commissions and can declare flood activity levels (II and III) for multiple municipalities.
- **Crisis Management:** District offices are empowered to direct emergency response and coordinate rescue operations during floods.
- **Verification and Oversight:** Responsible for verifying flood-related expenditures and managing flood protection operations.
- **Legal Mandate:** Operates under national civil protection and crisis management laws, ensuring structured flood response at the local level.

The participants were asked to reflect on these sensemaking questions in small groups:

- HOW do the tools you use support national/regional/local adaptation strategies and DRR action plans?
- HOW could those plans be better supported with information provided through PCP WISE?

The **outcomes** of the task are presented below.

Group 1:

- Main challenge is that there are too many strategies and policy frameworks, that also overlap and this creates a challenge with implementation of those plans.
- Four types of activities (prevention, preparedness, response, recovery) and the competences are not always clearly defined – registering responsibilities is missing in Slovakia (in Czech Republic there is Registry of rights and obligations).
- Office365, phone calls, integrated rescue system is an important integration tool.



- There are some local areas where there are efforts to collect contacts and create a database, including maps, but this is still on a small scale and not yet developed on national level.
- PCP WISE can help by improving stakeholder communication (workshop today is a good start).
- PCP WISE can also provide recommendations on how existing frameworks can be implemented in practice, guidance on how to act in certain situations to make it easier for involved stakeholders.
- It would help to have an overview of datasets available in the country as a whole, sharing a table overview with participants could be a first step – knowing what kind of data is where (and can be an input for the project) and what data can be an outcome of the project.
- Martin (SEA) was aware before about the four DRR phases (this is a globally accepted methodology) and something good to build on top of.
- Frustration around low hanging fruits that only work on local level, not on national level.

Group 2:

- SHMI are providing data for adaptation strategies, climate scenarios for near future (2050, 2100), but not working on the strategies that MoE is responsible for.
- Marek (Water management institute) provide data about water management and for water management strategies.
- Water management policy, annual strategy.
- Water management not dealing with adaptation strategies daily – there are too many strategies, and it is hard to say which one is relevant and valid – the implementation level can be very questionable.
- Surprised to see the use case of Bratislava city, but there is no system about how to update the water information, it is more a snapshot.

Group 3:

- Implementation of strategies is problematic in Slovakia, strategy falls under MoE, but data comes from SHMI and then it is published by the Slovak environmental agency.
- Lacking the rules or procedures around implementation at the local level (municipalities and local authorities can try to do something for their area, but there is no overall coordination of this).
- Fire protection agencies use climate risk and vulnerability assessment strategy to purchase new equipment for e.g. flood protection.
- PCP WISE could enhance risk maps for local authorities/municipalities – they often don't know the risk and the risk priorities for their areas.
- This could help to raise awareness at the local level.
- Fire risk assessment for local areas are prepared by SHMI, these are used by the fire departments, but the accessibility could be improved.
- A list of risks in Slovakia exists, this list also includes the responsible authority per risk category – this can be helpful and should be built on further.

**Group 4:**

- Tools they use that support adaptation strategy for Slovakia: drought monitoring, flooding risk maps, maps for urban planning etc.
- There is a lack of transfer of knowledge between science, policy makers and local stakeholders, as many plans are made at the EU or national level and sometimes also confined to certain sectors (not enough interdisciplinarity and interconnectivity between sectors).
- Stakeholder consultations of SHMI from Jan 2025 related to heat waves and drought in Slovakia revealed that the case studies from EU level are not disseminated to policy makers at regional or local level in an understandable and user-friendly language (there may be many useful documents, but no one knows about them or can understand them).
- Improving cross-sectoral and cross-scale communication and dissemination of information is crucial.
- Also important to understand what the triggers for local stakeholders are to implement strategies, especially as the local stakeholders do not have a voice in the strategy drafting.
- Important to think about impact-based assessments, the scientific results are often theoretical and do not have much meaning to non-scientific stakeholders (citizens, decision makers like mayors) – e.g. what does 1.5 degree warming mean for farmers? What will be the impact on my livelihood and life? This is underestimated in Slovakia, having campaigns to translate the information to the public.
- SEA: need to be realistic about how we will never be able to satisfy everyone, a more meaningful target is to create something that is accepted by most levels of society.
- SHMI asks for feedback, also through a voluntary network with weekly feedback questionnaires to understand how accurate the information on the map is compared to the situation on the ground.
- Also gathering feedbacks from annual meetings with voluntary reporters (seminar where SHMI presents their climate work and results and also invite speakers from different sectors, agricultural university, technical university to support knowledge transfer) always asking how the work could be improved.

Summary of HOW: Policy:

- Fragmentation of strategies and unclear responsibilities hinder effective implementation.
- Data integration and accessibility remain limited and inconsistent.
- Communication between science, policy, and local stakeholders is weak.
- PCP WISE can support coordination, guidance and local engagement.

An overview of the groups contribution is in Annex 3.

4.4 Sensemaking SO WHAT: User Story Lines

In this exercise the users worked on the User Story Lines created by the buyers in PCP WISE. The User Workshops were an excellent opportunity to validate them and make sure the



assumptions and aggregation of users' needs are taken further and supported with first-hand, real-life experiences.



Figure 4 User Story Lines purpose and development

The participants were asked to group around the user story that represents their cases best (there is also a blank version if none of them do) and make suggestions, additions, and edits directly on the printed-out story, while trying to answer the following sensemaking questions:

1. Do PCP WISE user stories accurately understand and include your user needs?
2. If not, what can be improved?
3. What differences did you have in your group? What commonalities?

The **outputs** of the exercise have been sent to the responsible partner (Fraunhofer) for an analysis and to be prepared for integration onto the tender documents, Deliverable 3.1, and are also contained in the Annex 4.

Summary of SO WHAT: User Story Lines:

- Understanding and overview of the complex data landscape.
- Recognition of critical coordination and integration needs.
- Identification of systemic barriers and local success stories.
- Value of facilitated dialogue and engagement

4.5 Pen-and-paper prototype of a solution

The goal of this exercise was to get attendees to prioritise their needs and concretise their expectations by designing a pen and paper prototype with the most important function the new tool should provide to them.

They were invited to consider the following aspects:

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



The **outputs** of the exercise have been sent to the responsible partner (Fraunhofer IOSB) for an analysis and to be prepared for integration onto the tender documents and are also contained in the Annex 5.

Summary of Pen and paper solution prototyping:

- Clarification of user needs and system requirements.
- Improved understanding of data flows and interactions.
- Identification of potential bottlenecks and usability issues.
- Support for stakeholder alignment through visual communication

5. Findings, conclusions and way forward

This is an early referential report. It contains the raw outputs from the workshop conducted on the 3rd of July with end users in Bratislava and has been created as an immediate result of the workshop with the scope to still be able to collect inputs, mainly those of secondary buyers from the buyers' group that could not attend in person.

As the workshop collected inputs for several tasks of the project, they have each been shared with the relevant partners and will feed into the PCP tender documents and/or relevant deliverables, and where possible have also been attached as an ANNEX of this deliverable.

This report is just the first step of more intense engagement of the users in the PCP. Further activity will take place in October 2025 when users of each PCP WISE buyer group will have the possibility to meet in person and engage in exchange and capacity building activities.

Take away message

“Effective climate adaptation in Slovakia requires better coordination of strategies, clearer responsibilities, improved data accessibility, and stronger engagement of all stakeholders.”



ANNEX – Outputs gathered during the workshop

1. Sensemaking WHAT: Problems and priorities

WHAT water-related climate/crisis/regular management information
do you have or not have?

FBS receives info
from STMO:
• Lack of
integration
• Lack of
precise
visualizations
and modelling
of need develop-
ment of incident

We have: Meteorology
hydro data
soil data
land use data - scale?
satellite data
land surface temperature

WHAT water-related climate/crisis/regular management information
do you have or not have?

We don't have: easy access to data for public
stakeholders Portal?
API?
Monitoring stations - too #
data quality - micro scale
data interpretation
"surface - fuel" mismatch



HAVE MISSING:
• NOT TALK OF DISCREPANCIES
- BUT TO LESS OBSERVED
DATA • VERY FEW
HOW TO MAKE STRONG
AND ONLY ON BIG NUMBERS

MISSING:
• CLIMATE SCENARIOS
~~MISSING~~ ARE OVERTED
ON OR ON WHETHER
MISSING CONNECTION TO
HYDROLOGY FORECASTING

→ CLIMATE SCENARIOS
• BIAS - CORRECTED
→ DROUGHT OBSERVATION
DATA
(we have)

**WHAT water-related climate/crisis/regular management information
do you have or not have?**

MISSING:
• DATA ON EXTENT OF
FLOODS
• CAPABILITIES TO MONITORING
THEIR EXTENT
• ONLY CONSEQUENCES =
= NO KEY

Drought
monitoring
by soil, meteorol,
hydrological
(we have)

Fire danger
index for
Slovakia
(we have)

WHAT problems do you have with using or accessing the information?

LOW INTEGRATION
OF SYSTEMS
DATA ^{ONLY} ON DROUGHT



OLD DATABASE SYSTEMS
NO PUBLIC API (SHARING DATA ACROSS INSTITUTES)
HUMAN RESOURCES
SPATIAL INFORMATION (TOO LOW RESOLUTION, OR EVEN MISSING/NOT
VALIDATED)

WHAT problems do you have with using or accessing the information?

missing:
data related
to water supply
availability

→ DATA ABOUT
REGISTERED URBAN
FLOODED AREAS
WITH EXTREME RAINFALL
INTENSITIES

WHAT problems do you have with using or accessing the information?

lack of inform.
about accessibility
to data and
institutional responsib.

2. Sensemaking HOW: Mapping of digitalisation

Summary from Wooclap



3. Sensemaking HOW: Policy

PREVENTION
WATER MANAGE
AUTHORITIES

PREPAREDNESS
/ MV SR
/ STEP SR

TOO COMPLEX
FRAMEWORK
OF STRATEGIES
(LICOS)

Which are the main adaptation and DRR strategies that influence your work?

