



EXPANDEO

12-13 June 2024

SIDE EVENT

Organised by:



EARSC

European Association  
of Remote Sensing  
Companies

PROTECT

PROCURING INNOVATIVE CLIMATE CHANGE SERVICES

Final Event

Brussels

11 June 2024



This project has received funding from the Horizon Europe Framework Programme (HORIZON) under grant agreement No 101060592

# 9.00 – 9.15: Opening remarks by PROTECT's Project Officer & Project Coordinator



Erwin Goor, Project  
Officer at EC/REA



Marc Pattinson, Innovation  
Director at G.A.C. Group



# Agenda

## Morning part:

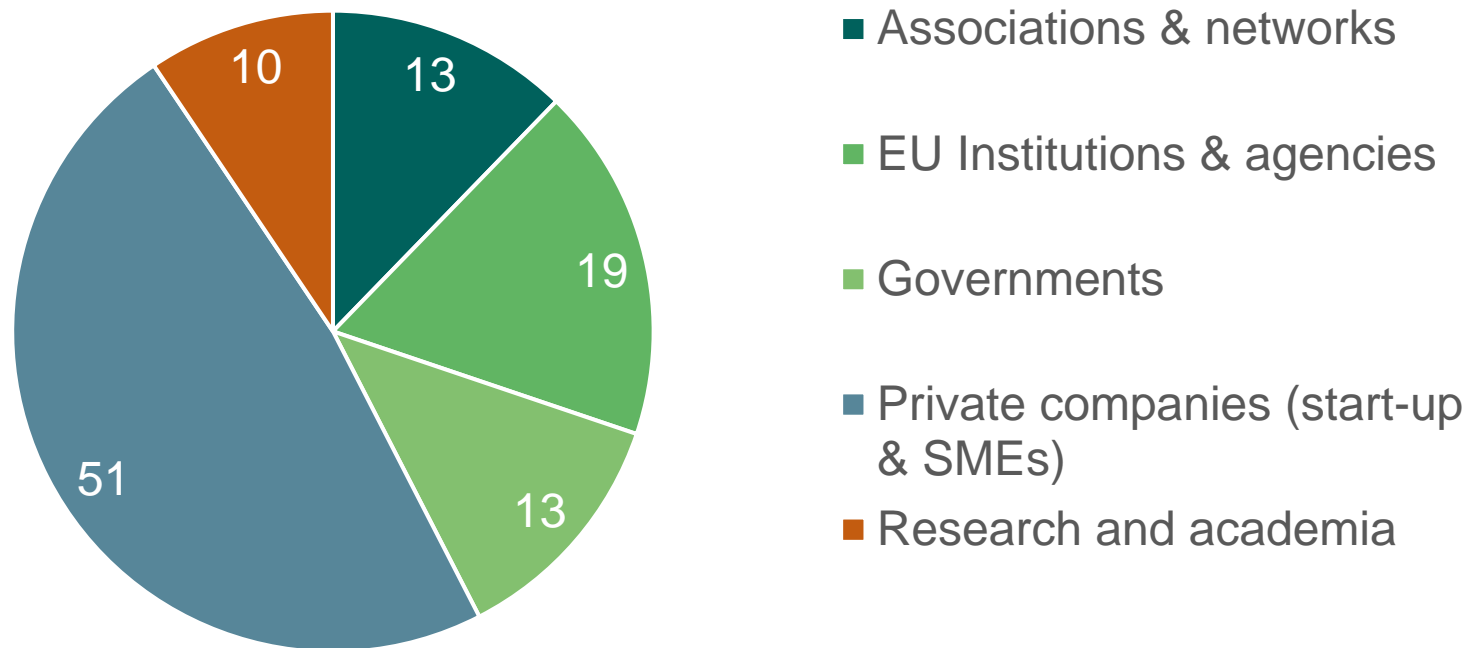
- **9.00 – 9.15: Opening remarks**
- **9.15 – 10.00: Panel discussion 1** – How can Pre-Commercial Procurement support climate change adaptation efforts through Earth Observation-based solutions – Lessons learnt from PROTECT?
- **10.00 – 11.00: Panel discussion 2:** How Innovation Procurement can boost the development of new and innovative solutions?
- **11.00 – 11.30: Coffee and tea break**
- **11.30 – 12.15: Panel discussion 3:** How EO can contribute to new and innovative climate adaptation solutions and to innovative governance tools?
- **12.15 – 13.00: Lunch break**

## Afternoon part:

- **13.00 – 14.30: Grab a coffee and meet, greet, and network!**
  - Corner 1 – Meet the PROTECT Team
  - Corner 2 – Meet the PCP WISE Buyers
  - Corner 3 – Meet the Providers
  - Corner 4 – Meet other EU projects
- **14.30 – 15.30: PROTECT project & Key results presentation**
- **15.30 – 16.00: Coffee and tea break**
- **16.00 – 17.00: Panel discussion 4:** From PROTECT to PCP WISE
- **17.00 – 17.15: Wrap-up and concluding remarks**

# Who are the participants? (106 registered)

## Audience today





**9.15 - 10.00 Panel discussion 1: How can Pre-Commercial Procurement support climate change adaptation efforts through Earth Observation-based solutions – PROTECT lessons learnt?  
Moderated by Stefka Domuzova, EIT Climate-KIC**



**Nora van Cauwenberg**  
Expert in water and sustainable development and CEO at BitaGreen, Mission Adaptation



**Cristobal Reveco**  
Climate adaptation development scientist-Practitioner at GERICS & coordinator of the VALORADA project



**Thanh-Tâm Lê**  
Director at EIT Climate-KIC & PROTECT project Partner

# 10.10 - 11.00 Panel discussion 2: How innovation procurement can boost the development of new innovative solutions? Moderated by Jozef Kubinec, Mol Slovakia



**Lieve Bos**  
Policy officer Innovation  
Procurement and  
Experimentation Spaces,  
EC/ DG CNCT



**Vassilis Tzanidis**  
Innovation  
Procurement Advisor,  
EC/ EIC



**Samira Boussetta**  
Innovation procurement  
expert/ Former Innovation  
Procurement Advisor at  
DG GROW & CEO and  
Founder of Altaee



**Bernhard Jäger**  
Research Manager &  
Department Lead at  
SYNYO and Coordinator  
of iProcureSecurity PCP



# HORIZON EUROPE

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## THE EU RESEARCH & INNOVATION PROGRAMME

2021 – 2027

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LIEVE BOS

INNOVATION PROCUREMENT

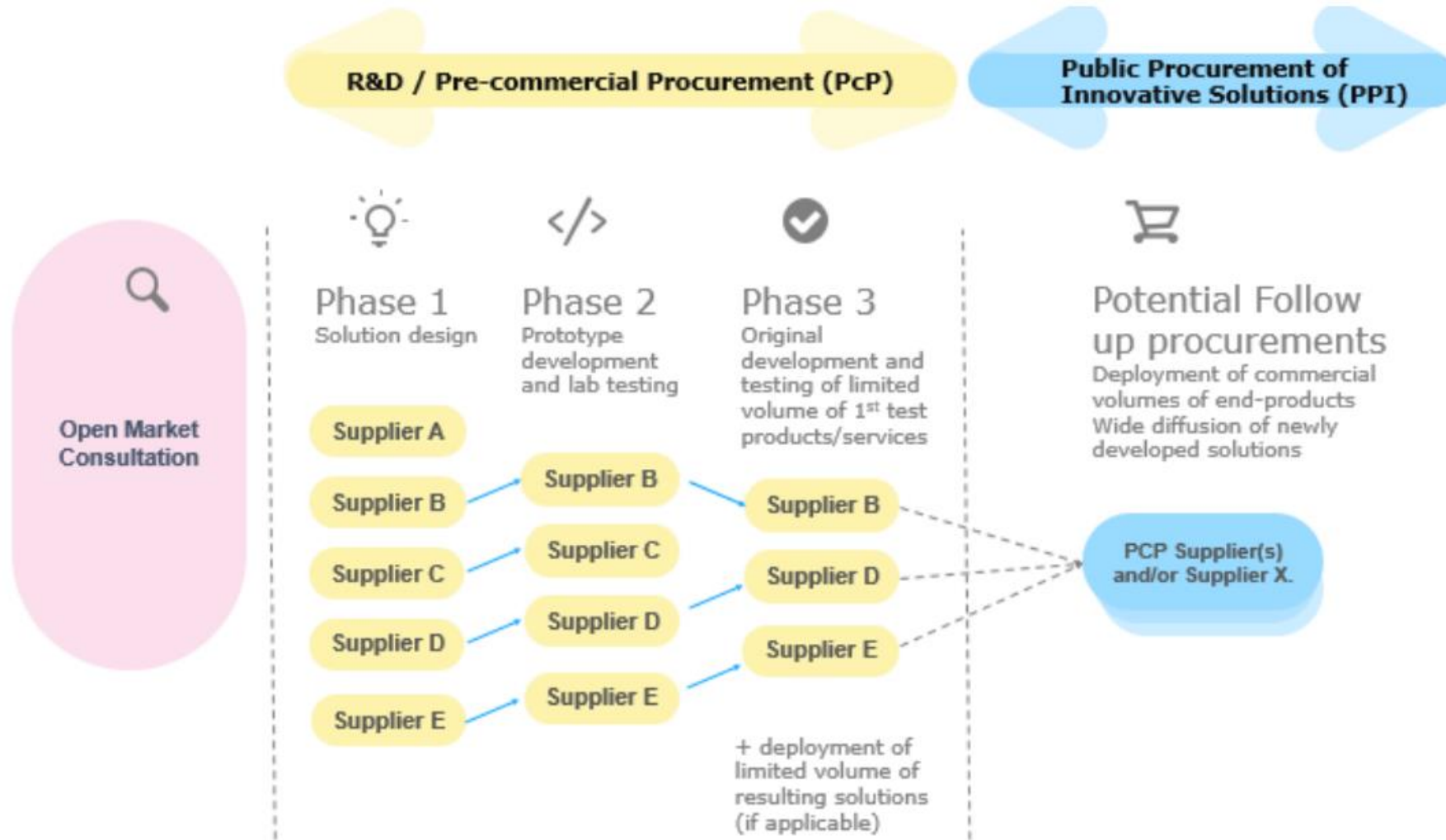


Support from Horizon Europe

Research and  
Innovation



# Complementarity



More than 1000 public buyers around Europe have already successfully implemented PCPs

PPI uses procurement procedures defined in EU public procurement directives and national law



# Impacts of EU funded PCPs on procurers

- **Deployment:** 2Y after project end 55% of projects/procurers deployed solutions
- **Improved interoperability:** 60% of PCPs resulted in more interoperable solutions
- **Removing supplier lock-in:** 20% cost reduction & higher quality products
- **Strategic autonomy, security of supply chain:** Several examples for EU companies now being lead providers, not only in EU but also for Asian and US procurers



PCP by Norwegian government resulted in deployment of NO infrastructure (EFTA funding). The world's first and largest full scale carbon capture, transport and storage facility (CCS).

Once large industry sites around Europe are connected to it (EU Innovation fund), this will reduce by 14% the CO2 emissions across the entire EU by 2030.



2014-2016: PCP by Danish regions & hospitals  
Result: Blue Ocean Robotics (Danish startup) created innovative disinfection robots that kill 99% of all viruses & bacteria within 10 minutes.

2020: EU bought 300 of these 'EU made' robots for hospitals around Europe to fight COVID.  
Steep worldwide growth, becoming unicorn. Strengthens European position in robotics.

# Impacts of EU funded PCPs on suppliers

- **Opens a route-to-market for new players/SMEs**
  - More than doubles contracts going to SMEs/startups (>70% vs 30%)
- **Quadruples commercialisation success rate**
  - 20 times more contracts awarded cross-border (86% of phase 3, 75% of phase 2 and 30% of phase 1 contractors commercialise already 1Y after PCP)
- **Fosters access to finance**
  - Doubles chances to win further procurements, increases access to VC funding, partnerships with large corporates, mergers/acquisitions, IPOs
- **Stimulates cross-border company growth**
  - 20 times more contracts awarded cross-border (33,1% vs 1,7%)
- **Creating growth and jobs /strategic autonomy in Europe**
  - 99,7% of contractors do 100% of R&D activities for PCP in Europe

More info: [impacts of EU funded PCPs](#) and [brochure with results EU funded PCPs and PPIs in the ICT sector](#)

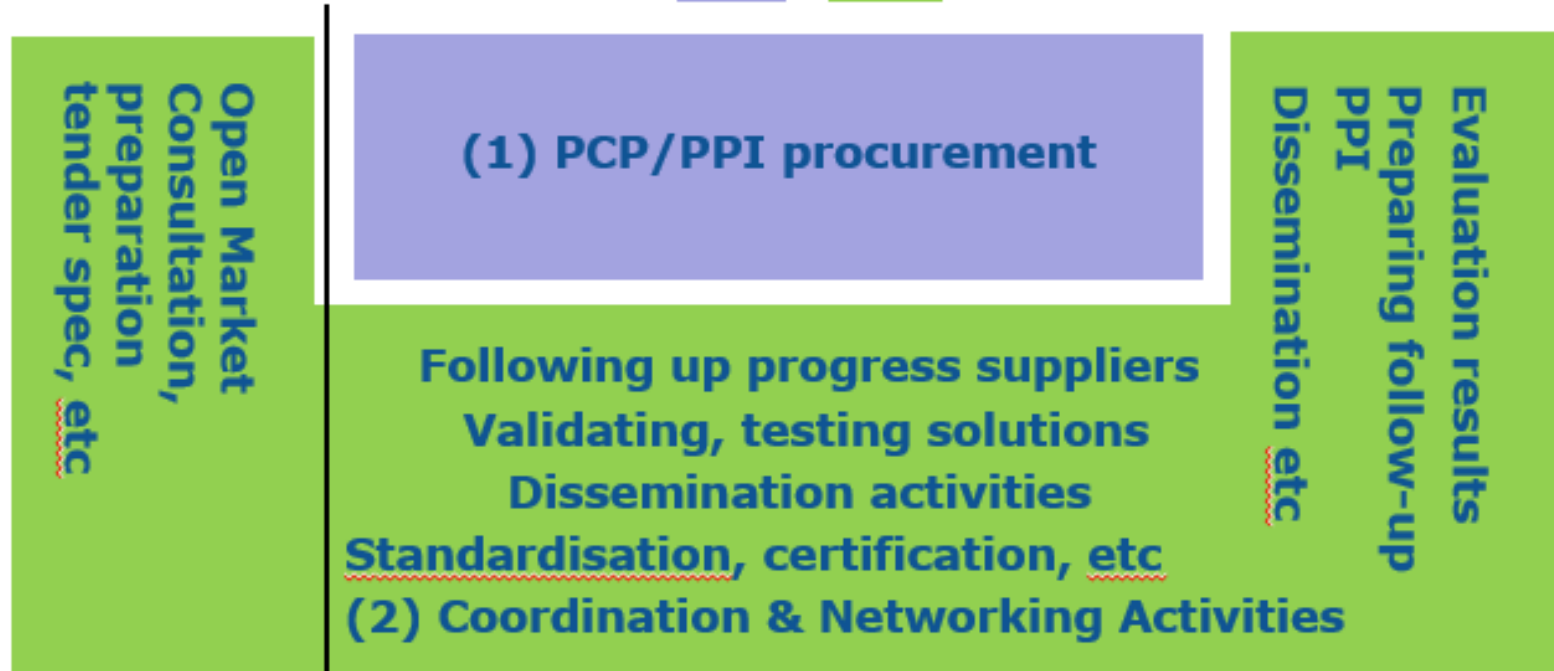


# Horizon Europe funding

## Eligible activities

PCP/PPI actions co-finance (1) + (2)