RESPONSE
FIREFIGHTERS

PUBLICITIES IN
STRATEGIES
FRAMEWORK

TOO MANY STRATEGIES
WHICH ARE DIFFICULT
TO EXECUTE

RECOVERY
RESPONSE

MISSION:
• HOW WATER AND
WENTURE COOPERATION
AND TRANSFER OF KNOW-
LEDGE BETWEEN ORGANIZATIONS

Which are the main adaptation and DRR strategies that influence your work?

Preparation of
action plan proposal
on proactive manage-
ment of drought, heat waves
and wildfires
(project ClimateCast)



Natura 2000
influences
protection &
conservation
plans

Which are the main adaptation and DRR strategies that influence your work?

Forestry manage-
ment & refore-
station plans
(→ fire risk)

EU-level
law for
emergency
warnings

~~Q1~~ Strategy and Concept of water management policy 2021-2030
Envirostrategy 2030

Which are the main adaptation and DRR strategies that influence your work?



UNFUNCTIONAL:

- FHM/FHM ARE NOT
INCOMPATIBLE INTO
SPATIAL PLANS =>
=> HIGH RISK

-> MAPS OF THE
Flooding risk
-> FOR THE URBAN
PLANNING

-> ~~European~~ European
CRA tools for the
creation of the results
for Adaptation strategies

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

Fire hazard
maps need to
be validated
by in-situ
observations
Firefighters go into
the field to assess
fire risk and issue
warnings

Shifting climate
zones affecting
vegetation &
tree species

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

Emergency warn-
ing service
set up due to
EU-level
requirements

Early warning
maps (1km res.)

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

↳ SHMI -> we provide data for adapt. strategies (climate scenarios)
WRI - provide some part of data and expert knowledge for water management



VIS
OFFICE
+
EMAILS

PHONE CALLS

12S
INTEGRITY
ACCOUNTING
SYSTEM

DATABASE OF
CONTACT DETAILS

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

QGIS +
PDF MAPS
ONLY IN SNV
ABSENCE ON NATION-
AL LEVEL



IMPROVE COMMUNICATION BETWEEN STAKEHOLDERS

INVOLVE MEASUREMENT FOR CURIOUS MITIGATIONS

SUPPORT OF VOLUNTARY FIREFIGHTERS

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

BETTER SUPPORT:

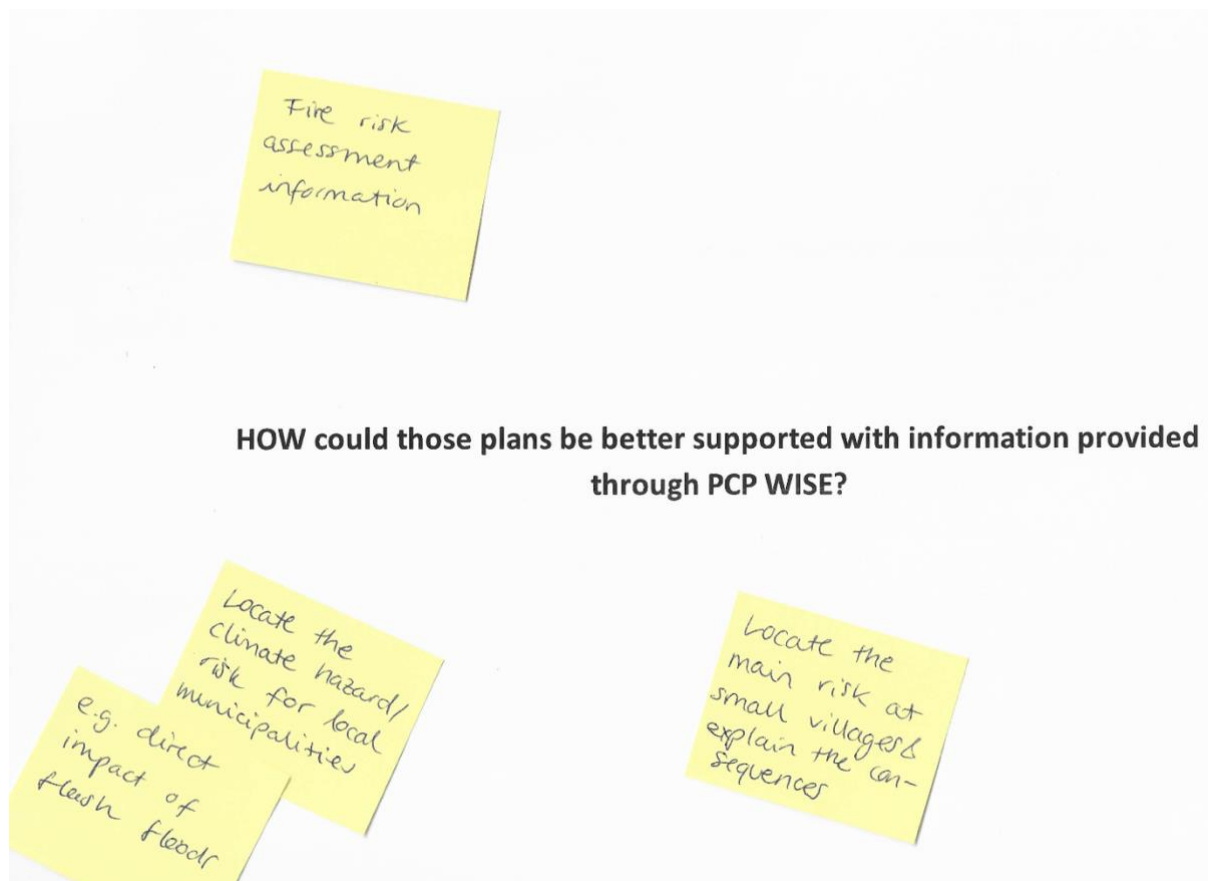
- SLR IS TOO MUCH DIVERSIFIED – LOCAL/PROVINCIAL/BIOMED/NUMERICAL VALUES

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

improve/increase feedback from stakeholders when preparing strategies

transfer of knowledge between science-policy makers – local stakeholders

impact based assessments with interdisciplinary approach



4. Sensemaking SO WHAT: User story lines

Outcomes from User story lines event contribution



I am ... FROM THE DISTRICT OFFICE SPIŠSKÁ NOVA VES
AS CRISIS MANAGER

My mission is ... (COORDINATION OF CRISIS SITUATION) PREPARATION
EXECUTING SUPERVISION ON REFUNDING OF COSTS RELATED
WITH RESCUE ACTIVITIES, PREPARATION OF AREA RISK ANALYSIS,

My pain points are ...
- LACK OF DATA
- UNCOORDINATED ACCESS TO EXISTING DATA
- UNSUFFICIENT COORDINATION OF AUTHORITIES COOPERATION
- LOW FINANCIAL FLEXIBILITY

The tools I use are ...
- CENTRAL IT SYSTEM EPSIC
- MS OFFICE (EXCEL, WORD, ACCESS) ONE DRIVE
- GIS - QGIS, + (SOME OUT OF DATE SYSTEMS), GINA

From data source ...
- LOCALLY PREPARED DATA (CONTACT DATABASE)

A solution for my pain points could be ...
- NEED FOR DATA MANAGEMENT IMPROVEMENT
FOR THE WHOLE DATA LIFE CYCLE
- IMPROVEMENT OF METHODOLOGICAL FRAMEWORK
- AVAILABILITY OF SOLUTIONS PROVIDING REQUIRED FUNCTIONALITY

I have these technical requirements for the solution... (FUNCTIONAL REQUIREMENTS)
- DATA FILTERING, PROCESSING, VISUALISATIONS
- SUPPORT FOR EXPORTS
- II - INPUTS
- ANALYTICAL SUPPORT

I have these non-technical requirements for the solution ...
- USER FRIENDLY AND SIMPLE INTERFACE FOR
RELEVANT USER GROUPS (CITY, REGION, NATIONAL USERS)
- 24/7 AVAILABILITY
- OFFLINE ACCESS, INTEGRATION ON EXTERNAL SYSTEMS

This is what I need to accept the solution ...
- DATA CONTENT (DATA QUALITY)
- PRICE
- OPEN (DATA, API, SOURCE CODE)
- DOCUMENTATION

This is how I would benefit ...
- BETTER PREPARABILITY
- FASTER DECISIONS MAKING
- BETTER CIVILIAN PROTECTION
- RISK
- IMPROVED PREVENTION
- MORE EFFECTIVE MEASURES VIA IMPROVED
LEGISLATION FRAMEWORK



I am ... ~~public organization~~ public organization (university)

My mission is ...

help regions and cities with the data processing and methodology towards to climate adaptation plans, on climate resilience.

My pain points are ...

- data accessibility (not always clear where I can find a data), not for free
- ~~result~~ result interpretation in the best user-friendly way
 - to end users
- ~~cooperation~~ cooperation with other institutions (avoiding the duplicating efforts)
- ~~end users~~ end users usually do not know what they really want or need, they did not learn from past!

The tools I use are ...

- hydrological ~~rainfall runoff~~ rainfall runoff models
- fire danger model
- event based ~~extreme rainfall~~ methodology → for the estimation of the critical rainfall
- urban planning when the influence of climate change → rainfall
- testing the effectivity of the ~~aplicated~~ aplicated NBS

From data source ...

- CDS (European)
- SHMU (Local) (would wide)
- remote sensing data (Sentinel for vegetation characteristics; ~~Landsat~~ - Landsat → heat islands)

A solution for my pain points could be ...

- help to improve the understanding of the potential climate risk (as university) ^{the negative impact}
- national (open register) with the climate connected data (in preparation SHMU) ^{for the end users}

I have these technical requirements for the solution ...