PCP actions: 100% funding rate  
PPI actions: 50% funding rate



**Preparation Stage**

**Execution Stage**

Every project goes through a preparation stage and an execution stage

1<sup>st</sup> pre-fin

Review  
2<sup>nd</sup> pre-fin

Possibly additional reviews  
(e.g. per phase of a PCP action)

Final review  
Final payment



# Interesting links

## Innovation Procurement

- [How to prepare a successful innovation procurement proposal in Horizon Europe](#) (video)  
Subscribe to the [EU Innovation Procurement newsletter](#) to receive regular info on calls, news etc.
- Examples, info on EU funding etc: [https://research-and-innovation.ec.europa.eu/strategy/support-policy-making/shaping-eu-research-and-innovation-policy/new-european-innovation-agenda/innovation-procurement\\_en](https://research-and-innovation.ec.europa.eu/strategy/support-policy-making/shaping-eu-research-and-innovation-policy/new-european-innovation-agenda/innovation-procurement_en)
- [How to prepare a successful proposal in Horizon Europe](#)
  - More info about RIA, IA, CSA actions, types of costs, MGA, evaluation procedure etc.
- [A successful proposal for Horizon Europe: Scientific-technical excellence is key, but don't forget the other aspects](#)
  - Info about Gender dimension, Open Science, Interdisciplinarity, DNSH principle etc.
- [Dissemination & Communication in Horizon Europe](#)
- [The Funding & Tenders Portal for beginners](#)

## Proposal preparation in general



# EU support for innovation procurement

## Free of charge assistance



[www.eafip.eu](http://www.eafip.eu)

Helping you to kickstart / participate in an innov proc

### SPIN4EIC Strategic Innovation Procurement Programme

Enhance the access to procurement markets in Europe and globally.

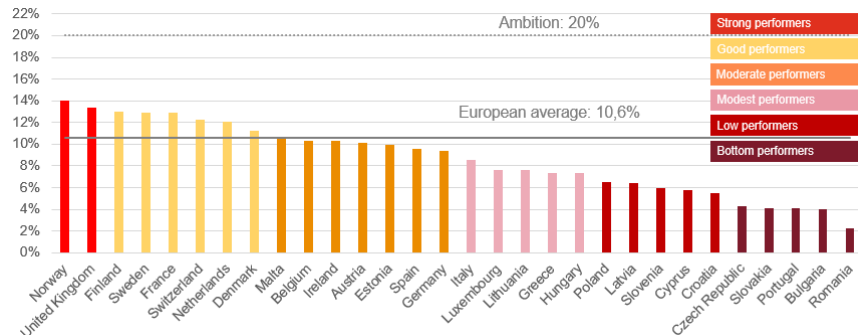
[SPIN4EIC](#)

## EU funding for buyers' groups

- Greening healthcare: 20 M€ ([HLTH-2024-CARE-14](#); 26/11/2024) **NEW**
- Demand led innovation in security: 10,5 M€ ([2024-SSRI-01-01](#); 20/11/2024) **ENLARGED CALL**

[How to prepare a successful innovation procurement proposal](#) in Horizon Europe (video)

## Benchmarking



[Join us on 25 June](#) for results of 2024 benchmarking of national policies and investments on innov proc

## Win 75 K€! EU innov proc awards

#EUIPAwards

THE EUROPEAN INNOVATION PROCUREMENT AWARDS 24

[Apply here](#)

European Innovation Council





# Thank you!

## # HorizonEU

<http://ec.europa.eu/horizon-europe>



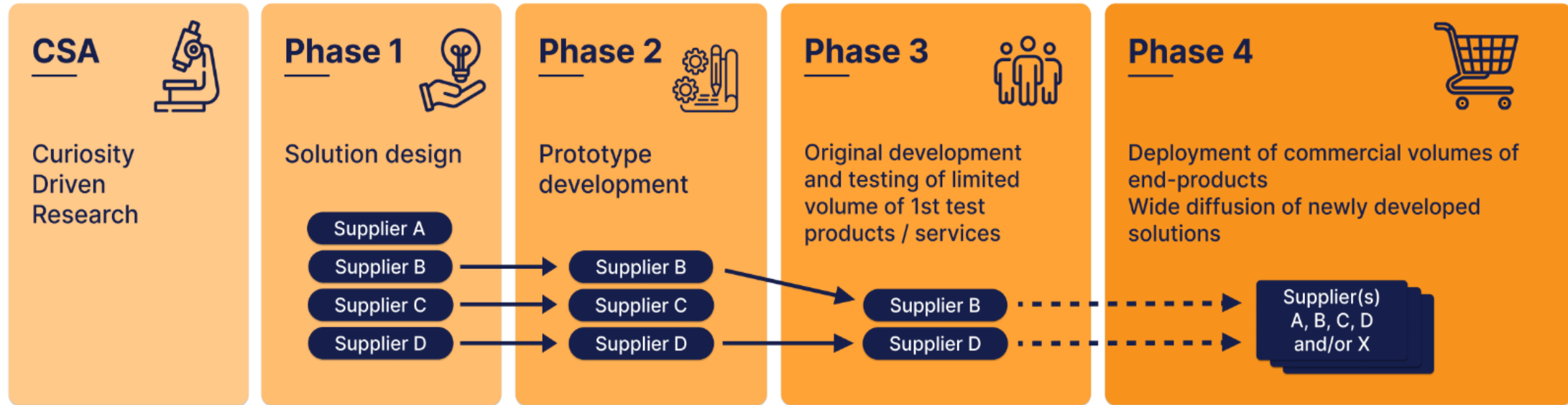
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Image credits: © ivector #235536634, #249868181, #251163013, #266009682, #273480523, #362422833, #241215668, #244690530, #245719946, #251163053, #252508849, 2020. Source: Stock.Adobe.com. Icons © Flaticon – all rights reserved.



# Innovation procurement



Anti-Superbugs PCP



# Samira BOUSSETTA – Innovation Procurement Expert

Samira Boussetta is an expert consultant in sustainable and innovative public procurement. She has held key roles such as Director of Public Procurement for local authorities, Head of Legal Affairs and Innovative Procurement in the health sector, and Head of the Innovation and SMEs Unit in the French State Procurement Directorate.

In 2019, she joined the European Commission to advance public procurement innovation across Europe. A trained lawyer, Samira also holds a Master's degree in Innovation, Foresight, and Organisational Transformation.

Throughout her career, Samira has championed collaborative approaches to foster innovation. At the French government's purchasing department and the European Commission, she has been instrumental in developing buyers' communities focused on innovation and sustainable development.



# Example of PCP in the health sector



Anti-Superbugs PCP







# Pre-Commercial Procurement of Innovative Triage Management Systems Strengthening Resilience and Interoperability of Emergency Medical Services

SYNYO GmbH - Bernhard Jäger (iProcureSecurity PCP Project Coordinator)

Find more information on the project here →



office@iprocursecurity.eu



pcp.iprocursecurity.eu



@procuresecurity



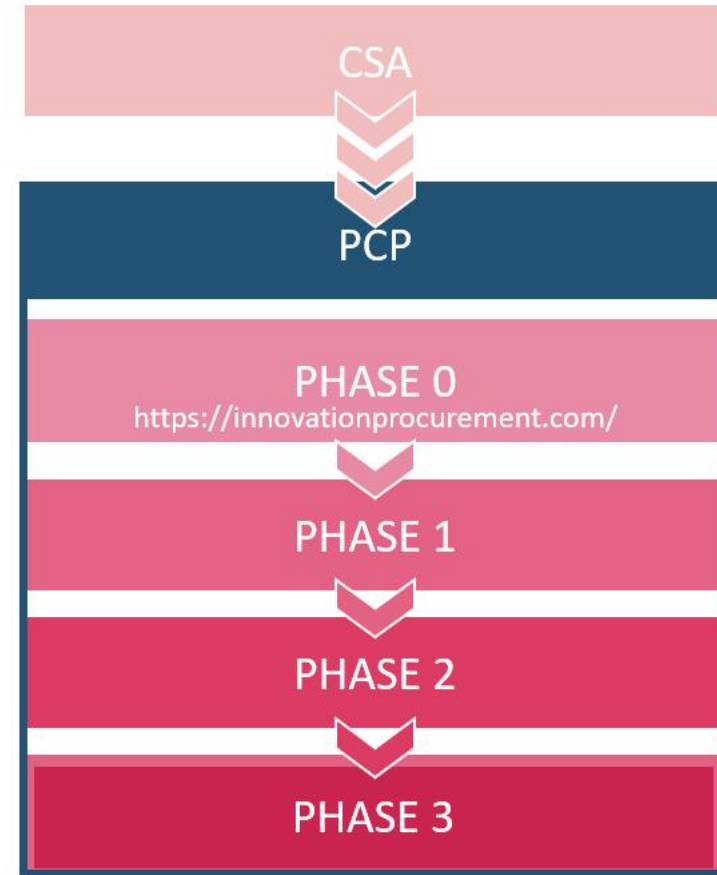
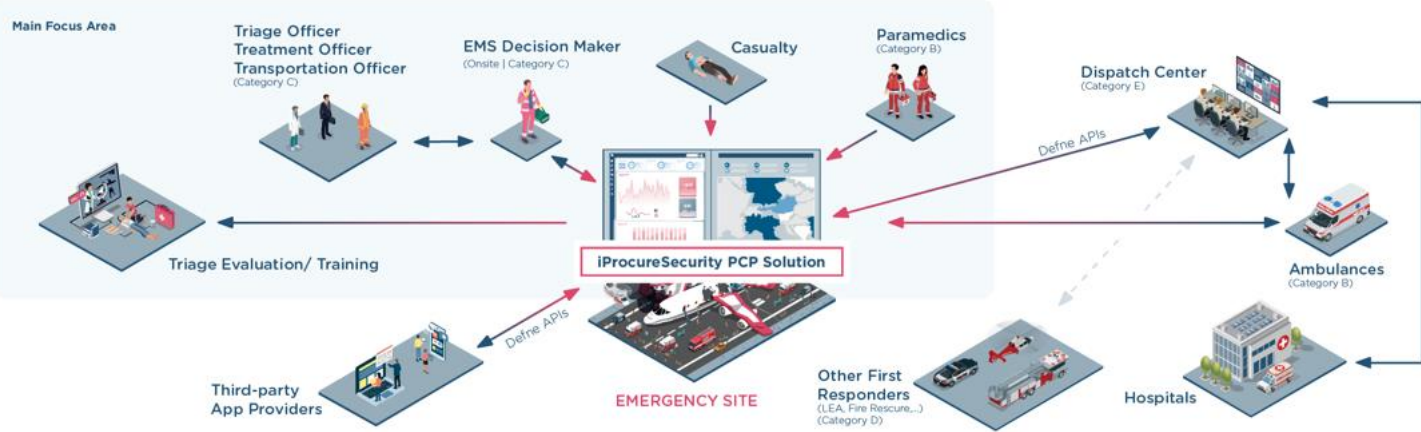
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022061.



### OBJECTIVE: Improve triage through a flexible management system

1. Quick and accurate overview of casualties and their status.
2. Decision support for better allocation of available resources & quicker support for casualties.
3. Improved interoperability with other first responders and relevant actors.
4. Reduced handover times between ambulance transport and hospitals.
5. Insights for quality assurance and training measures.