- ~~national data~~ national data registered with data in the GIS usable form (daily data) ^{climate data}
- ~~data~~ data viewable with possibility of download ^{vector shapesites}
- ~~extreme rainfall intensity maps~~ Extreme rainfall intensity maps ^{for given return periods}
- register of the past flash floods events together with [↓]

I have these non-technical requirements for the solution ...

→

This is what I need to accept the solution ...

This is how I would benefit ...

- with the ~~quality~~ quality input data → better results from simulation models → better adaptation plans, on design of the adaptation measures

CLIMAX



A

I am ...

Citizen

My mission is ...

Support in understandable and trustable communication of floods and related climate change aspects

~~My~~ Participate in preparedness, prevention, response, recovery after climate event
To be prepared ~~for~~ for extraordinary event, to protect lives, health and ~~assets~~ assets

My pain points are ... assets of my families and my relatives.

Lack of tools / services able to provide the flood and climate change related information

Lack of information (general awareness) about the risks and consequences.

Financing of my measures

Help (protection) from the authorities

The tools I use are ...

<https://data.bratistava.sk/>

info from "PROCEVAHU"

generally available information (which might be too general)

From data source ...

<https://data.bratistava.sk/>

as soon

A solution for my pain points could be ...

Available relevant map app @ <https://data.bratistava.sk/>

maps including risk specification.

visualisation (model) of possible consequences.

platform summarizing all what is possible to do with simple

I have these technical requirements for the solution... manuals.

Data and service made available in standardized way

user-friendly

standardized for use on various devices (PC, tablet, smartphone, printed pages...)

I have these non-technical requirements for the solution ...

Intuitive and user friendly interface

easy to read, brief but exact

easy to understand (including non experts)

This is what I need to accept the solution ...

Availability of the app/service for generic citizens

Security

Reliability

Robustness

This is how I would benefit ...

Improved awareness about the floods and climate change for wide public users

Easy to prepare and promptly implement appropriate (optional) measures

Be able to react quickly and effectively



I am ... NGO

My mission is ...

Support authorities in their missions, ~~including~~
support citizens in connection with authorities

My pain points are ...

productive, both-side communication and cooperation
financing of related efforts
sustainable and long-term commitments

The tools I use are ...

trainings, exercises, ~~development~~ development of
related documents (strategies, plans ...)

From data source ...

~~generally~~ expertise of our experts

A solution for my pain points could be ...

honest and serious interest in mutual cooperation

I have these technical requirements for the solution ...

working on various devices (PC, tablet, smartphone...)
user-friendly
reliable
including technical support

I have these non-technical requirements for the solution ...

easy to understand and use
security (certain level)
gradually accepted

This is what I need to accept the solution ...

confirmed by the authorities
confirmed by the end-users

This is how I would benefit ...

We do not expect any special benefit.
maybe only rise of our experience and capacities
for future projects ...



SURVE ①

SLOVAK WATER MANAGEMENT ENTERPRISE
S.C.

I am ... (PROF. MISTAK OF ENVIRONMENT)

My mission is ... TO IN CON POUTATE CC IMPACTS WTD FLOOD AND DROUGHT WATER MANAGEMENT.
TO KNOW INTERACTION BETWEEN SURFACE WATERS AND UNDERGROUND.
TO PRODUCE FLOOD HAZARD AND FLOOD RISK MAPS, TO DO FLOOD PROTECTION;
TO PROTECT WATER BIOTOPES CITIES AND WATER RESERVOIRS = MANAGE THEM.

My pain points are ...
LACK OF MANAGEABLE DATA SETS / DATA CONTEXT OF FLOODS, SOURCES
OF FLOODS, CONSEQUENCES OF FLOODS, ...
LACKING DATA FROM OTHER SECTIONS, FROM NUM Q PARTS, LACKING INFO ON
RELEVANT PROJECTS BASED ON HYDROLOGY MODELING OR HYDRAULIC MODELING.
INFO ON HOW THE STATE OF DATA CAN BE USED IN FLOOD PROTECTION.

The tools I use are ... LACK OF MANAGEABLE DATA.
- GIS TOOL, APPROXIMATION, GDBS - MOSTLY OWN MADE
- WEB SERVICES (WMS, WFS)
- TRY TO COORDINATE, TO INTERPRET AND TO EXPLAIN PEOPLE WILLING TO
COOPERATE

From data source ...
- OWN DBS, GDBS, PAPERS, TABLES, ... ON EXTERNAL SUBJECTS
- POINTS, AKA USING AS SOURCE OF GENERAL DATA

A solution for my pain points could be ...
- AT LEAST GDB, DB, XLSX DATA WITH RE MANAGEABLE DATA SOURCE
AND SCHEMATA AND HERE VARIETY = NOT TOO GENERAL DATA
- AVAILABLE UP-TO-DATE DATA
- VERIFIED DATA - CALIBRATED MODELS

I have these technical requirements for the solution ...
- MANAGEABLE DATA
- POINTS AVAILABLE FOR PUBLIC WITH EASY INTERPRETABLE DATA
- LIMITED DATA INFORMATION => TOO MANY WEBSITES, TOO MUCH UNCERTAIN
COMPETENCE AND RESPONSIBILITY

I have these non-technical requirements for the solution ...
- INTERSECTORAL COOPERATION AND COMMON AVAILABLE INFORMATION
- 24/7 AVAILABILITY

This is what I need to accept the solution ...
- SCALE - VALIDATED SOLUTION (SK IS VERY DIVERSE COUNTRY, MOUNTAINS
AND MOUNTAINS, ...)

- TO AVOID MISINTERPRETATION OF RESULTS
DATA QUALITY

This is how I would benefit ...
- MY WORK WILL BE FASTER, MY DECISION WILL BE FASTER
- I WOULD BE ABLE TO COMMUNICATE TO CHIEFS AND PUBLIC MY RESULTS / PROBLEMS
IN BETTER WAY. BETTER UTILIZATION OF ANALYSES RESULTS.
- MORE COMPONENTS (FROM DIFFERENT SECTIONS) WILL BE IN CON POUTED INTO MY
DATA USES.



SURE @

SLOVAK WATER MANAGEMENT STRATEGY

I am ...

National authorities (e.g. SK Ministry of environment)

My mission is ...

Utilisation of national spatial data infrastructure as well as support for national strategy on adaptation to climate change implementation

• SUPPORT TO FLOOD DAMAGE MGMT AND TO FLOOD WARNING AND
CRISIS MANAGEMENT

My pain points are ...

Lack of availability of relevant datasets as well as demonstration of their usage

- TO LESS INFORMATION ON WHAT WAS DONE AND IN WHICH PART OF
SLOVAKIA

The tools I use are ...

[National Geoportal](#) [Climate change adaptation platform](#)

From data source ...

[Spatial data registry](#)

- NOT ONLY SPATIAL DATA ~ ALSO ARE DATA AVAILABLE, BUT TRUTH THAT GEOMETRIC
PRECISE IS GREAT

A solution for my pain points could be ...

Availability of the [Cluster 2 output datasets](#) via machine (API) and human readable interfaces (GUI)

Available relevant map app @ National Geoportal

- AT LEAST ARE VALIDATED DATA IN GDB, DB, XLSX

I have these technical requirements for the solution...

Support for data collection and maintenance // Visualisation and communication

I have these non-technical requirements for the solution ...

User access management // Usability // Scalability // Reliability // Security // Support // Notifications

↳ DIFFERENT OUTPUTS FOR DIFFERENT USERS TOO
- TO AVOID MISUSE OF DATA

This is what I need to accept the solution ...

Data updates:

- In peace time: Monthly basis
- During crisis: 0,5-1 hour interval
- With access to previous historical data

This is how I would benefit ...

Delivery a comprehensive overview of flood risks to improve decision-making and urban planning



I am ... SLOVAK ENVIRONMENTAL AGENCY

UNIFIED

CURRENT

My mission is ...

TO PROVIDE TRUSTED AND VALID INFORMATION ABOUT
~~ENVIRONMENT~~ AND STATE OF THE ENVIRONMENT IN FORM
OF INDICATORS.

My pain points are ...

LACK OF SOURCES WHICH ARE ACCESSIBLE THROUGH API AND
HAVE WELL STRUCTURED.

~~ALL~~ SOURCES WHICH ARE NOT IN STANDARD FORMAT OR
ARE PROPRIETARY

The tools I use are ...

AUTOMATED HARVESTING, API, ~~FREEZCOM~~ OPEN DATA,
REST SERVICES, SOAP SERVICES

From data source ...

WHICH ARE PUBLISHED THROUGH WEB SERVICES.

A solution for my pain points could be ...

ONE BIG ACCESS POINT FOR EXAMPLE
PUBLIC API ENDPOINT WITH CORRECT METADATA AND
STANDARD STRUCTURE, REST API

I have these technical requirements for the solution ...

I have these non-technical requirements for the solution ...

- CLEAR RESPONSIBILITY, WHO IS RESPONSIBLE FOR THE VALIDITY
AND OF DATA
- PERIODICAL UPDATE, AND CLEAR INFORMATION WHEN THE DATA
WAS LAST TIME UPDATED

This is what I need to accept the solution ...

SUCCESSFUL COLLECTION AND
HARVESTING THE DATA

This is how I would benefit ...

I WILL BE ABLE PROVIDE RICHER AND MORE
DETAILED INFORMATION



I am ...

National authorities (e.g. SK Ministry of environment)

My mission is ...

Utilisation of national spatial data infrastructure as well as support for national strategy on adaptation to climate change implementation

My pain points are ...

Lack of availability of relevant datasets as well as demonstration of their usage

GAP BETWEEN RAW / INPUT DATA AND EASY TO USE AND INTERPRET DATA FOR DECISION MAKING (OUTPUTS)

The tools I use are ...

National Geoportal Climate change adaptation platform

GIS SOFTWARE (QGIS, SNAP)

From data source ...

Spatial data registry

ANY SOURCE I CAN GET FOR FREE

A solution for my pain points could be ...

Availability of the Cluster 2 output datasets via machine (API) and human readable interfaces (GUI)

Available relevant map app @ National Geoportal

AS ADDITION TO RELEVANT MAPS @ NATIONAL GEOPORTAL SHORT AND COMPREHENSIVE TEXT EXPLANATION ON THE MAPS, THEIR INPUTS AND ~~THEIR~~ MEANING OF THE OUTPUTS

I have these technical requirements for the solution...

SUBJECT MATTER TABULAR OUTPUTS WITH STATISTICS FOR EACH AREA OF INTEREST

Support for data collection and maintenance // Visualisation and communication

I have these non-technical requirements for the solution ...

User access management // Usability // Scalability // Reliability // Security // Support // Notifications

I THINK ALL OF THOSE ARE TECHNICAL REQUIREMENTS

This is what I need to accept the solution ...

Data updates:

- In peace time: Monthly basis
- During crisis: 0,5-1 hour interval
- With access to previous historical data

- EASY TO USE AND COMPREHENSIVE DATA VISUALISATION ON THE WEB PORTAL OF THE SOLUTION

This is how I would benefit ...

Delivery a comprehensive overview of flood risks to improve decision-making and urban planning

IMPROVED SPATIAL AND SATELLITE DATA USAGE,

PROMOTION OF SATELLITE DATA USAGE ~~AS A RESULT~~



POSLAT KOLEGOVI HASICOU PRE ROZUMEVIE A POTURDEVIE
KDE JE DOTAZNIK OIAZNIK NECH DORUZI ZASEBA
FIRE FIGHTER FOR
7022f
MINISTRY OF
FIRE FIGHTING
INTERIOR

I am ... TACTICAL AND STRATEGICAL CRISES MANAGEMENT

My mission is ... ANTICIPATE EXTREME EVENTS BY DESIGNING DISASTER
REDUCTION PLANS TO BE BETTER PREPARE TO EXTREME EVENTS

My pain points are ... LACK OF UNDERSTANDING SITUATIONAL AWARENESS BECAUSE
I LACK TOOL TO INTEGRATE AND VISUALISE
THE DATA ARE NOT EASILY ACCESSIBLE OR ARE PROVIDED ON
DEMAND
TIMELINESS OF DATA - TO GET DATA IN TIME

The tools I use are ...
? INFORMATION
FIRE MAPS?
CRISES DASHBOARD?

From data source ...
PERIODIC INFORMATION FROM SHMU 2X DAY ABOUT PROBLEMS
~~INFORMATION ABOUT PROBLEMS~~

A solution for my pain points could be ...
~~PERIODIC~~ DAILY UPDATED RISK MAPS
- HIGHER DETAILS OF RISK MAPS ->
100 M RURAL
- TOOL FOR VISUALISATION OF DIFFERENT DATA

I have these technical requirements for the solution ...
I WANT TO : GOOD VISUALISATION
I WANT TO HAVE IT INTEGRATED IN MY SYSTEMS
GOOD AND TIMELY ACCESS TO DATA

I have these non-technical requirements for the solution ...
USER ACCESS MANAGEMENT, USABILITY, SCALABILITY, RELIABILITY,
SECURITY, SUPPORT, NOTIFICATIONS

This is what I need to accept the solution ...
- ACCESSIBLE ON TABLET, PHONE
- NATIONAL LANGUAGE
TIMELINESS OF DATA: DURING CRISES?
- DURING PEACE TIME?

This is how I would benefit ...
DELIVERY A COMPREHENSIVE OVERVIEW OF FLOOD RISKS TO IMPROVE
PRECISION - MAKING AND



* lack of available data on many desired topics

I am ...

Water Research Institute

(marat.sulovsky@uvvh.sk)

My mission is ...

to monitor water quality (e.g. in accordance with Nitrate Directive), to implement and monitor parts of Water Framework Directive, i.e. produce National Water (Management) Plan and monitor its fulfilling, to model some specific hydrological situations

My pain points are ...

- different data models used (formats, structure, storage) even within one organisation, not to mention when sharing data between different organisations
- lack of human resources and finances (expert knowledge in cutting edge topics, software and hardware technology debt, not only in PCs but also in monitoring tools)

The tools I use are ...

monitoring network (sites), laboratory instruments, software ~~tools~~, solutions (office, GIS, statistical databases, servers), field instruments and transportation systems (cars, fridge for storage)

From data source ...

- own data
- data from sister institutes (geological service, hydrometeorology, soil institute, water management institute, ~~and~~ geodesy service)
- Copernicus

A solution for my pain points could be ...

- scientific board (for internal ~~setting~~ internal research priorities)
- focusing on developing internal standards for storing and sharing data
- setting API standards as norm when sharing data between organisations
- implement spatial information as a requirement in many legislative norms

I have these technical requirements for the solution ...

- interoperability (standard and user-oriented exchange format) (backed up with financial resources)
- high resolution (including satellite data, e.g. Copernicus - Sentinel data) (but mid-range resolution would be OK)
- offline functionality (lacking signal in the field)
- ~~multiple~~ dashboards, different output resolution (for hardware support)

I have these non-technical requirements for the solution ...

- language support

data import availability

This is what I need to accept the solution ...

- easy to use and

This is how I would benefit ...

- easier everyday work
- time for solving other tasks



I am **Slovak Hydrometeorological Institute**
(LIVIA LABUDOVA, LADISLAV MARCOVICI, JURAJ HOLBO)

My mission is ...

providing reliable climate data; analysis of past and future climate, drought monitoring; fire danger monitoring; climate and weather ~~climate~~ expert assessment for private and public sector; communication of climate change to stakeholders and public.

My pain points are ...

- personal resources
- financial resources
- inter-institutional cooperation
- ~~real~~ need to improve communication of results towards public in understandable lang.
- missing of local intersectoral case studies

The tools I use are ...

- own measured data
- GIS softwares
- high-performance computer (HPC)
- satellite data (at another department)

From data source ...

- own data
- for nowcasting - ECMWF, EUMETSAT
- Copernicus - ERA 5

A solution for my pain points could be ...

- support (financial) from the Ministry of Environment
- trainings related to communication
- graphical and PR support for attractive visualisation
- intersectoral networking
- support for case studies

I have these technical requirements for the solution...

- a dashboard to visualise the data
- enhancing soil moisture and vegetation data
- inter-institutional data sharing
- technical support for measurements for case studies

I have these non-technical requirements for the solution ...

- user friendly database of projects and activities done by institutions

This is what I need to accept the solution ...

- Slovak language
- open source

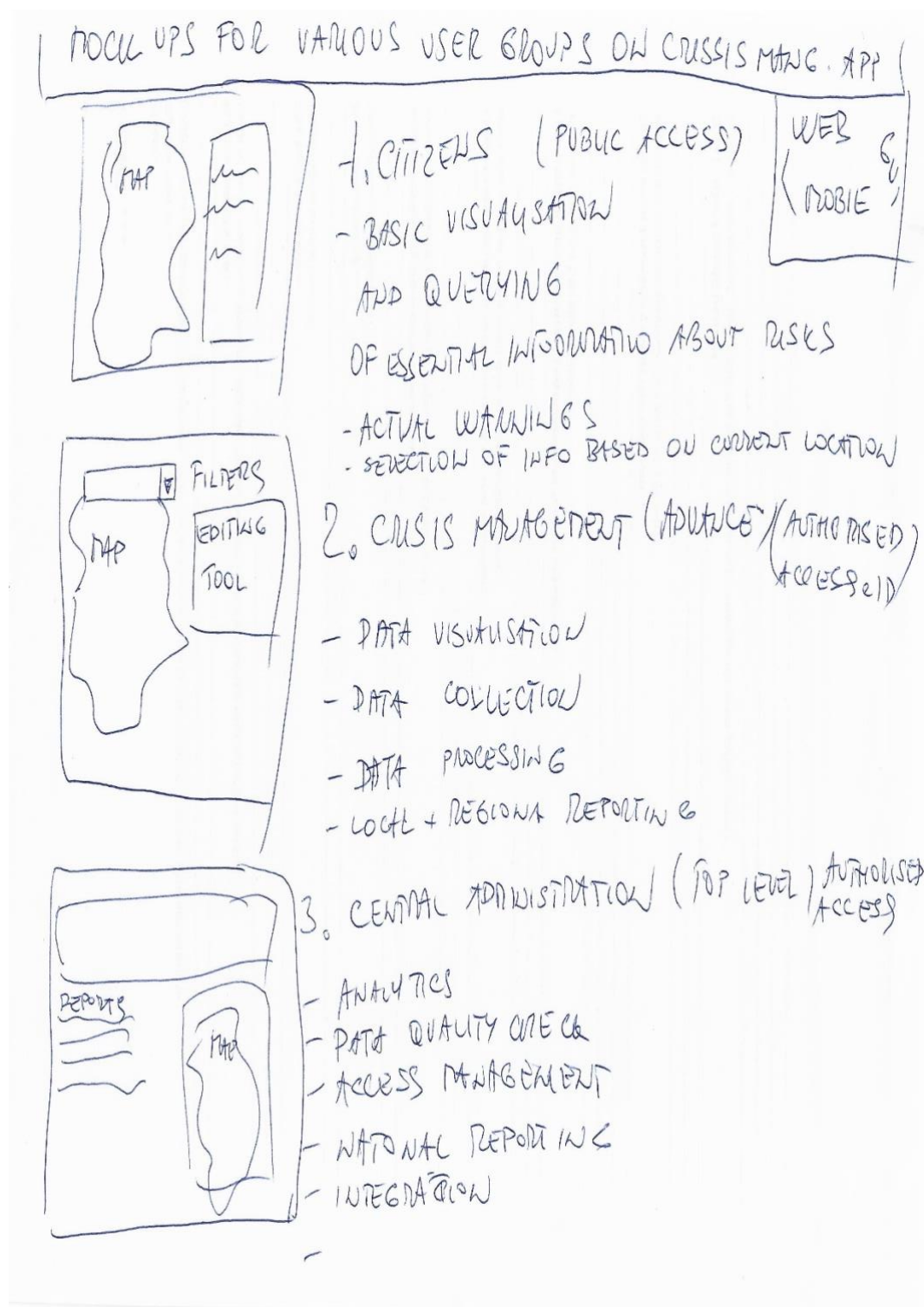
This is how I would benefit ...