#### MAIN ACTORS AND SYSTEMS IN A TRIAGE MANAGEMENT SCENARIO



The European Innovation Council

Backing visionary  
entrepreneurs

European  
Innovation  
Council





## EIC ACCELERATOR

- For single companies
- Grants up to **€2.5 million**
- Equity up to **€15 million** or above
- To enter the market & scale-up (TRL 6-9)



## EIC PATHFINDER

- For consortia
- Grants up to **€4 million**
- To research technology breakthroughs (TRL 1-4)



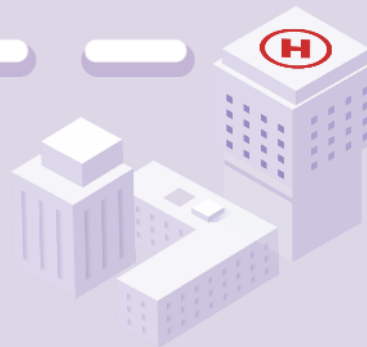
## EIC BUSINESS ACCELERATION SERVICES

- Mentors, coaches
- Global partners
- Innovation ecosystems
- EIC Community Platform

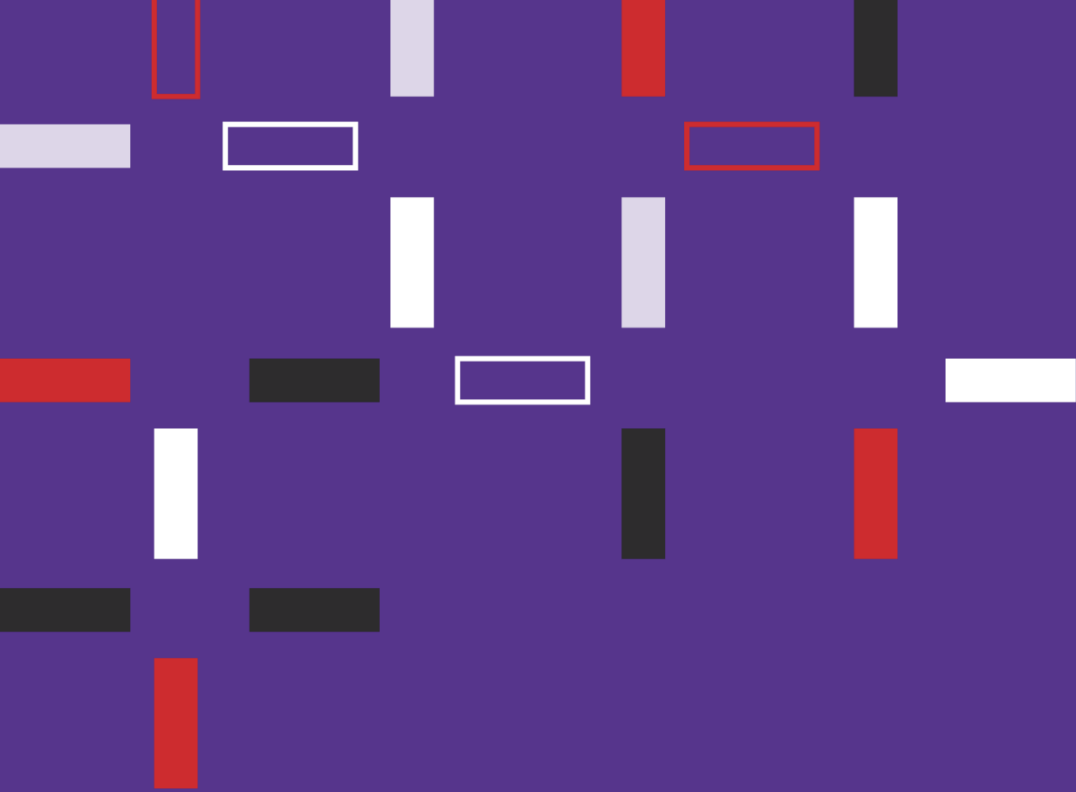


## EIC TRANSITION

- For consortia & single companies
- Grants up to **€2.5 million**
- To develop business cases (TRL 4-6)







# EIC BAS Innovation Procurement program



## WHAT

- Establish the EIC as a **Centre of Excellence** on Innovation Procurement



## WHY

- Open procurement **market opportunities** to EIC awardees, thereby supporting them in scaling their businesses

## HOW



### Skills

- › Provide **EIC awardees** with skills and knowledge to navigate procurement processes effectively through **trainings and toolkits**
- › Empowering **public procurers** with skills to understand and implement innovative procurement practices via direct assistance



### Contacts

- › Connecting procurers and EIC awardees and building a network of public and private procurers interested in EIC solutions via the **EIC community of buyers**
- › Facilitating **matchmaking** of EIC awardees with procurers for innovative solutions, via **pitching events**



### Contracts

- › Fostering **agreements** between EIC awardees and procurers for innovative solutions, via **pitching and matchmaking events**
- › **Assisting** EIC awardees to participate in public and private innovation **procurement tenders**.
- › **Financial support** to EIC beneficiaries to carry out PoCs or pilot tests

## DEMAND

## SUPPLY

### Matchmaking

For Private and Public procurers

- › **Identification** of relevant procurers and development of a **common challenge**
- › **Matching** EIC beneficiaries with buyers' needs based on the defined challenges

### Assistance to public procurers

- › Identification and assessment of the **needs** of the public procurer
- › Support with conducting an **open market consultation**
- › Support in the drafting of **tender documents** and building a **business case**

- › **Co-creation** of **pilot solutions** in preparation of a fully fledged procurement procedure (e.g. Innobuyer project)

### Academies and Toolkit

- › Organisation of **online Innovation Procurement Academies** to boost innovation procurement knowledge and skills in the **European and Global** contexts
- › Building and sharing a **toolkit on innovation procurement** to be accessible on the SPIN4EIC **Helpdesk**

### Pitching

- › **Selection** of EIC Awardees to match procurers' needs and challenges
- › Provision of **pitching coaching** and feedback on **pitch decks**

### Assistance

- › Identification of European and international **opportunities** matching EIC Awardees' solutions
- › Assisting EIC Awardees **throughout the tendering cycle** (guidance on elaboration of tender strategy, storyline, pipeline management, opportunities follow-up and feedback loops, IP and legal matters, etc.) based on tailored needs of each assisted EIC Awardee
- › PoCs or pilot tests on the services of public and private sector buyers **de-risking Innovation Procurement** (e.g. Innomatch)

## SPIN4EIC Community



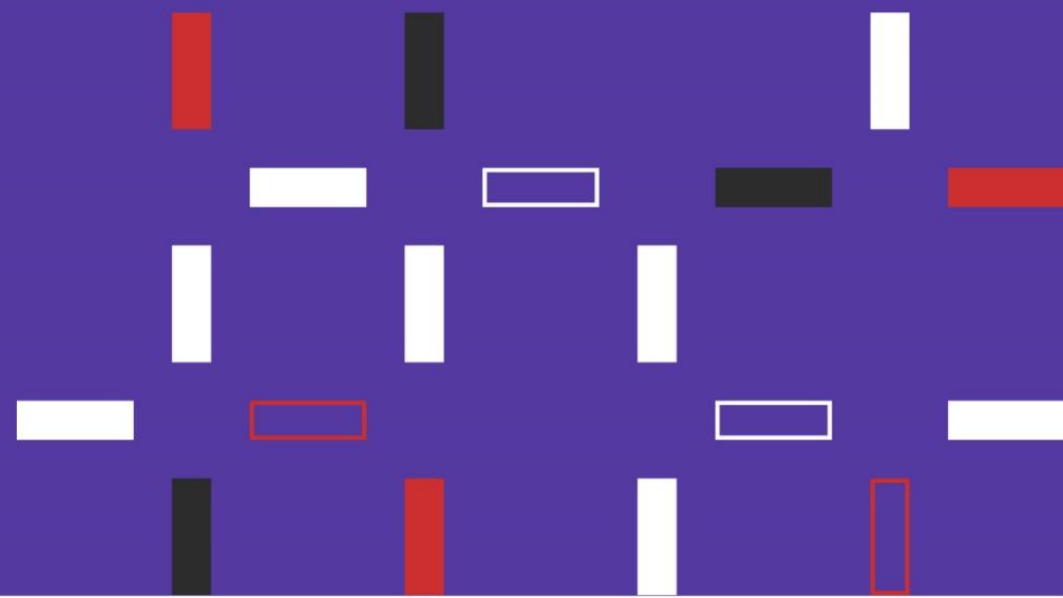
# Thank you!

Dr. Jur. Vasileios  
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Procurement Advisor

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Tel +32 229-54767  
 v\_tsanidis  
 vasileios tsanidis



## Do you want to work with us?





**11.30 - 12.15 Panel discussion 3: How Earth Observation can contribute to new innovative climate adaptation solutions and to innovative governance tools?  
Moderated by Remco Timmermands, Spaceside**



**Franz Immler**  
Head of the Environmental  
Observation Sector, EC/  
DG RTD



**Annalisa Donati**  
Secretary General,  
EURISY



**Emmanuel Pajot**  
Managing Director,  
EARSC



# Environmental Observations

How can Earth observation contribute to new and innovative climate adaptation solutions and innovative governance tools

*Franz Immler, European Commission,  
DG RTD, B.3*

From monitoring...



Atmosphere



Marine



Land



Climate Change



Security



Emergency

...to understanding

# Copernicus Services

- CAMS  
Copernicus Atmosphere Monitoring Service
- CMEMS  
Copernicus Marine Environment Monitoring Service
- CLMS  
Copernicus Land Monitoring Service
- C3S  
Copernicus Climate Change Service
- CSS  
Copernicus Security Service
- CEMS  
Copernicus Emergency Management Service

# EO benefiting end users

 e-shape

Fast Facts for You

7 showcases

37 pilots

4 years grant

68

partners



agriculture



health



renewable energy



ecosystem



water



disaster



climate

<https://e-shape.eu/index.php/success-stories>

Seasonal preparedness



e-shape  
EuroGEO Showcases:  
Applications Powered  
by Europe

The CRITERION web service

EO-based pollution-health risks



e-shape  
EuroGEO Showcases:  
Applications Powered  
by Europe

EO supporting industry and public authorities in air quality assessment  
Application of e-shape Health Surveillance Air Quality Pilot (HSAQ) for Finnish users

Improved well-field management with Sentinel-1 SAR data



e-shape  
EuroGEO Showcases:  
Applications Powered  
by Europe

Aquifer-systems need a solution to monitor the land subsidence over wide areas and manage the groundwater extraction strategy

Co-designed with the basin water management authority (BWS), the groundwater management products generated in the framework of the e-shape project provide an accurate and fast assessment about the influence of the pumping rates in the piezometric levels and land subsidence. The land surface displacement results are





# Policy context

- Implementing the Green Deal:
  - Climate Services, adaptation
  - Biodiversity restoration (mapping ecosystems)
  - Sustainable Agriculture
- GEO / EuroGEO
  - International collaboration
  - Earth Intelligence
  - User centric approach

# Thank you



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# eurisy

ACTING COLLECTIVELY TO  
BRIDGE SPACE AND SOCIETY

Satellite data for cultural Heritage: Hand-on  
examples and future perspectives

Annalisa Donati  
Secretary General  
UNESCO VeneTo Stars  
30/04/2024



# Mission & Members





# Approach



*Facilitator* → EXPLORE

Raise awareness of satellite applications to help professional communities in many sectors: from transport to risk management, from habitat protection to energy, from climate change to the IoT.



*Matchmaker* → CONNECT

Support potential end users of satellite applications by leveraging its vast network among space and non-space communities; understanding patterns and links and/or creating them for mutual benefits.



*Adviser* → INFORM

Provide feedback to decision-makers on possible measures to overcome obstacles in diffusing space-derived innovation in society.





# eurisy

ACTING COLLECTIVELY TO  
BRIDGE SPACE AND SOCIETY

Satellite data for cultural Heritage: Hand-on  
examples and future perspectives

Annalisa Donati  
Secretary General  
UNESCO VeneTo Stars  
30/04/2024



## SAFE & RESILIENT CITY



### DISASTERS & SECURITY

- Management of natural disasters
- Coordinated emergency and rescue services
- Critical infrastructure monitoring
- Oil spills detection and removal
- Monitoring of hazardous goods' transportation
- Analysis of crime incident patterns
- Intruders' reporting



### SOIL & WATER

- Soil morphology and moisture
- Soil cover and use
- Inland and sea water quality and temperature
- Remote control of water reservoirs
- Hazardous materials management
- Sustainable urban agriculture



## HEALTHY & INCLUSIVE CITY



### HEALTH

- Coordinated emergency medical services
- Remote health check-ups
- Pollution peaks alerts
- First aid apps



### ENGAGEMENT

- Apps enhancing civic e-participation
- City management based on mobile behavioural data
- Apps fostering sustainable lifestyles
- City open data



### CULTURE

- Monitoring of historical buildings
- Augmented reality and historical city maps
- Tourism and city guides
- Geolocated outdoor serious games



## CLEAN CITY



### AIR

- Air quality and temperature
- Traffic, industry and airport emissions
- Air quality modelling and management



### ENERGY

- Solar energy systems' assessment
- Wind maps for wind power stations
- Remote monitoring of hydropower stations
- Synchronised power grid systems
- Remote detection of power outages



### GREEN AREAS

- Urban forest and biosphere maps
- Balanced green and built-in spaces
- Vegetation cover monitoring and management



### WASTE

- Optimised bin collection
- Detection of illegal dump sites
- Hazardous waste tracking



### URBAN PLANNING

- Land cover classification
- Land use monitoring and management
- Cadastral maps
- Urban sprawl monitoring
- Property tax evaluation
- Identification of illegal buildings
- Urban 3D planning



### TRANSPORT & MOBILITY

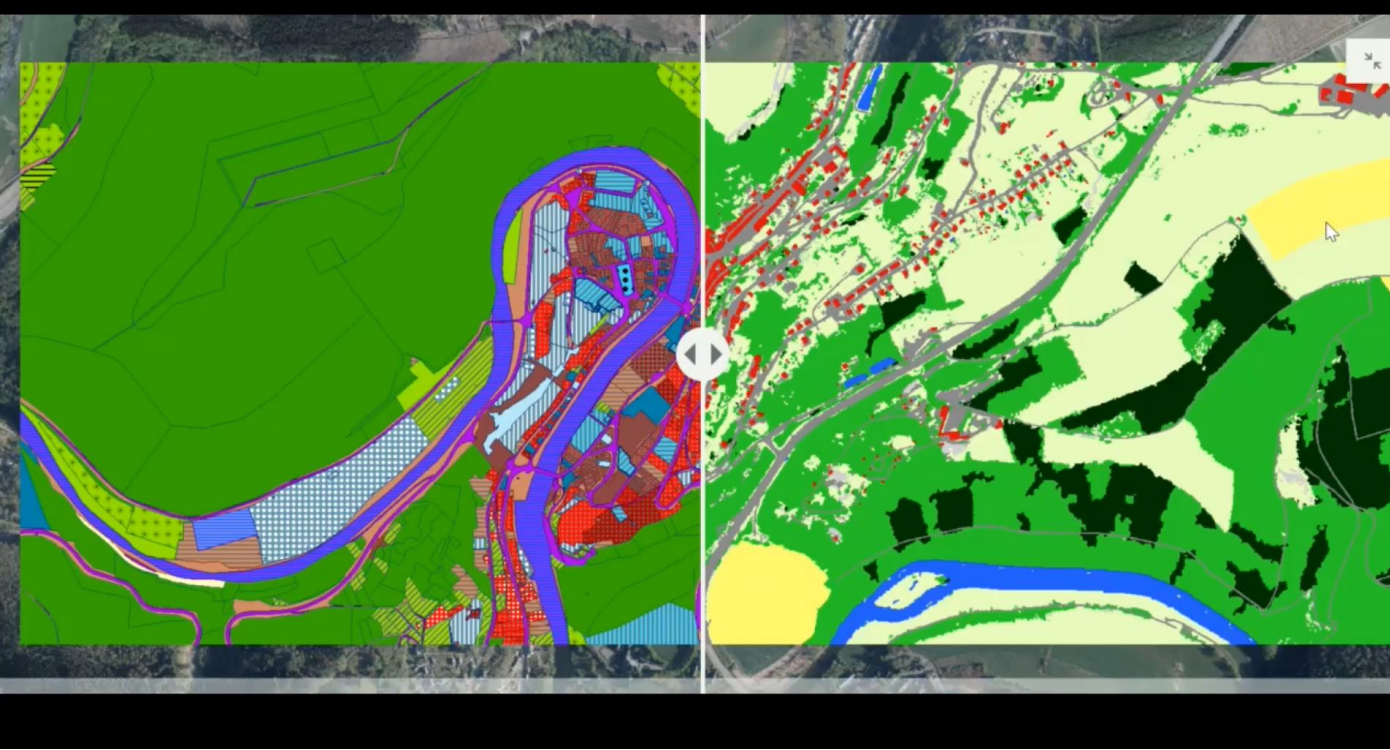
- Real-time transport information
- Bike and car sharing
- Intermodal transport
- Urban traffic modelling and analysis
- Optimisation of public transport and traffic lights
- Mobility support for persons with impaired mobility
- Parking apps



### BUILDINGS & INFRASTRUCTURE

- Monitoring of pavements, buildings and critical infrastructure
- Planning of constructions and transport infrastructures
- Adapt construction materials to climate changes
- Road condition and traffic safety improvements
- Mapping of buried optic fibres, gas and electric lines
- Soil subsidence maps to prioritise maintenance works

# The Public Service of Wallonia (Belgium) relies on satellite imagery for a comprehensive view of land cover and use



## The user:

The Public Service of Wallonia



## The challenge:

Acquisition of precise, accurate and easily updatable information, on land cover (LC) and land use (LU) to comply with EU INSPIRE Legislation

## The solution:

WALOUS maps' integrate the latest georeferenced data on the whole Walloon territory

## The benefit:

The Department of Agriculture, Natural Resources and Environment of the PSW uses the map to support farmers in making their declarations





# COPERNICUS AND ME



Video available at:  
[https://youtu.be/K6Y](https://youtu.be/K6YZoSBmHSQ)  
[ZoSBmHSQ](https://youtu.be/K6YZoSBmHSQ)

COPERNICUS  
& ME



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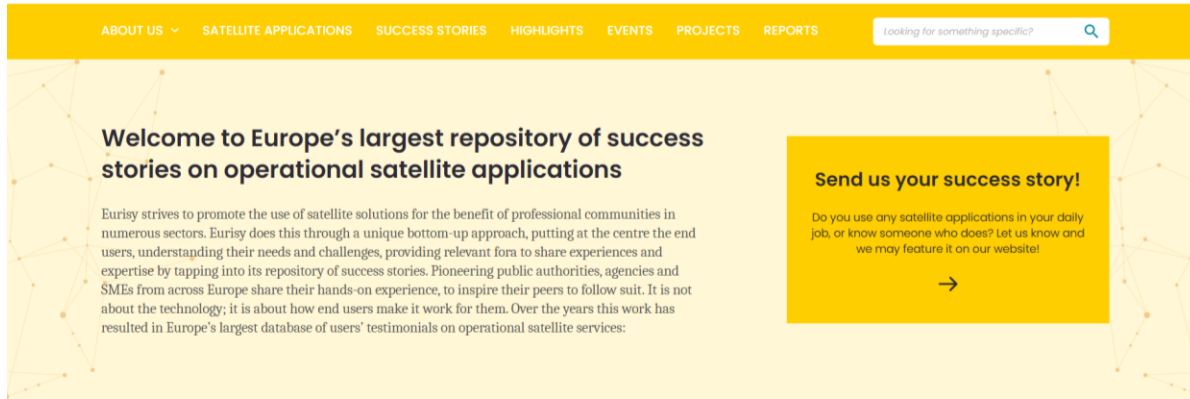
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& ME



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# Success stories database



The Success Stories aim at addressing communities outside the space sector to express their needs and to present their challenges.

Objective is to favour the integration of satellite-based solutions in their workflow.

Success stories will favour the dissemination of case studies and help connecting service providers and end users.

- Communication and digital society >
- Energy, infrastructure and utilities >
- Environment, climate and health >
- Maritime >
- Risk management and emergencies >
- Smart cities >
- Tourism, culture and leisure >
- Transport and logistics >



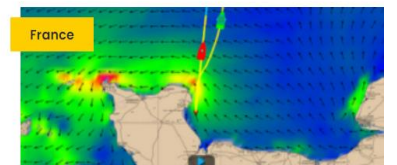
Montenegro: Protecting marine habitats thanks to a map based on satellite information



Lazio Region: supporting coastal zone management with geo-information services



Finland: All-year-round open ports due to efficient ice-breaking services



Weather4D: smooth seas and fair winds ahead with satellite technology



Sweden



Spain: Effect of construction work around the port area

# Thank you!

For more visit  
our website



## QUESTIONS?

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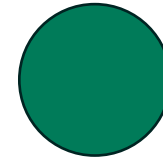
A top-down view of a dining table with numerous dishes. In the center, a person's hands hold a light blue ceramic bowl filled with a stir-fried dish, possibly chicken or pork, topped with shredded green onions and red chili. The background shows various other plates and bowls containing different types of food, including what looks like dumplings, vegetables, and sauces. The lighting is warm and slightly dim, creating a cozy atmosphere.

**Lunch break (12.15 – 13.00)**

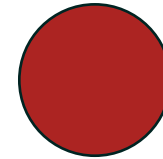


# 13.00 – 14.30: Time to grab a coffee, meet, greet, and network!

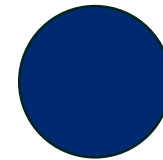
- EU Project Area in the back of the main room
- Supplier & Buyer Meet-Up Area in the Foyer
- Want some privacy? Plan your B2B meeting in the planner (separate rooms on the lower level)



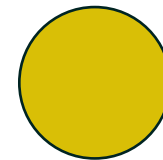
Corner 1 - PROTECT Team  
Foyer area



Corner 2 – Buyers  
Foyer area



Corner 3 – Suppliers  
Foyer area



Corner 4 - European Projects  
Main room



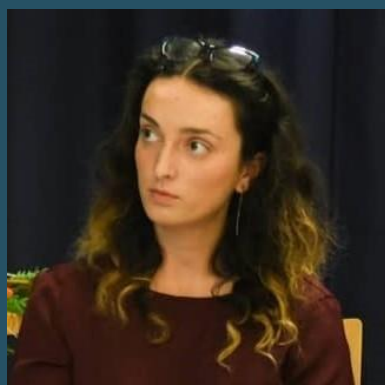
# Presentation of the PROTECT project and its Key Exploitable Results (14.30 – 15.30)



Marc  
Pattinson,  
Innovation  
Director at  
G.A.C. Group



Méliッサ  
Campagno,  
Innovation  
Consultant,  
G.A.C. Group



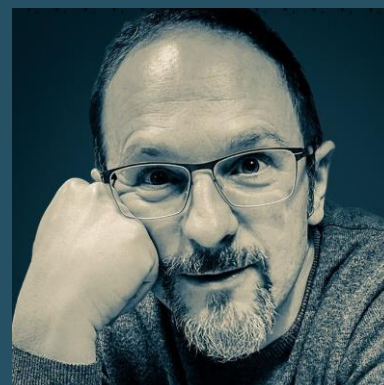
Ioana Rosca  
Space Project  
Manager,  
Aerospace Valley



Stefka  
Domuzova,  
Space Earth  
Observation  
Orchestrator,  
EIT Climate-  
KIC



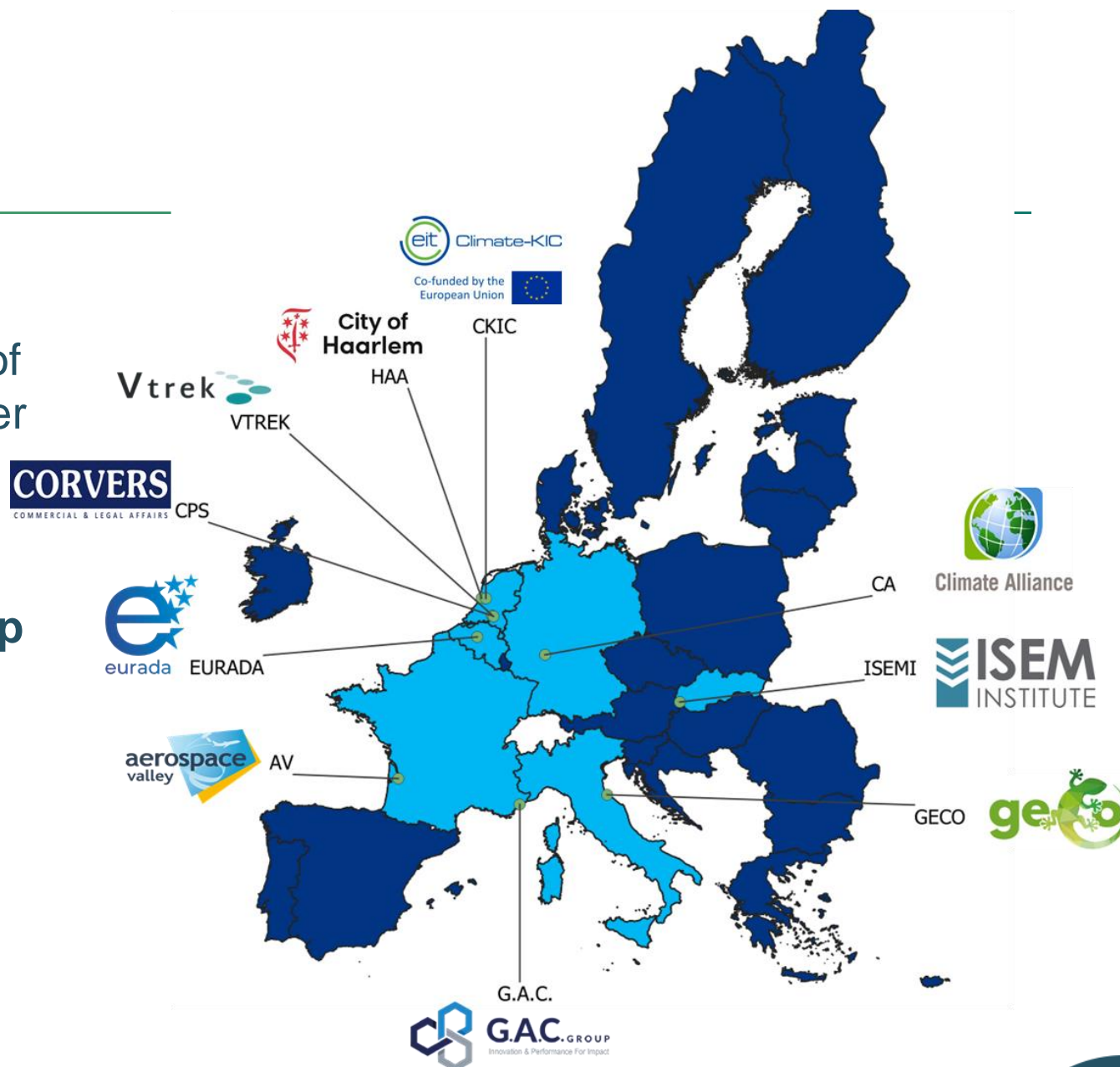
Matty van  
Sloten, Project  
Manager,  
Corvers  
Procurement  
Services



Paolo Mazzoli,  
Hydraulic and  
Flood  
management  
engineer,  
GECOsystema

# PROTECT ID Card

- PROTECT is a project funded by the European Commission in the framework of the HORIZON EUROPE programme under Grant Agreement Number **101060592**.
- Call info: [Link](#)
- PROTECT is coordinated by **G.A.C Group**
- **10** European partners
- Budget **2M€**
- Start: 1<sup>st</sup> of June 2022
- End: 31<sup>st</sup> of May 2024 (**24 months**)



# PROTECT in a nutshell

## WHY?

Fostering the response capacities and increasing the cooperation of European Public Buyers in EO and Climate Change adaptation and mitigation is of decisive importance for strengthening the climate resilience of European societies in the light of multiple climate hazards calling for close cooperation of public authorities.

## WHAT?

PROTECT is intended as a preparatory phase to a future PCP. It aims at defining the needs for Innovation Procurement (PCP action) as a means to develop new and innovative climate change adaptation solutions based on environmental observation (space, in situ, citizen observation).

## HOW?

PROTECT aims at creating a Pan-European network of local, regional and national level Public Buyers together with EO data and climate service providers, and any other relevant stakeholders in order to identify and tackle capability gaps and innovation needs to foster greater involvement of stakeholders in innovation procurement.

**Duration:** 24 months  
**Coordinator:** G.A.C. Group

**Start date:** 01.06.2022  
**End date:** 31.06.2024



# In case you did know not what PCP is...

## R&D Pre-Commercial Procurement (PCP)

**PROTECT**

0



1



2



3



**Public Procurement of Innovative Solutions (PPI)**

Supplier A,  
B, C or D  
and/ or X

Pre-Commercial Tender

Preparatory  
CSA

Curiosity driven  
research

Solution  
design

Prototype  
development

Tender for Commercial deployment

Operational  
testing

# PROTECT Concept & Timeline

**Collect & analyse** information and data about challenges and unmet needs, knowledge and capability gaps, and R&D initiatives to create a catalogue of innovative solutions in five application domains

**Advise** up to 8 public authorities with climate change challenges on climate services fit for them **& Provide** specifications about common requirements and technical tender documents for the procurement of R&D, ready-to-use by the upcoming PCP action and external procurers.