- increasing awareness about climate change among public
- improved usage of our outputs/results by other institutions
- intersectoral analysis and impact ^{based} case studies



5. Pen-and-paper prototype of a solution

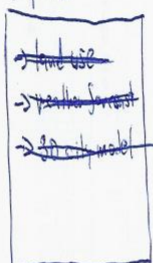
Outcomes from pen and paper solution prototyping





Land surface temperature simulation model for urban planning

Inputs:



1.

Model:

- Water accumulation model in the snow cover → and the simulation of the runoff supply during the melting period

2.

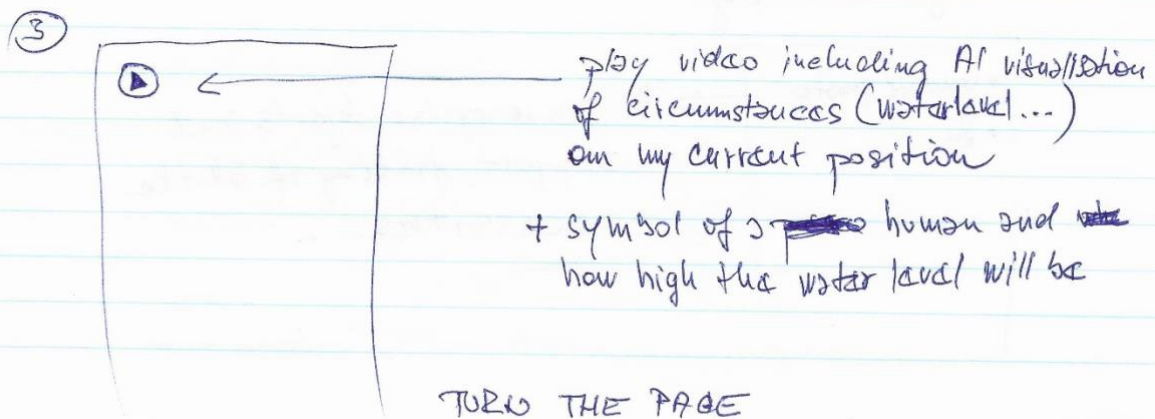
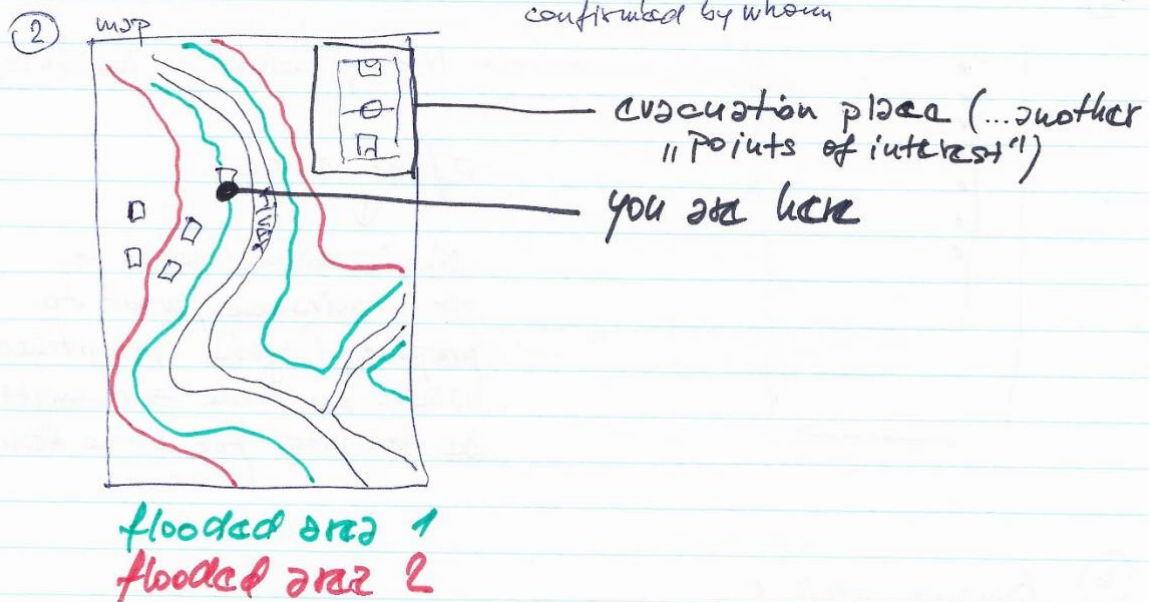
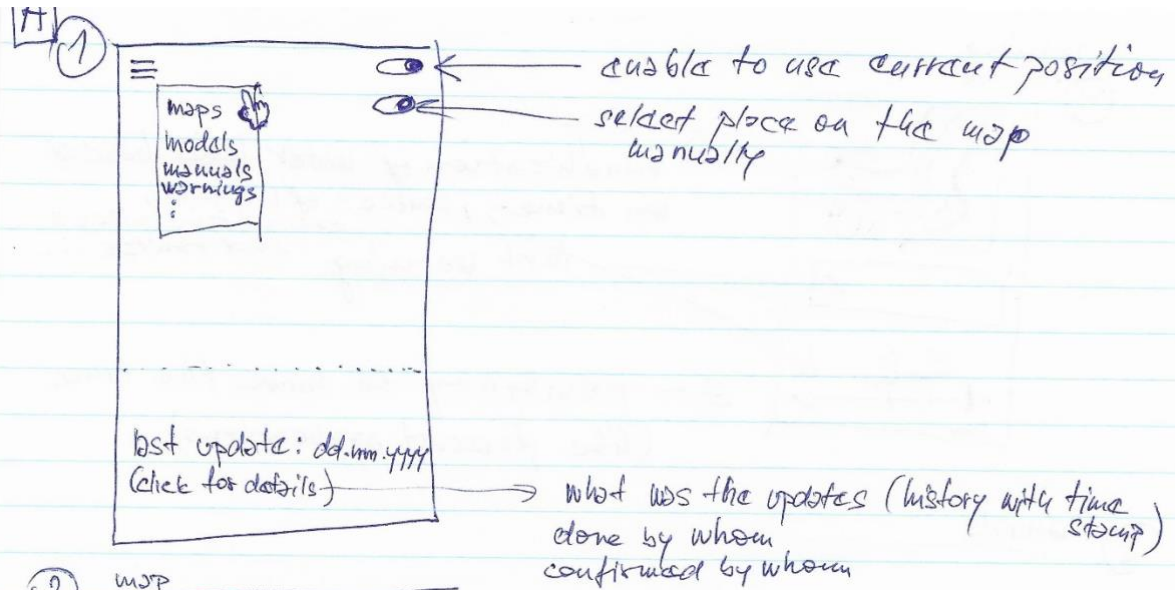
Inputs:

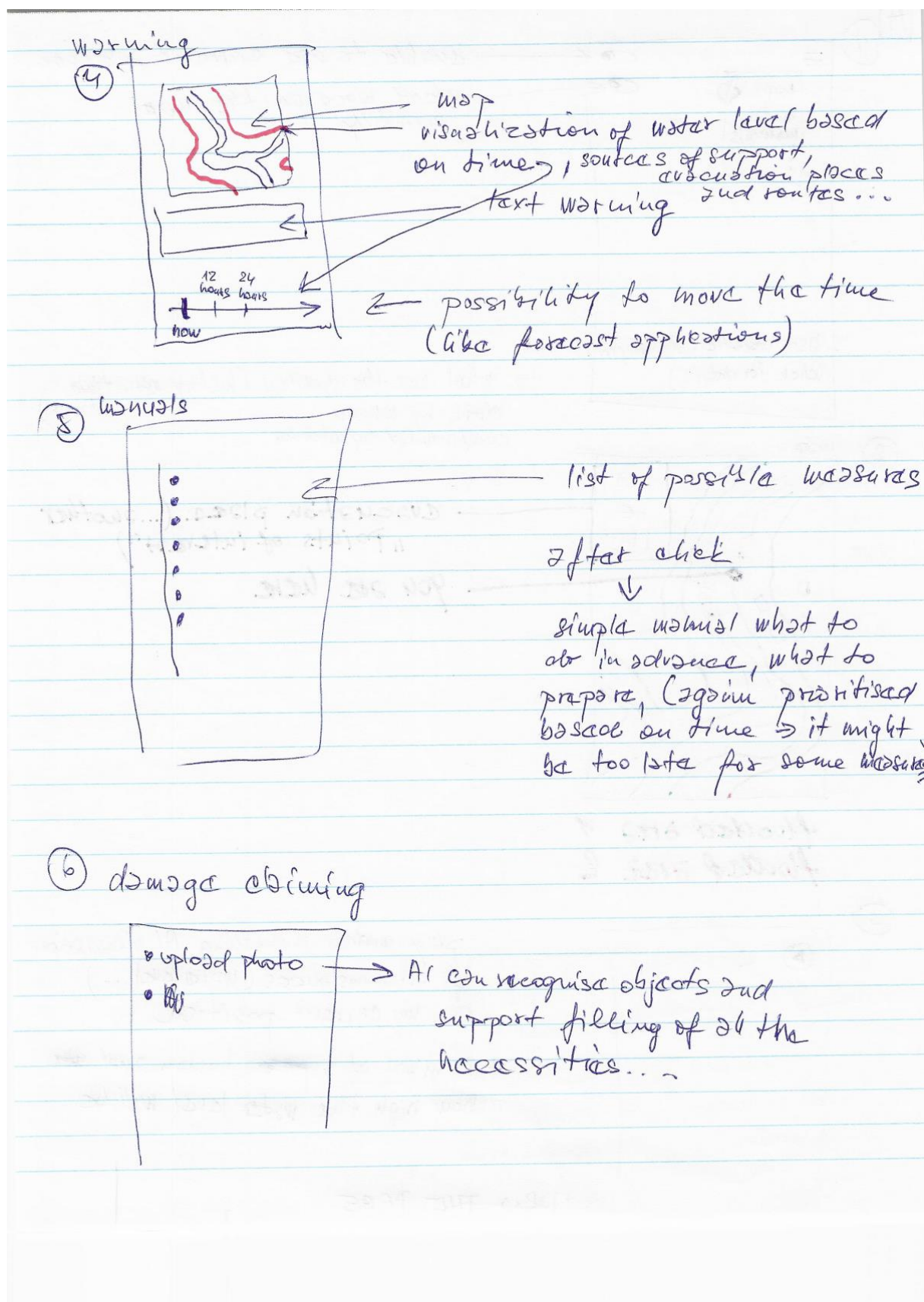
- detailed DEM
- dense (relatively) net of the snow depth measure stations (use the help of the Slovak Avalanche ~~Prevention~~ Prevention Centre)
- Snow line predictions based on the medium term forecast
- Snow line estimation based on the remote sensing (satellite or drone)

3.