*Continuous*



**MAP & CONNECT**

**Map & connect** public buyers facing climate change challenges and unmet needs, providers of EO data and climate services, projects, networks and experts in the field to build synergies among existing actor constellations and initiate knowledge exchange

**COLLECT & ANALYSE**



*Dec 22*

*June 23*



**FINETUNE & AGGREGATE**

**Finetune & aggregate** public buyers' needs to select 4 priority challenges fit for the PCP project, organise 4 OMCs and further support the formation of consortia of buyers to prepare a PCP application

**ADVISE & PROVIDE**



*Sep 23*

*Continuous*



**DISSEMINATE & EXPLOIT**

**Disseminate** the project activities through continuous and multiple channels and communication means targeting practitioners and R&D providers from all over Europe **& Exploit** key project results

# Pre-Commercial Procurement Call



19M EUR fully funded by [Horizon Europe](#)



- Closed on: 28 February 2024 at 17:00 CET
- Expected start: Q4 2024
- Expected launch of PCP tender: Q2/Q3 2025

## Expected outcomes

- Customisation/pre-operationalisation of prototypes **end-user services** building on the Copernicus Services that respond to the common needs of a buyers' group (**up to TRL 8**);
- **Reduction of fragmentation** of the demand for innovative solutions by enabling public procurers to collectively implement a Pre-Commercial Procurement (PCP);
- New opportunities for wide **market uptake and economies of scale** for the supply side.



# Zoom on 4 Key Exploitable Results...



**Community of  
Public Buyers**



**Catalogue of  
EO-based  
climate  
service  
providers**



**Toolkit of  
resources**



**Guidance and  
recommendat  
ions for future  
action**

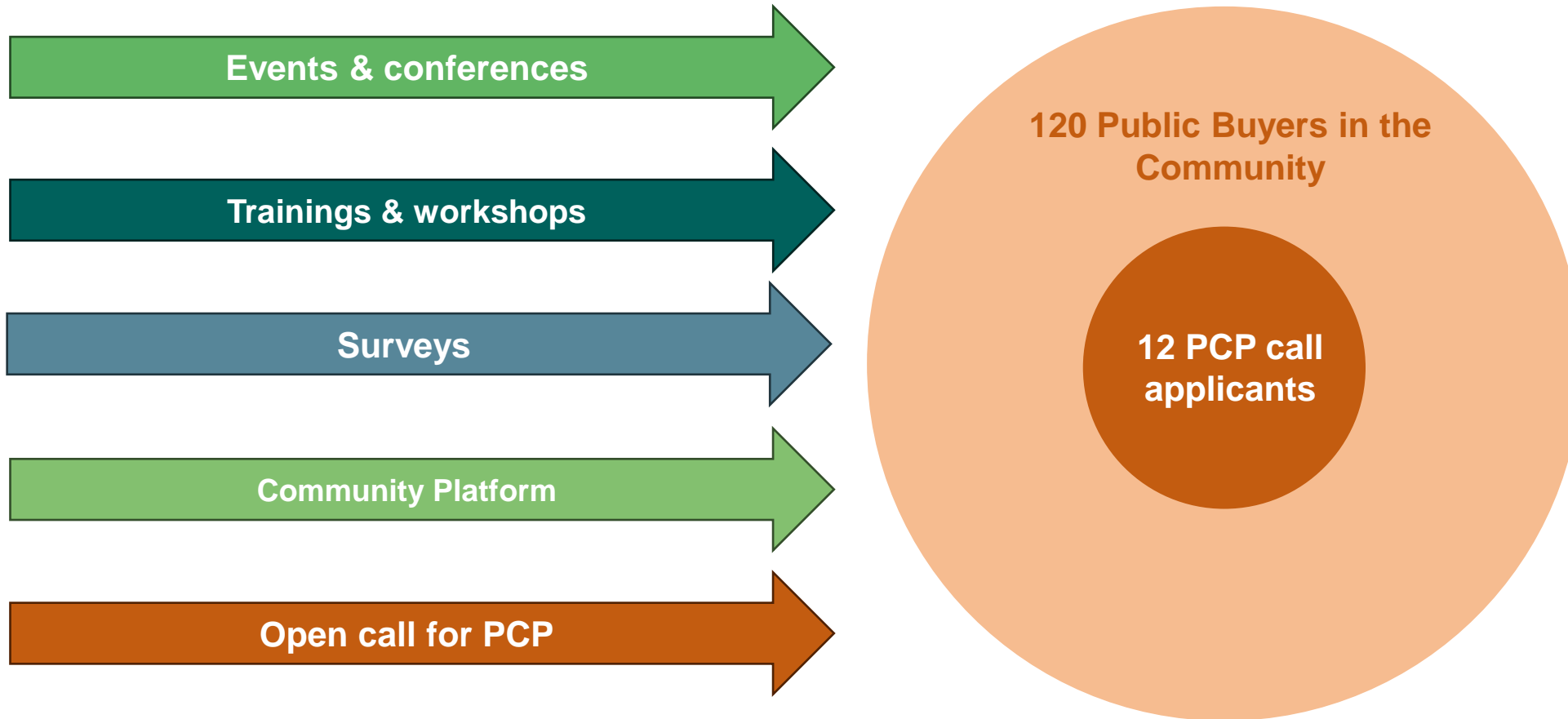
# The PROTECT “Community of Public Buyers”



Mélissa Campagno  
G.A.C. Group



# Creating the PROTECT Community

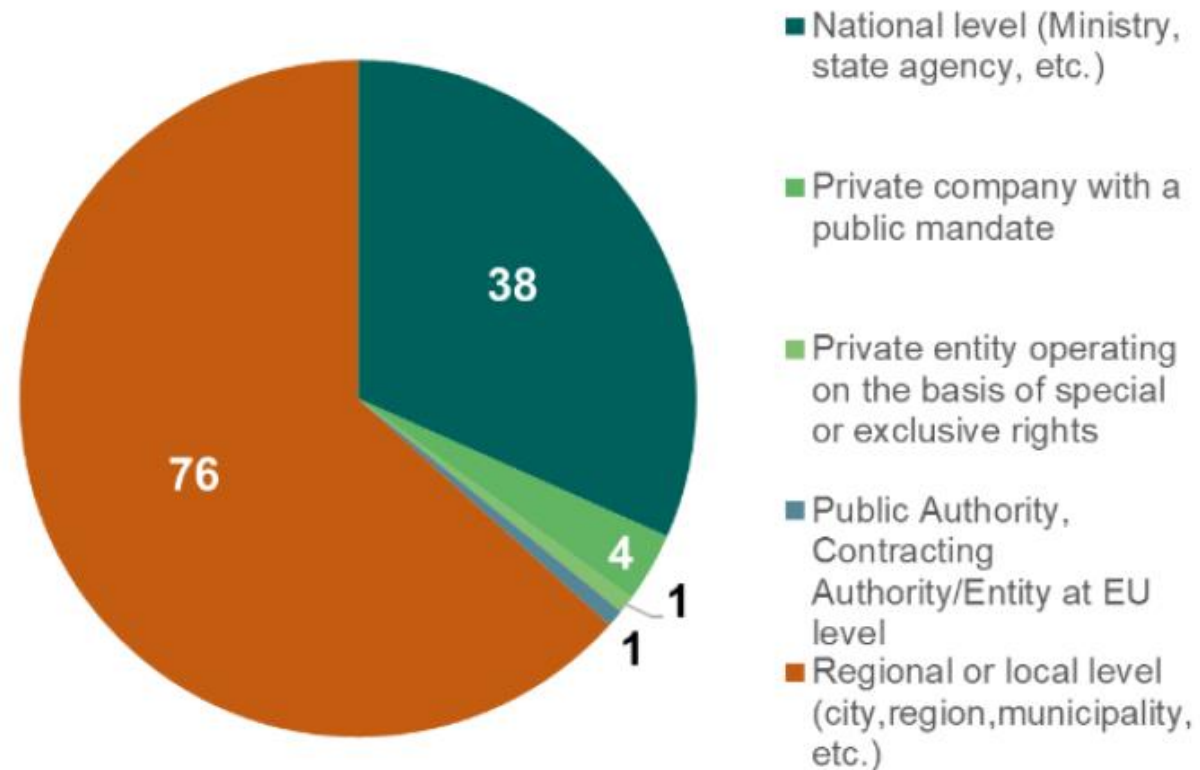




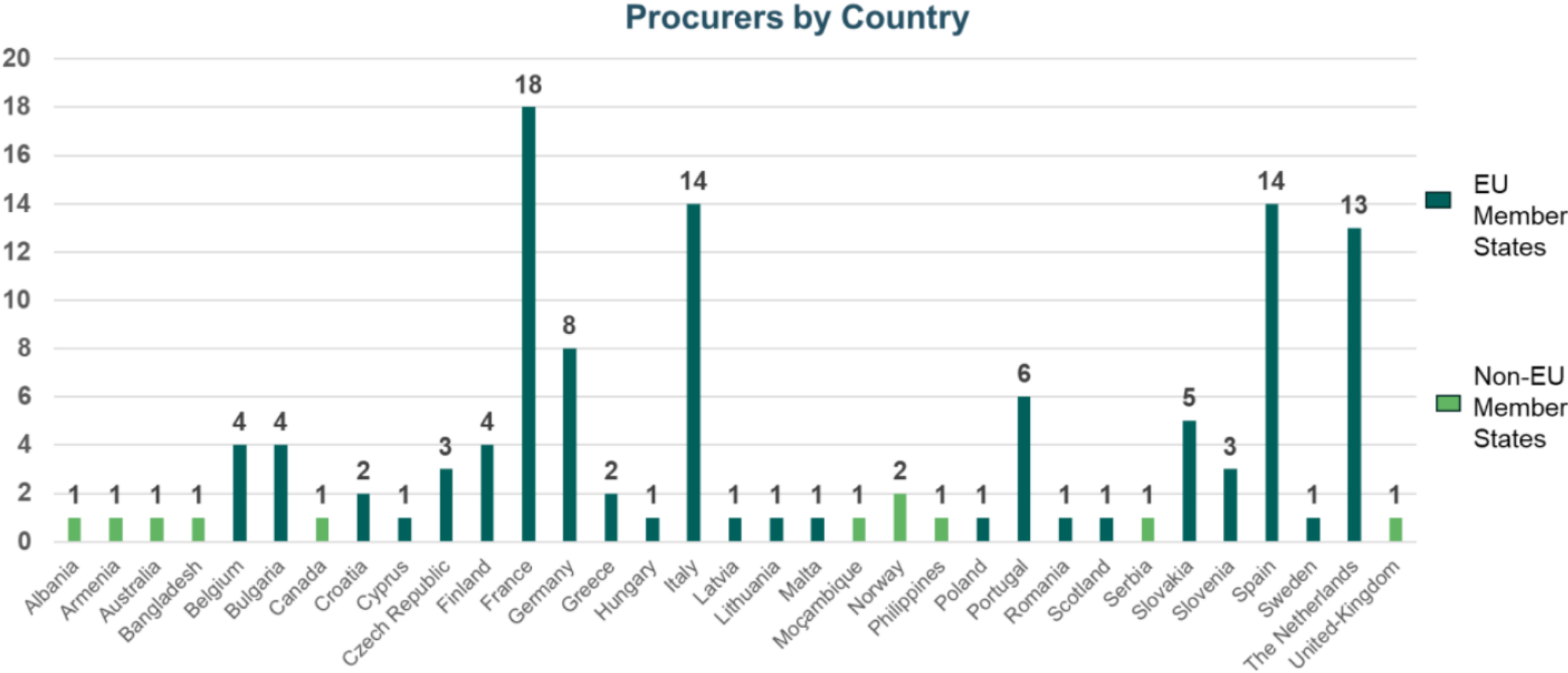
# Types of procurement organisations in the Community



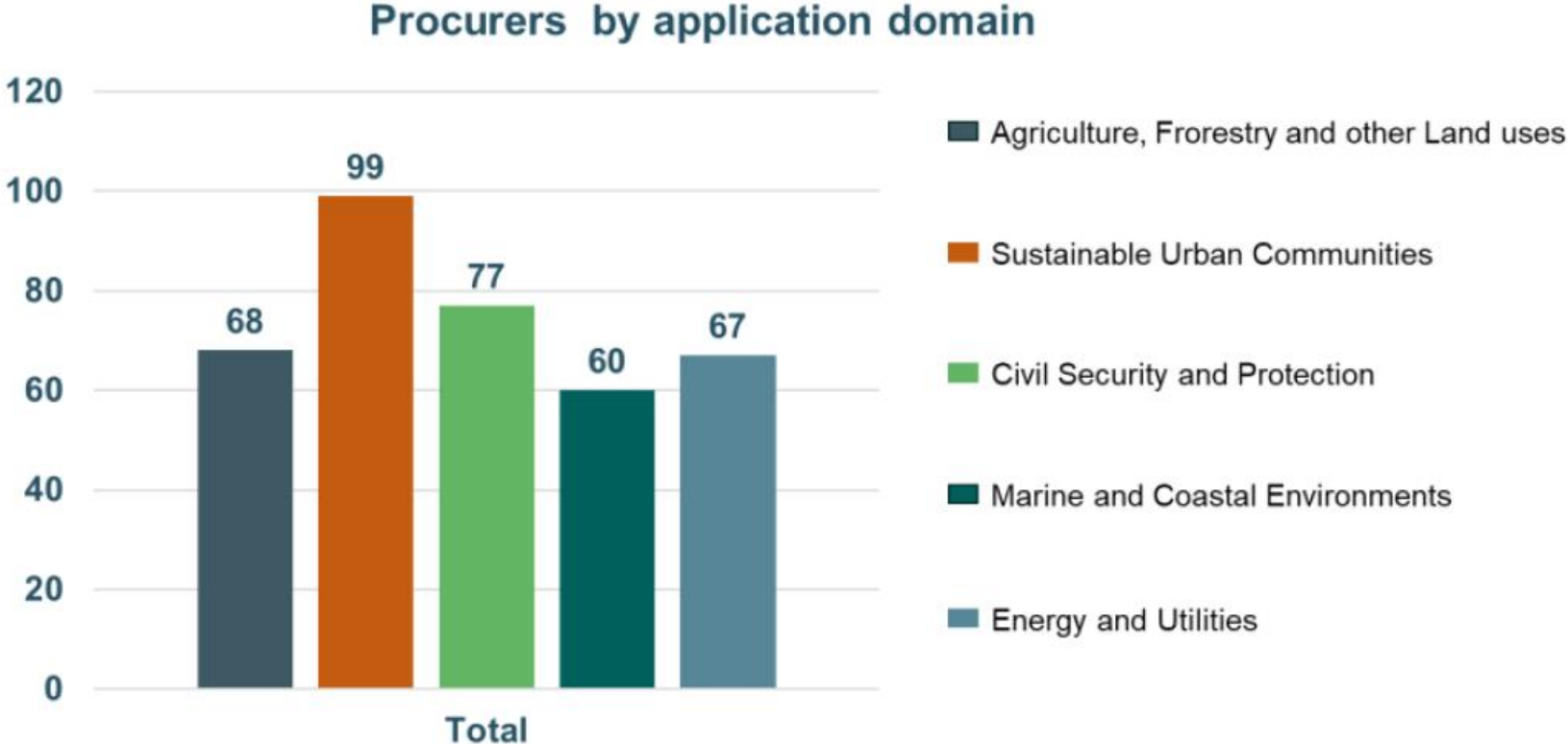
Procurers by organisation type



# Countries represented in the Community



# Buyers' interest in the 5 application domains





# What's next for the Community of Buyers?





**Assessment of the PCP WISE project application by the European Commission is expected for the end of June!**

Check the results on our website!