Outputs:

- predictions of the runoff in the mountainous areas in the spring period which will help to predict spring riverine flooding
- real time water accumulations in the snow mass







summary

1A

INPUT

FOR EXPERTS

1 DATA PROVIDER - INPUT OF DATA

2 AUTHORITY - JUST TO SEE THAT DATA ARE IN SIDE

DIFFERENT DATA ACCESES

- DATA [~~TABLES~~ TABLE / TEXTUAL DATA - AMOUNTS, DESCRIPTIONS, ...
GIS DATA (eg. EXTENT OF FLOOD, ...) (LOCATION OF DISASTER, ...)

- POSSIBLE TO ADD DIFFERENT SOURCES OF DATA [~~DATA~~ DATA [VALIDATION
ANALYTICAL TOOLS
STRUCTURE
TABLE CHANGES

2 OUTPUT/REPORTS

REPORTS

[EXPERT MAPS
PUBLIC MAPS

- REPORTS [EXPERT
PUBLIC

- TABLES / MAPS [EXPERT
PUBLIC

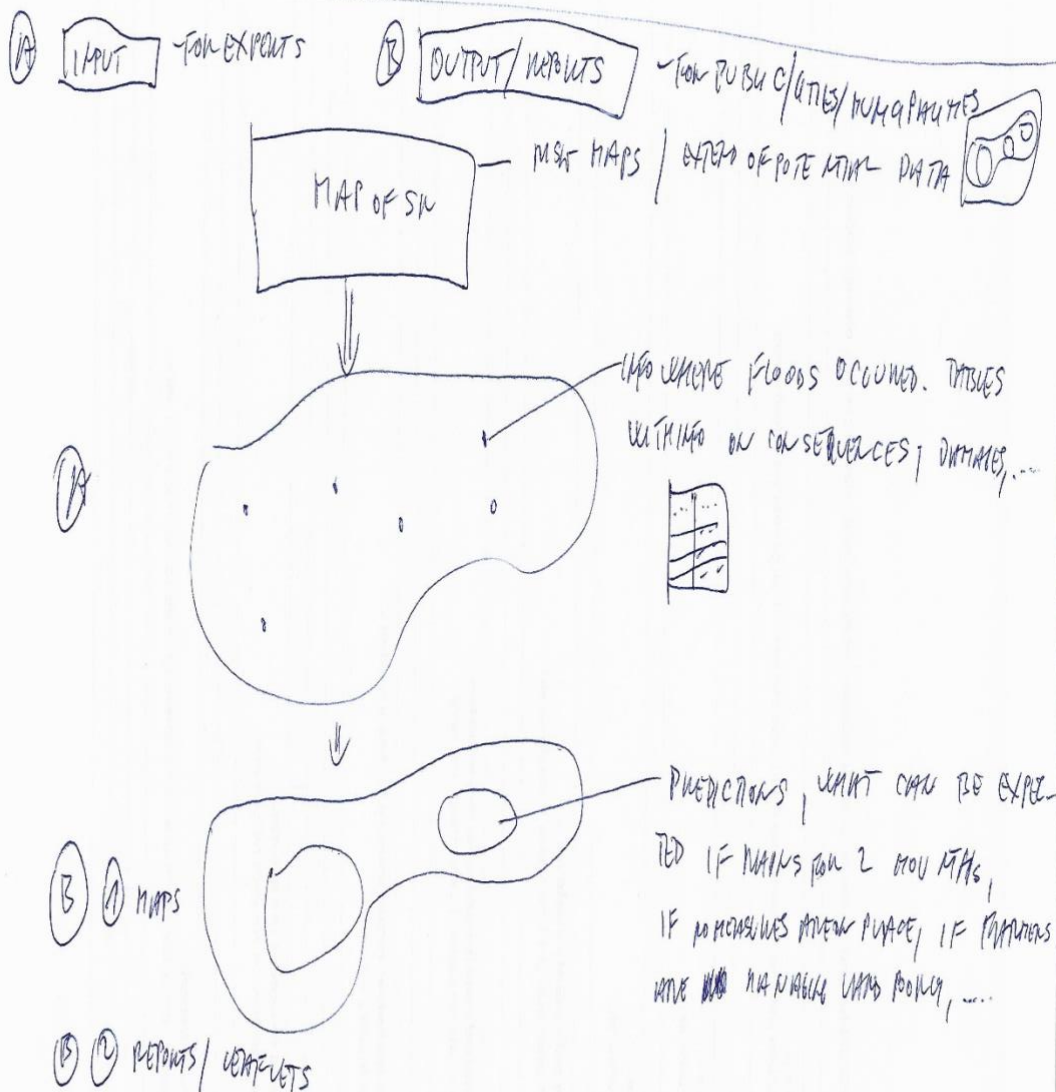
- METHODS

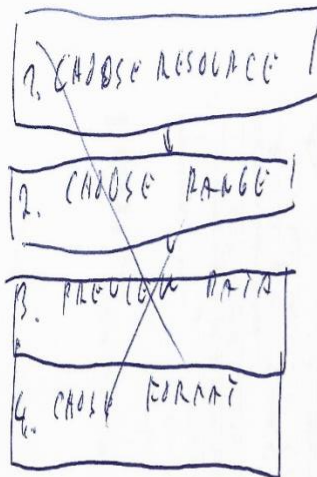
[BASED ON HISTORICAL DATA OBSERVATION
OR
BASED ON MODELLED DATA



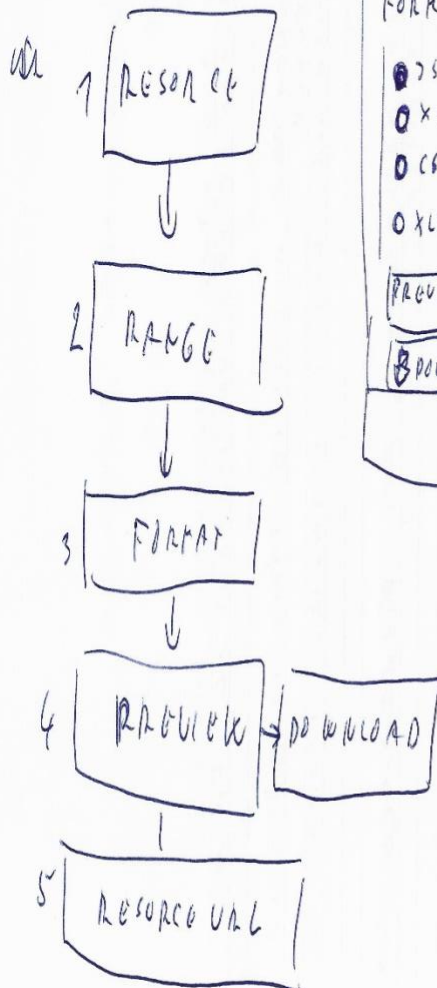
SUMMARY

- BASICALLY ACCESSIBLE VIA MB/PC BUT FOR PUBLIC STAKEHOLDERS VIA PHONES/TABLETS.
- Flood Portal:





generation



1. CHOOSE RESOURCE
Resource 1 ▾

2. CHOOSE RANGE
☒ ALL
☐ SIMPLIFIED
☐ OPTION X
☐ OPTION X1

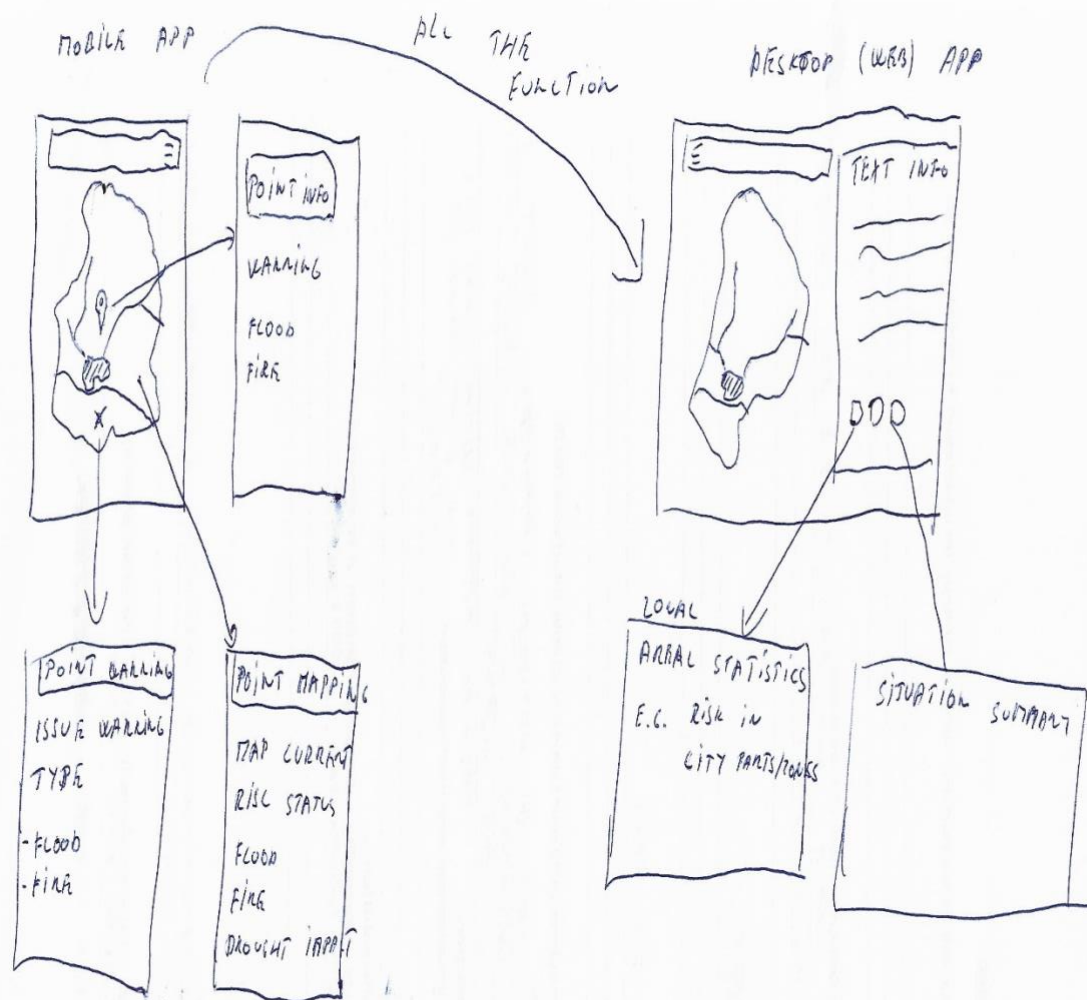
FORMAT
☒ JSON
☐ XML
☐ CSV
☐ XLSX

PREVIEW
NAME: DATASET1,
LAST UPDATE: 2025-02-01-11:54:57
BOMBA: ~~~~~
~~~~~: ~~~~~  
~~~~~: ~~~~~  
~~~~~: ~~~~~  
~~~~~: ~~~~~  
~~~~~: ~~~~~  
~~~~~: ~~~~~  
}

RESOURCE URL
<http://api.pcp.wiki.com/data/resource/2504>

PREVIEW
[PREVIEW] [DOWNLOAD]

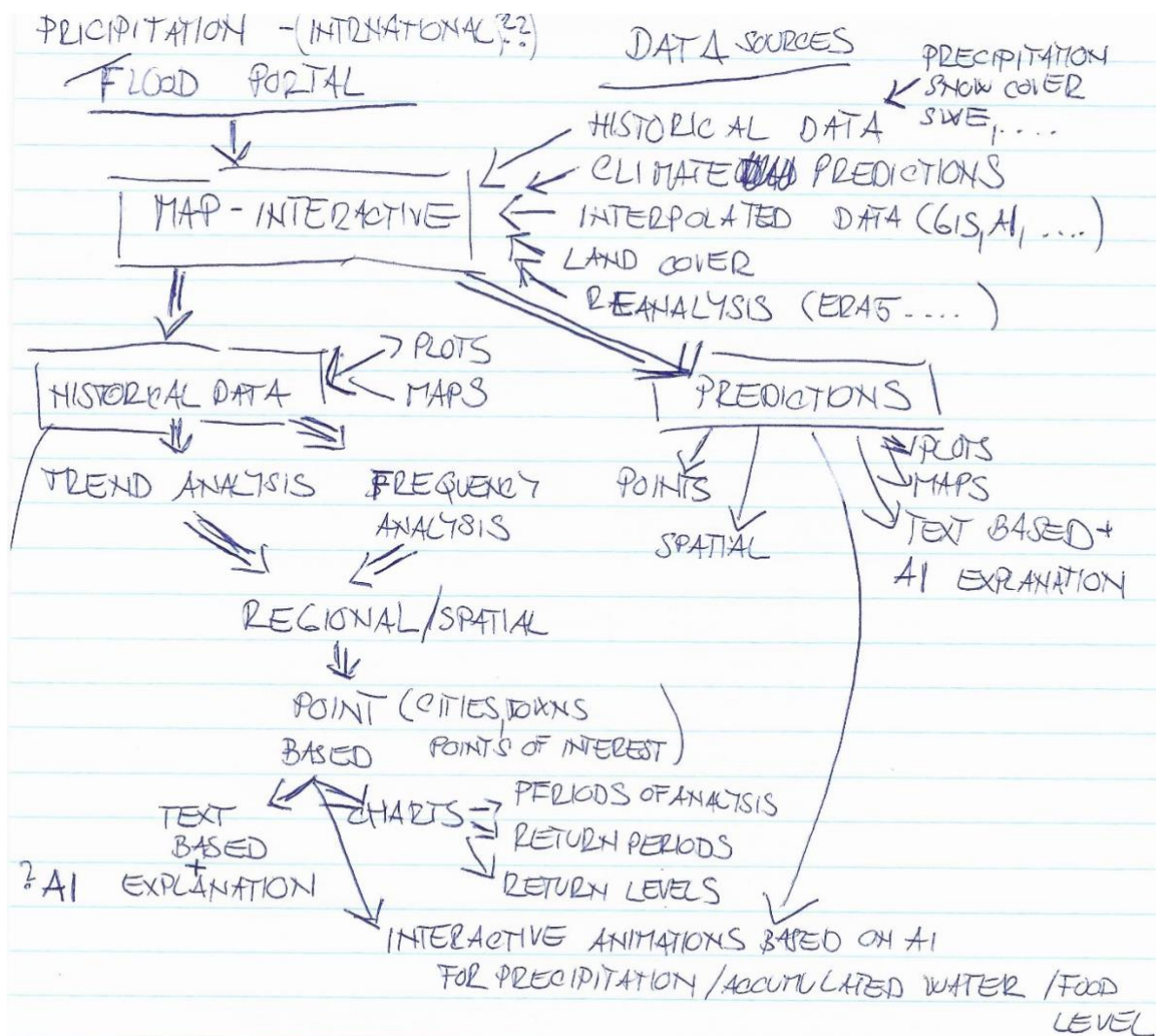
RESOURCE URL



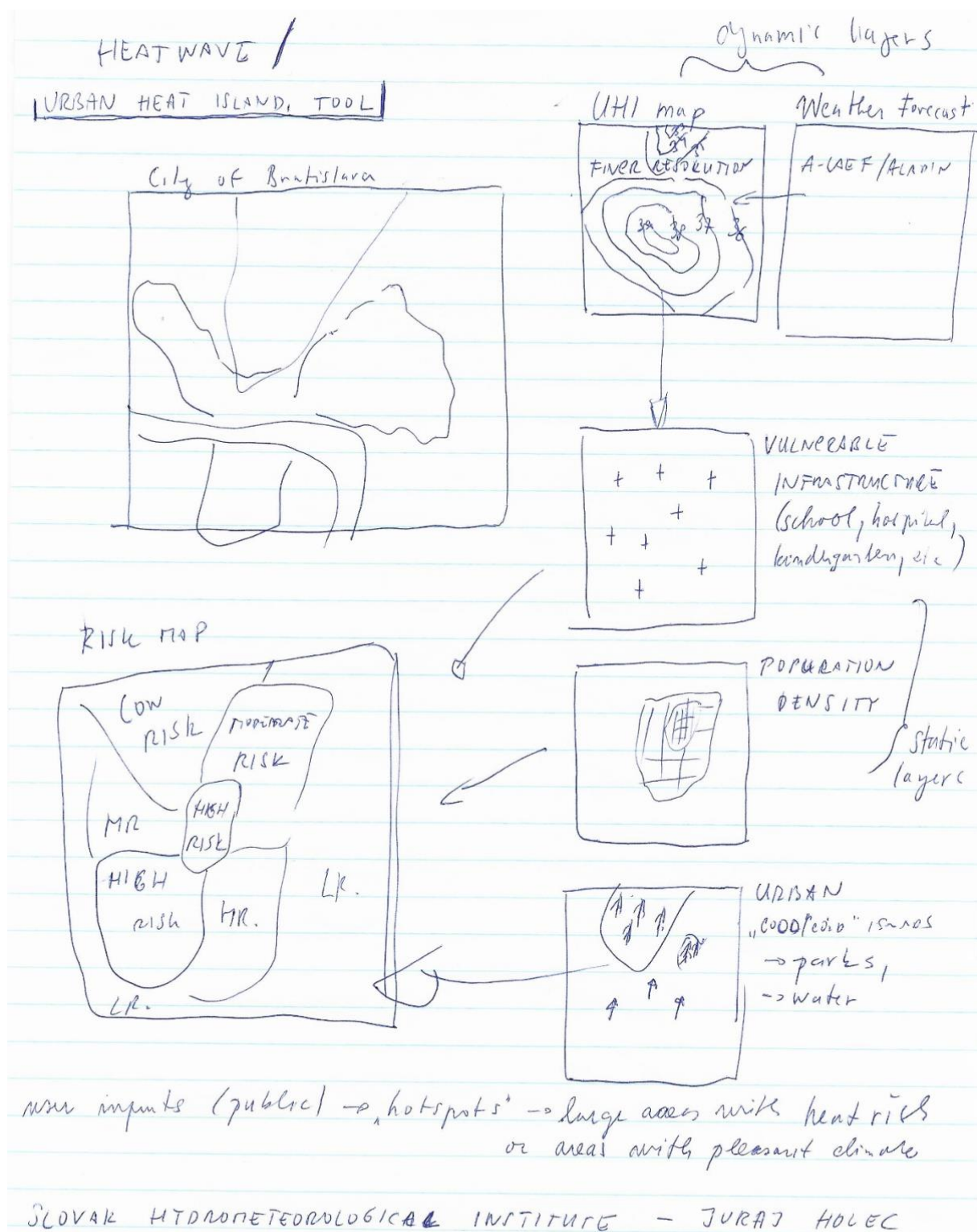
WORKS ONLINE (WIFI / MOBILE / SATELLITE DATA)