<https://www.protect-pcp.eu>

**Interested in joining the Stakeholder Observatory Group and follow the PCP's developments?**

**Let the PROTECT Team or PCP WISE Buyers know!**



# From a Buyers' Community to a wider and more inclusive Community



The screenshot shows the PROTECT Community platform homepage. At the top, there is a navigation bar with links for News, Directory, E-Catalogue, Discussions, Mapping tool, E-Library, and More. The main heading is "The PROTECT community platform". Below this, a paragraph states: "PROTECT seeks to support urgent action for climate adaptation and mitigation through innovation procurement procedures. It specifically aims to enable public authorities from different European regions to collaborate on a joint pre-commercial procurement." Another paragraph follows: "This platform aims at hosting the PROTECT community of public buyers and procurers and provide them with a safe and user-friendly space to learn, develop share and exchange ideas and good practices." Three buttons are visible: "Browse the directory", "See the priority domains", and "Register your organisation". Below these buttons, it says "or visit the PROTECT's project main website". A section titled "The platform in a nutshell" lists four features: Directory, E-catalogue, Mapping tool, and Forum, each with a brief description.



The screenshot shows the ENRICH Global Community Platform homepage. The browser address bar shows "egcp.enrich-global.eu". The main heading is "Communities for Global European Innovation". Below this, it says "Welcome to the Enrich Global Community Platform". A section titled "ENRICH GLOBAL AT A GLANCE" has the sub-heading "Building a future for innovation-related international collaboration". The text below states: "The objective of ENRICH GLOBAL is to contribute to the development of European scientific, technological and innovation excellence, reinforce innovation competitiveness and internationalisation and take European innovation global." There is a "More about Enrich Global" link. Below this, a "Your communities" section displays three community cards: PROTECT (22 members, active since February 2024), ROPHET (220 members, active since November 2023), and INPACE (3 members, active since April 2024). A fourth card labeled "TEST" is partially visible at the bottom.

<https://community.protect-pcp.eu>

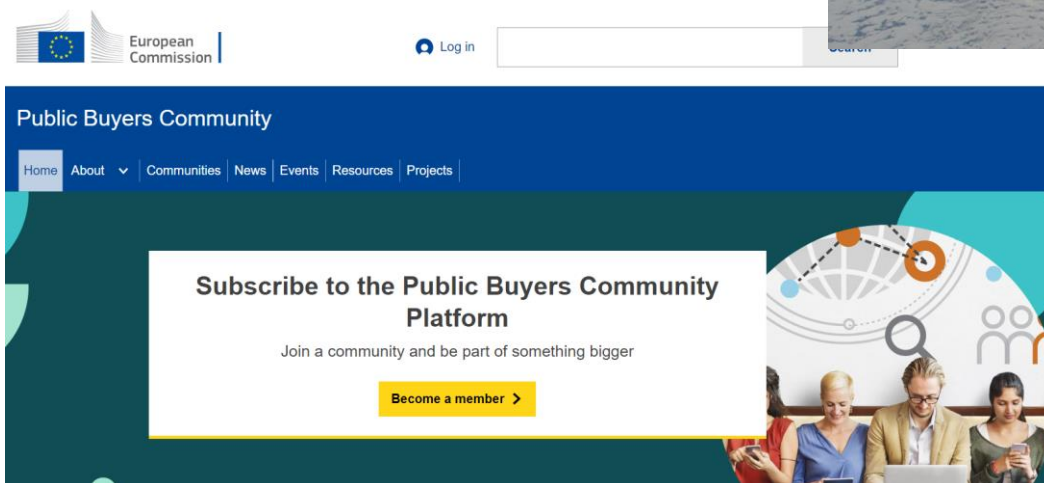
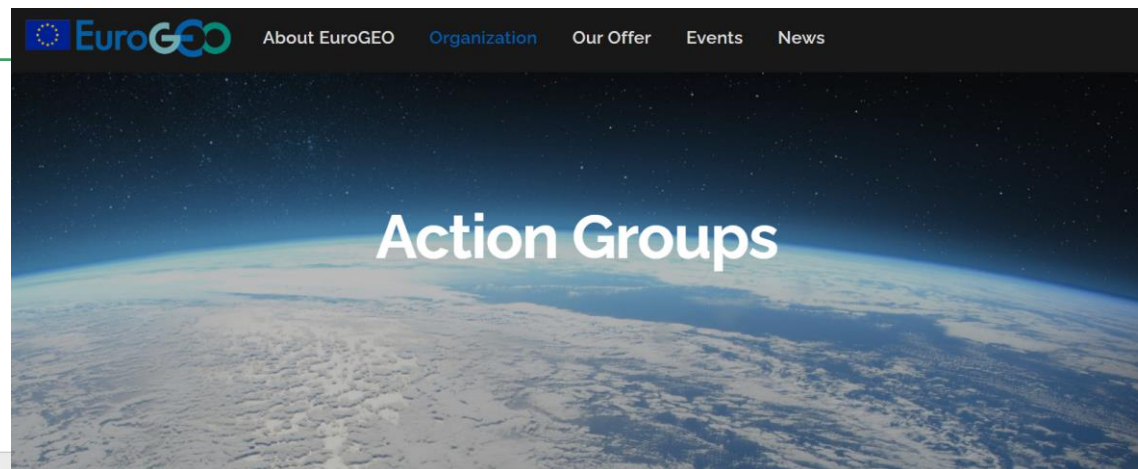
<https://egcp.enrich-global.eu>



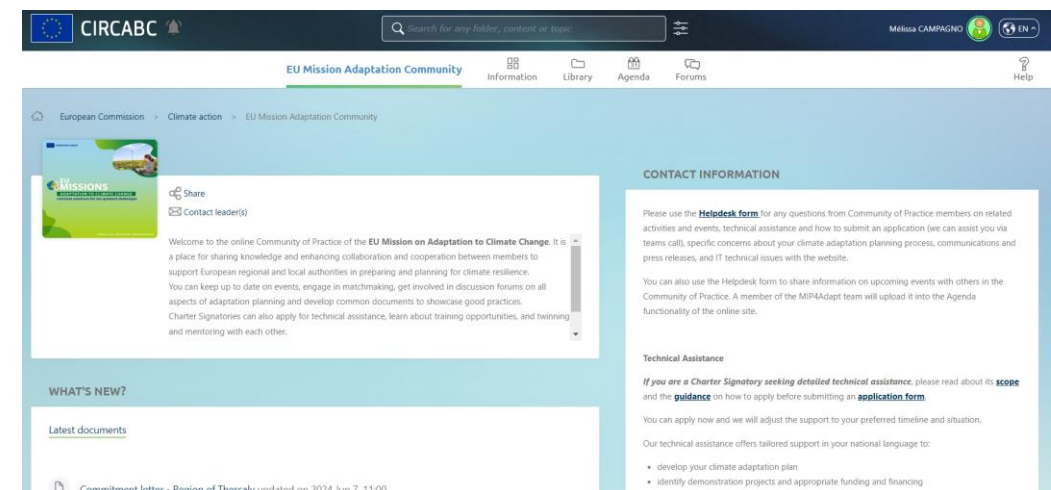
# Other relevant external Communities



## EuroGEO Action Groups



## DG GROW's Community of Public Buyers



## EU Mission Adaptation Community

## The PROTECT “e-Catalogue”



Ioana Rosca,  
Aerospace Valley



This project has received funding from the Horizon Europe Framework Programme (HORIZON) under grant agreement No 101060592

# Catalogue of EO-based climate service providers - Agenda



**1. Overview of the Key Results**



2. Methodology

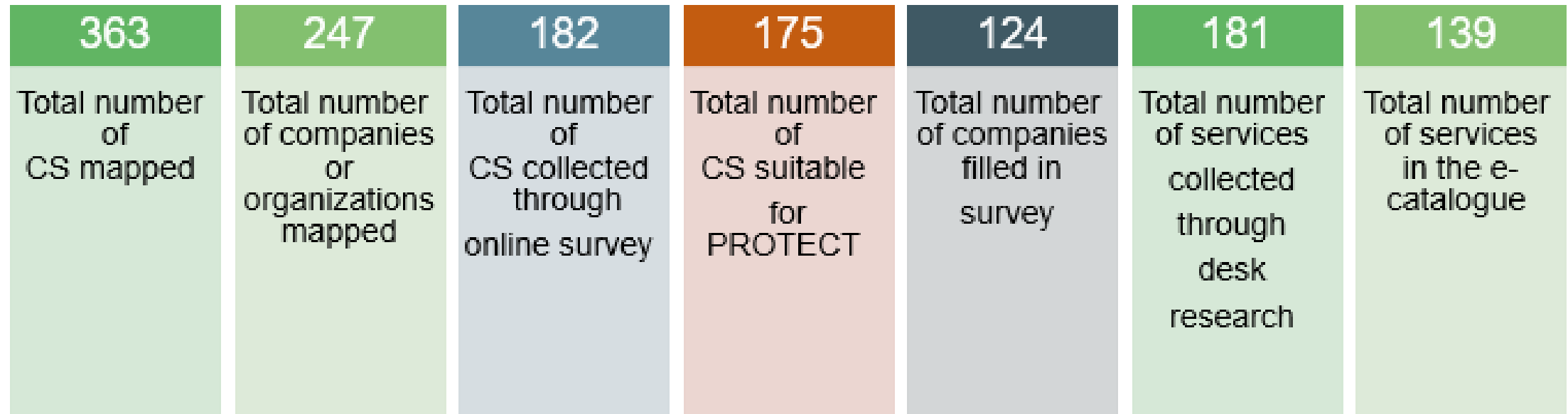


3. Expected value of the results and  
expected outcomes



4. Feedback

# Catalogue of EO-based climate service providers – Overview of the Key Results





## The PROTECT E-Catalogue

Keywords:

Technology used:

Domain:

TRL:

Country:

[Reset the search](#)

2 services have been found.

### EOMAP Water Quality Online

Company: [EOMAP](#)

TRL (Technology Readiness Level): [7](#)

Main domain: [Energy and utilities](#)  
 Sub domains: [Drinking Water](#)

Technologies used: [Satellites](#), [AI](#)  
 Satellite data used: information not available

#### Service description

- Operational Monitoring of reservoirs and river systems - Near-real time!  
 Baseline environmental information based on historical data

[More details on this service](#)

### Water detection

Company: [GeoScan GmbH](#)

TRL (Technology Readiness Level): [7](#)

Main domain: [Energy and utilities](#)  
 Sub domains: [Drinking Water](#)

Technologies used: [Satellites](#), [AI](#)  
 Satellite data used: information not available

Level): [7](#)

[ies](#)

[i](#), [AI](#)

## The PROTECT E-Catalogue

Technology used:

Domain:

TRL:

- All
- AI
- Aircrafts
- Drones
- Ground Truth Data
- Ground sensors
- IoT
- N/A
- Others
- Satellites
- VHR Data
- in situ

## The PROTECT E-Catalogue

Technology used:

Domain:

TRL:

Country:

[Reset the search](#)

- All
- Agriculture and forestry and other land uses
- Air quality monitoring in urban environments
- Aquaculture
- Biomass monitoring
- CAP monitoring
- Carbon capture & content assessment
- Civil security and protection
- Climate data and modelling for aquaculture
- Climate data and modelling for urban mobility monitoring and forecasting
- Climate services for agriculture
- Coastal Erosion from Space
- Critical infrastructure
- Crop yield forecasting
- Deforestation/degradation monitoring
- Detection of ground water sources
- Drinking Water
- Early warning
- Energy and utilities
- Environmental monitoring

time hy

management a

# Catalogue of EO-based climate service providers – Methodology



A combination of the following methodologies have been applied:

**Desk  
Research**

**Online  
Survey**

**Scouting/  
Interviews**

# Catalogue of EO-based climate service providers – Expected value of the results and expected benefits



Provide an overview to the stakeholders

Create awareness about PCPs among providers

Input for the State-of-the-Art Analysis and Open Market Consultations

Basis for the Orientation papers

# Catalogue of EO-based climate service providers – Feedback



Guide future  
public  
investments



Guide suppliers



Guide private  
investors



Data gap  
analysis



# The PROTECT Toolkit of resources



**Stefka Domuzova,  
EIT Climate-KIC**



# The PROTECT Toolkit of resources: from resources to toolkit



**CONTENT:** More than 50 PROTECT-made and other resources.

All resources that will compose the Toolkit are already or will be made available on the PROTECT website by the end of June 2024.