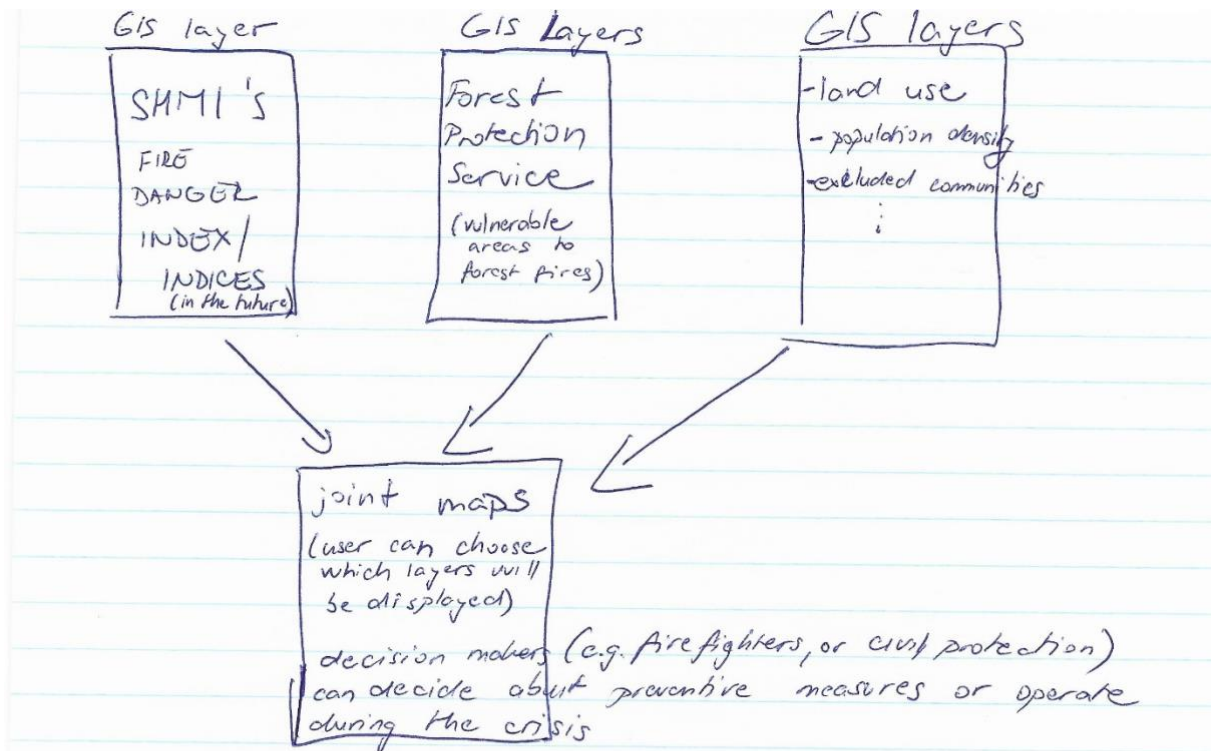
~~SOME FEATURES~~

MINISTRY OF ENVIRONMENT OF THE SLOVAK REPUBLIC



SLOVAK HYDROMETEOROLOGICAL INSTITUTE





Device : laptop, tablet

Environment : Inside, but also outside (in case of crisis management)

Pain-point : SHMI has some data/layers, Forest Protection Service has some valuable layers, but* the firefighters do not have an access to them (especially to those by FPS)

- This sketched tool would offer an overview of important layers for decision-making in both crisis and preventive phase.

Slovak Hydrometeorological Institute

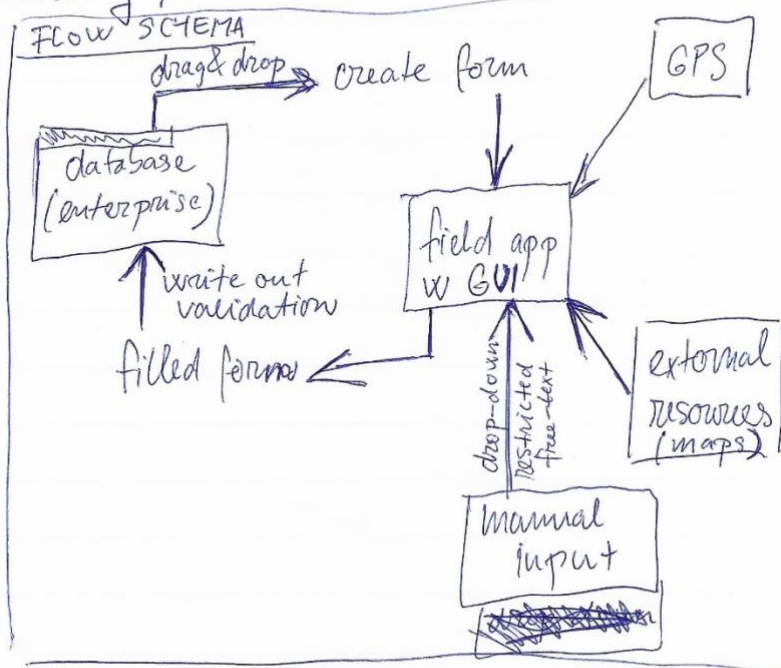
Q



Field GIS (More-like a functionality of a super software*)

- load current position / navigate to preselected location
- ~~data~~ form – possibility of extracting data from loaded layers (online if available / ~~or~~ offline if preloaded)
- environment – field, low level of signal
- device – mobile phone ~~or~~ tablet
- point-point – standardised input of data into database (geodatabase) from the field work (minimising failures of field worker)
- after: when secure connection is available, validate and load data into database (enterprise)
- pre: Setting up the formula for data form by drag and drop ~~entries~~
- filling up: drop-down menu with domain entries
Restricting free-text to minimum

* higher level



marek.sulovsky@vuvh.sk

~~Water House~~

Water Research Institute / Bratislava



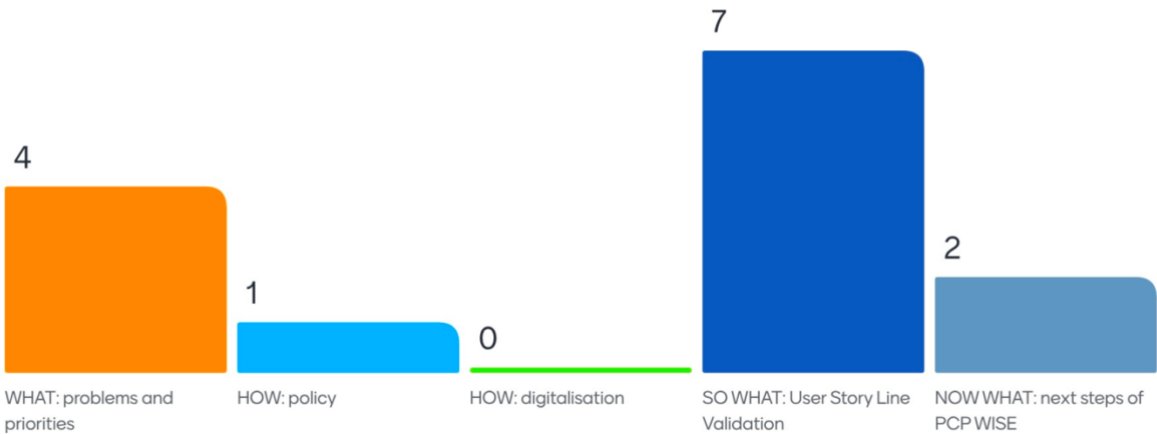


6. Mentimeter feedback

What is one thing you learned and will take home after the workshop today?



Which part of the workshop was most useful to you?

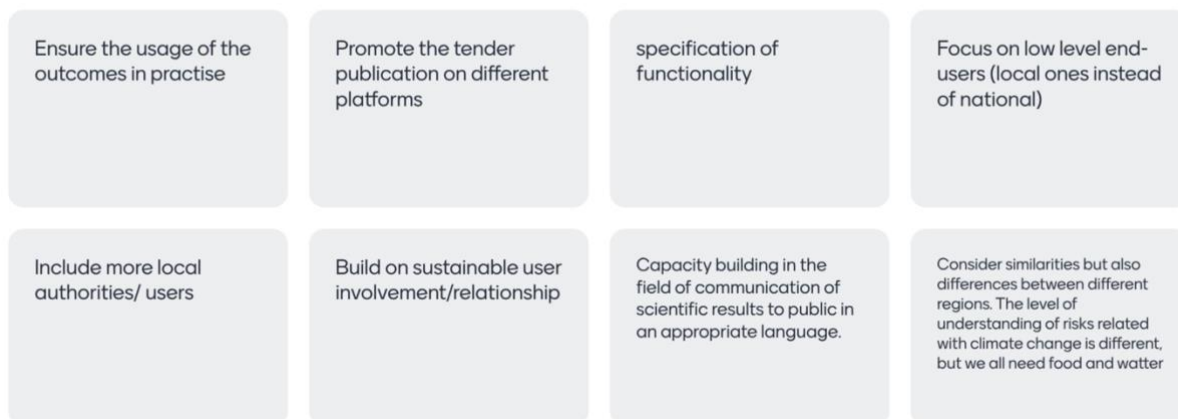




What would you like to learn more about?



What is one thing you would like PCP WISE to do/focus on in the coming months?



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