**FORM:** The toolkit already exists in a prototype “Booklet” version, soon to take the shape of an online platform.

**EXPLOITATION:** Imagine together how can different stakeholders be interested in using the Toolbox and supporting its partial/total uptake.



# Content: What have we produced to help public procurers (and not only!):



- The PROTECT taxonomy of climate services
- Analysis on the Market of CS/EO services in the 5 PROTECT domains
- Analysis of the perceived climate adaptation risks around Europe (per region)
- Analysis of national legal frameworks *vis-à-vis* innovation procurement
- Training webinars and materials on PCP, climate services, Earth Observation and the interaction of these – e.g. The PROTECT Training Curriculum and Painpoint workshops
- Policy briefs
- Other awareness-raising material (PROTECT-made and others)

All available at <https://www.protect-pcp.eu/relevant-resources/> & <https://www.protect-pcp.eu/downloads/>

# Format: PROTECT Toolkit of resources: where we started from?



## Webinars & Workshops

- > Open Market Consultation webinar#1 – FLOODS Challenge
- > PPT Presentation of the OMC on FLOODS challenge
- > Open Market Consultation webinar#2 – FIRES Challenge
- > PPT Presentation of the OMC FIRES challenge
- > Open Market Consultation webinar#3 – WATER Challenge
- > PPT Presentation of the OMC WATER challenge
- > Open Market Consultation webinar#4 – SUSTAINABLE INFRASTRUCTURES Challenge
- > PPT Presentation of the OMC SUSTAINABLE INFRASTRUCTURES Challenge
- > PROTECT PCP Introduction training : <https://youtu.be/vWRKY1sNw4B>
- > PROTECT Practical aspects of PCP : <https://youtu.be/Y7mVJDdrE0E>
- > PROTECT Matching climate services to climate targets and broader needs : <https://youtu.be/sQrrhbkcOw>
- > PROTECT Exploring the wide range and scope of climate services : <https://youtu.be/V8ChIOHL5ng>
- > PROTECT Online workshop SUSTAINABLE URBAN COMMUNITIES : <https://youtu.be/Upu93pnxx9I>
- > PROTECT Online workshop AGRICULTURE FORESTY AND LAND USE DOMAIN : <https://youtu.be/y7HFjeBDbYY>
- > PROTECT Online workshop ENERGY AND UTILITIES : <https://youtu.be/teADUwIkaXE>
- > PROTECT Online workshop MARINE AND COASTAL ENVIRONMENT: <https://youtu.be/amnlapsjwRY>
- > PROTECT Online workshop CIVIL SECURITY AND PROTECTION DOMAIN : <https://youtu.be/qLaaBcUaUo8>
- > Pain point workshop on FLOODS challenge – <https://www.youtube.com/watch?v=LoqkdneXF8>
- > Pain point workshop on FIRES challenge – <https://www.youtube.com/watch?v=WGcgwT878t0>
- > Pain point workshop on WATER challenge – <https://www.youtube.com/watch?v=KCUn8QKcnAg>
- > Pain point workshop on INFRASTRUCTURES – <https://www.youtube.com/watch?v=nDW41jC5POg>
- > e-pitching session Briefing event: <https://youtu.be/F28ZaDLwznY>

## Documents

- > Cross-cutting analysis of drivers and barriers of the demand for climate services in the EU (Project deliverable)
- > Open Market Consultation FAQ
- > Open Market Consultation Report
- > Overview of the four selected challenges for the PCP
- > PROTECT's 10 online trainings and accompanying material
- > Analysis of climate challenges in European regions
- > Cross-analysis of climate services and barriers into potential PCP topics
- > Innovation friendly legal frameworks to implement Innovation Procurement\_for upload
- > One pager – Climate change adaptation and mitigation
- > One pager – How EO services contribute to climate change adaptation and mitigation
- > Preparing a Pre-Commercial Procurement- Needs identification and assessment using value methodologies
- > Prospective Article – Energy and Utilities
- > Prospective Article – Marine and Coastal Environment
- > Protect Taxonomy
- > Relevant EUROPEAN policies for PROTECT
- > What is innovation procurement
- > PROTECT\_Pain\_Point\_Fall Presentation
- > Package of 10 Policy Briefs



# Format:PROTECT Toolkit of resources: inspirations we followed

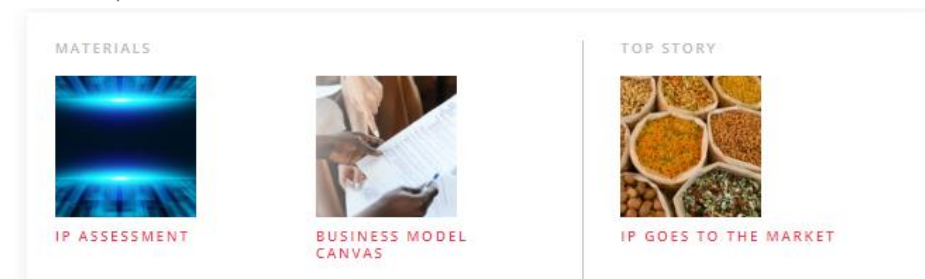


PROCEDIN Resource Library

## ▸ From prototype to market-ready service

So, you have your minimum viable product and are now on the verge of diving into the market. One, two, three... three...? Well, it is not as easy.


This is where solid business planning and market exploration are required. Developing a business model based on a unique value proposition in conjunction with a market analysis and/or competitive analysis helps in paving your way towards commercialisation and beyond. To make things work you will need to **consider the IP aspects**. Which assets are protectable and is protecting them with an IP right the way to go in every specific case? (e.g., patent vs trade secret). You will also need to consider the **legal aspects** of founding and running a company. While **procedures vary among countries**, many have encouraging conditions for young technical start-ups (such as favourable tax regimes, financing and even acceleration/incubation support schemes).



























e-shape Sustainability Booster

# Format:PROTECT Toolkit of resources: pre-final results



 **Awareness raising**

#	Resource Title	TARGET AUDIENCES	THEMATICS	PROTECT RESOURCE
#1	<b>Analysing climate challenges in European regions</b> Snapshot mapping of the main climate issues at regional level in several European Member States and across PROTECT's five application domains, with a focus on adaptation and resilience challenges.	 		
#2	<b>Cross-analysing climate services and barriers into potential Pre Commercial Procurement topics</b> The document cross-analyses the outcomes of several other tasks (focused on climate legislation, perceived regional climate risks, national PCP policies and others) to recommend possible topics for future PCPs.	 	   	
#3	<b>Summary of outcomes and conclusion of the PROTECT cross-analysis</b> A summary of the outcomes and conclusion of the cross-analysis conducted to identify drivers and barriers of the public demand for EO-based climate services	 	   	

 Public authorities  
  Services providers  
  Innovation procurement  
  Climate change adaptation and mitigation  
  Earth Observation  
  Climate services

PROTECT • Toolkit of resources 6

Extract from the PROTECT Toolkit booklet, fully accessible here:



# Thank you!



The PROTECT Toolkit booklet is fully accessible here:



# Guidance & Recommendations for future action – Part 1 PCP challenge & Procurement strategy



**Matty Van Sloten**  
**Corver Procurement**  
**Services**



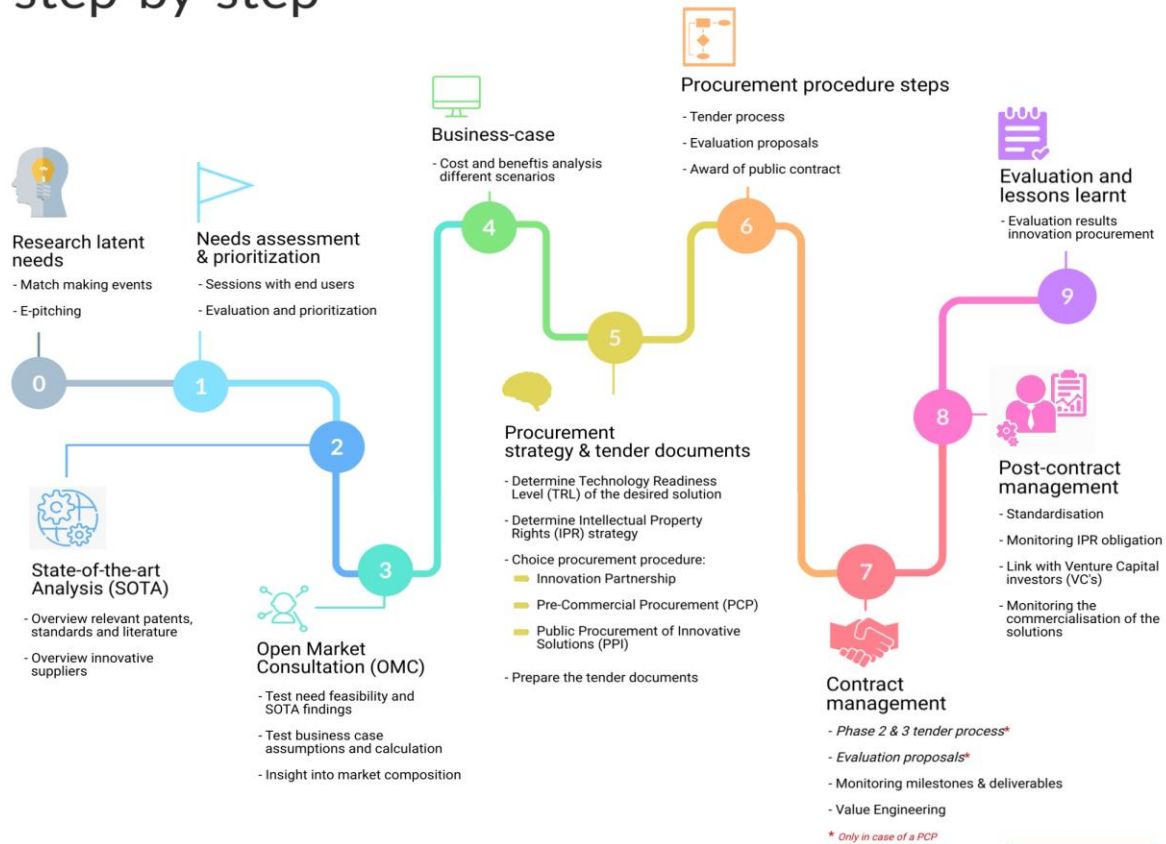


# PCP Challenges & procurement strategy

- **The 4 challenges and how did we get to them**
  - Needs definition, assessment & prioritisation
  - Market research: State-of-the-Art Analysis & Open Market Consultation
- **Next steps**
  - Business Case
  - Procurement Strategy
- **Recommendations for future PCP**

# Preparatory activities - using the EAFIP Methodology for Innovation Procurement

## EAFIP methodology step-by-step



CREATED BY CORVERS PROCUREMENT SERVICES BV



- Use of Value and LEAN methodologies for the assessment of functional needs.
- Understanding the "as is" situation and the "desired" situation.
- Identification and description of use cases with end-users.
- Definition of a procurement strategy based on the TRL of solutions and the feedback from the market.
- IPR management in a PCP.

# Needs identification & assessment

## Value engineering approach - 3 stages:

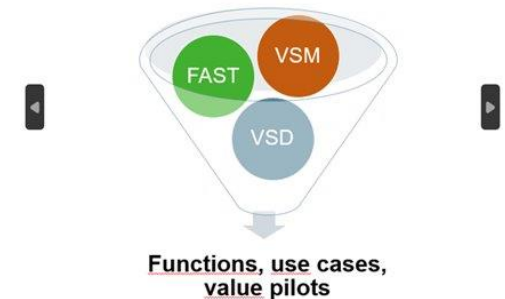
1. Pre-study (including surveys and desk research);
2. Workshops (pain point workshops and consultations)
3. Post-study (analysis and recommendations for the implementation of innovation procurement approaches).



## 5 Pain point workshops - value techniques used to:

- Describe the scope of problems
- Develop use cases & functional requirements
- Describe the present state & the desired (wished) future situation

### Value methodologies used in pain point workshops



One workshop per application domain:



# Needs prioritisation

From 7 challenges

→ *4 challenges selected*

## Criteria:

1. commitment to lead a buyers group
2. interest of public buyers
3. genuine need to solve a problem as part of the strategic plan of an organization
4. expected impact of EO and CS on several sectors
5. technology readiness level (TRL) (COTS available or room for innovation?)
6. EU wide network, interregional cooperation and cross-border interest.

## 1 FLOODS CHALLENGE

Rapid mapping, predicting, preventing different types of floods and improving coordination efforts, relevant to marine and coastal environments, sustainable cities and civil protection and security agencies.



## 2 FIRES CHALLENGE

Predicting, preventing fires, tracking and tracing causality (causers) in different scenarios (waste, forest/nature, other), relevant to environmental agencies, sustainable cities, agriculture, forestry and land use, as well as for civil protection and security agencies.



## 3 WATER CHALLENGE

Climate resilient solutions for predicting, connecting data, planning, supply-demand, relevant to the application domains marine and coastal environments, energy and utilities, sustainable cities, agriculture, forestry and land use, as well as for civil protection and security agencies.



## 4 INFRASTRUCTURE CHALLENGE

Sustainable and resilient re-development, restoring & adaptation of existing neighbourhoods, relevant to sustainable cities and regions, energy and utilities and civil protection and security agencies.





# State-of-the-Art (SOTA)

## 3 activities SOTA:

1. Analysis of the Intellectual Property Rights (IPR), listing the existing patents and standards
2. Mapping of the Commercial-Off-The-Shelf (COTS) products
3. Analysis of the material collected, translating this into a list of technologies and assessment of the TRL level of these technologies.

## **Conclusions:**

- Providers' most used COTS products are open data platforms such as Copernicus.
- There is research going on in fields related to the 4 challenges and solutions *tackling some but not all* of the functionalities defined under each of the challenges.
- There are currently no relevant standards for the four challenges.
- A number of products are available in the market but they can only partially address the gaps and needs of the procurers.

# Open Market Consultation (OMC) Results

## OMC Activities:

- 4 OMC webinars
- A request for information through an EU Survey questionnaire
- Other activities & questionnaires – incl. publication Q&A document

## OMC performed for the 4 identified challenges

The OMC confirmed the initial assumptions that the functional requirements of the four challenges cannot be tackled by one solution and that R&D efforts are required to address existing technology gaps. **Hence – there is room for innovation.**

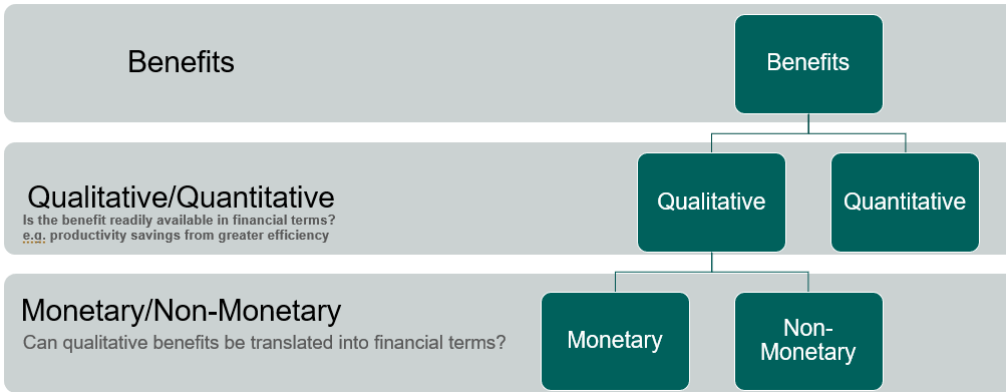
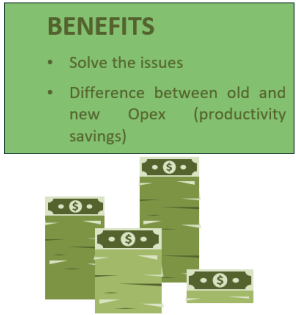
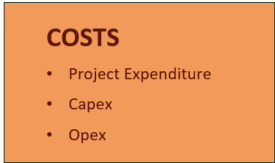
Note – a returning input in the providers questionnaire results was that several providers pointed out that there was room for innovation in the area of:

- combination and/or integration of data / databases
- combination and/or integration and/or merging of applications
- making currently available information more accessible and interchangeable



# Business Case Development

- 1 Business Case per challenge performed – outcome for all = positive
- Based upon the outcomes of the SOTA & OMC and on the public buyers’ prioritised unmet needs (and specific technology gaps) to organise the PCP and achieve the underlying objectives while keeping the costs and risks to an acceptable level
- A baseline has been drawn on a layered approach and common taxonomy to collect water related data, develop comparative alternatives based on desired functionalities and outcomes and Total Cost of Ownership (TCO) calculations
- Translated into the Procurement Strategy



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From 7 challenges

→ *4 challenges selected*

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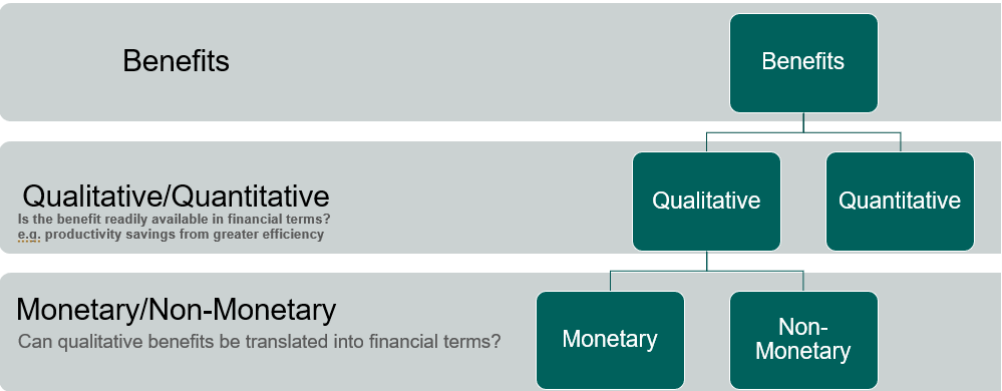
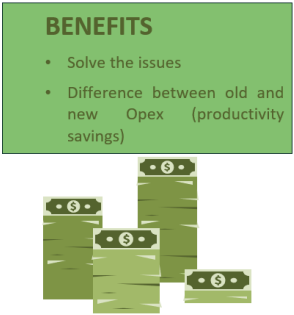
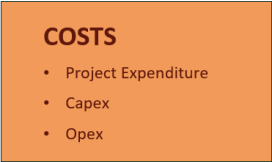
Note – a returning input in the providers questionnaire results was that several providers pointed out that there was room for innovation in the area of:

- combination and/or integration of data / databases
- combination and/or integration and/or merging of applications
- making currently available information more accessible and interchangeable



# Business Case Development

- 1 Business Case per challenge performed – outcome for all = positive
- Based upon the outcomes of the SOTA & OMC and on the public buyers’ prioritised unmet needs (and specific technology gaps) to organise the PCP and achieve the underlying objectives while keeping the costs and risks to an acceptable level
- A baseline has been drawn on a layered approach and common taxonomy to collect water related data, develop comparative alternatives based on desired functionalities and outcomes and Total Cost of Ownership (TCO) calculations
- Translated into the Procurement Strategy



# Procurement Strategy Design

The scope of the four (4) challenges and use cases was reassessed based on the OMC results and the discussions held with public buyers committed to implement a PCP.

Result: selection of **one overarching Water (management) challenge clustering different use cases**.

**The aim is an integral assessment of day-to-day SWVA conditions with space-based value chains based on local/central knowledge (AI, EO-Inversion/hydrological modelling, etc.)** to provide a first basis of local water intelligence for the use case stakeholders.

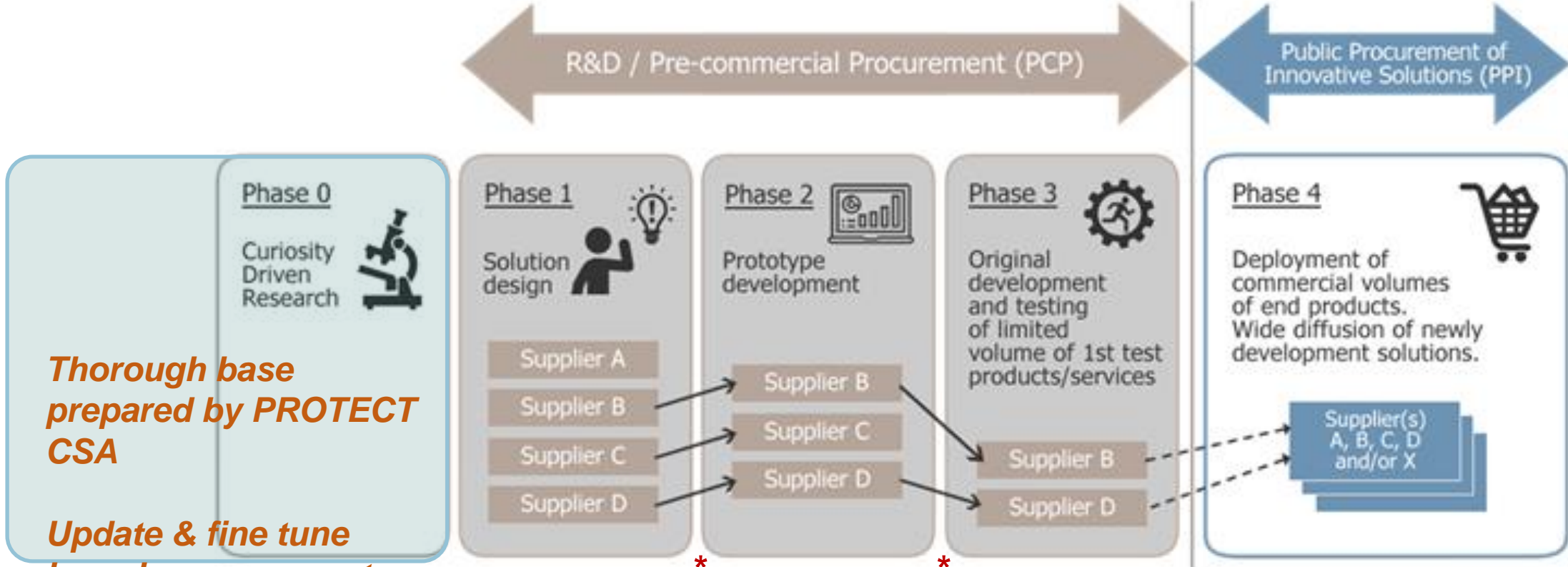
Current assessment:

In principle, the four challenges identified are suitable for a **PCP approach** followed by a PPI for the deployment of the solutions developed in the PCP.

However, it is important to:

- obtain a more detailed assessment of the specific technology gaps to be addressed by the R&D efforts, which will be provided by the final results of the SOTA analysis, and
- to have a clear cost/benefit analysis of addressing those gaps regarding the value that the functionalities would provide to the public buyers in terms of the impact of the (to be developed) climate services and EO applications, which will be based on the business case.

# Next steps



*\* Mini-competition with evaluation process to select suppliers for the next phase.*



# PCP recommendations

## Bridge, built upon and update (preliminary) results and findings from PROTECT CSA

- Challenges & use cases descriptions → *fine tune use cases (depending on actual public buyer(s))*
- Providers questionnaire input → *take into account*
- Results SOTA → *update SOTA*
- Results and input given in the Open Market Consultation → *perform new OMC*
- Business Case → *update Business Case*
- Preliminary Procurement Strategy recommendations (from Orientation Paper) → *take into account*

# Guidance & Recommendations for future action – Part 2 Pilot activities



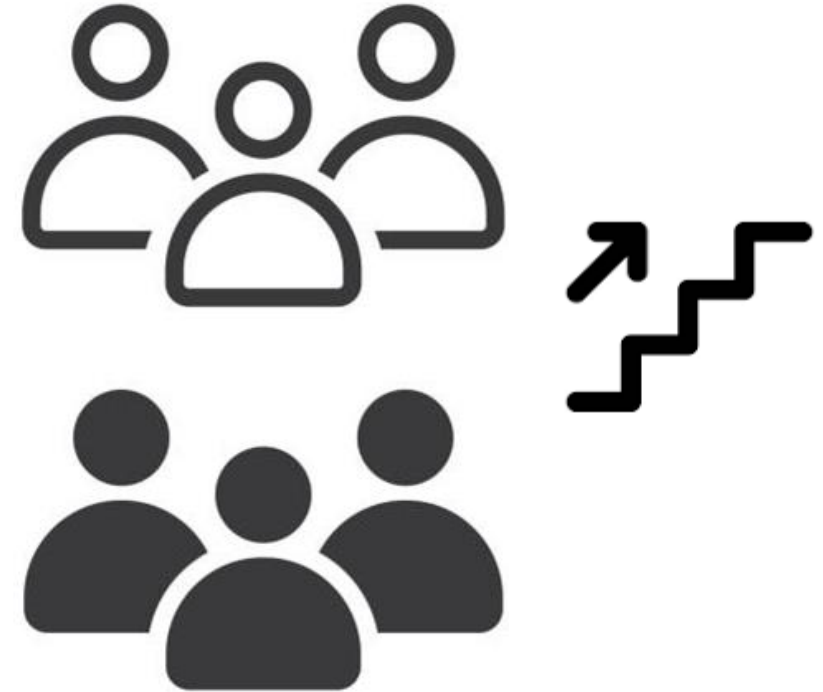
**Paolo Mazzoli**  
**GECOsystema**



# On-demand consulting activities – Guidance & recommendations for future action



- A step-by-step approach:
- Step 0 Find Pilots among participants/strategy
  - Step 1 Framing Questionnaire
  - Step 2 SWOT Analysis by pilot members
  - Step 3 Going deeper with Face 2 Face



# Step 0 Find Pilots among participants and setting up the strategy



*Selections criteria for PILOT Selection  
webinar attendance*

*Diversification of public/private  
status, size, regulatory context,  
climate, environmental impact  
strategy, geographical areas,*

*application domain*

*Level of engagement*

*....*



- [ARPA Lombardia](#)
- [Ayuntamiento de Las Rozas de Madrid](#)
- [Het Waterschapshuis](#)
- [Region of Central Macedonia](#)
- [Emilia-Romagna Region](#)
- [Barcelona Provincial Council](#)



*Strategy shared  
with the set of Experts  
(CKIC, CORVERS, HAA ) in  
PROTECT*

- Framing –SWOT*
- On demand sessions  
-analysis and lessons  
learned*

# Step 1 Framing Questionnaire



PROCURING INNOVATIVE CLIMATE

Sezione 1 di 6

## On Demand Consultancy - framing of needs

Welcome to the first part of the On Demand Consultancy, designed to assess climate services (CS) needs, and develop an integrated approach to their strategy.

We will define with you the Innovation Procurement approach from an EU administrative issues, technical assessment, sustainability, and innovation when **public buyers** acquire the **development or deployment of pioneering specific mid-to-long term public sector needs**.

By answering this questionnaire you will provide us with initial information on your organization and your concrete need(s).

### The Context



PROTECT Final Event

### Topic 1 - Innovation Procurement Expert Consultancy (By [Corvers](#))

Based on the feedback in this section, Corvers will assess how available innovation procurement legal instruments could apply to your specific case. Alternative scenarios and the procurement strategy including Intellectual Property Rights (IPR) will be analysed.

TRL related procurement strategy



### Topic 2 - Climate Service Technical Assistance (by [GECosistema](#))

Descrizione (facoltativa)

In these sections you will reflect on technical needs of the of CS such as functional data needed, temporal and spatial resolution, graphical user interface, operational de



Sezione 4 di 6

### Topic 3 - Responsible and Sustainable Procurement Practices (by [HAA](#))

What practical examples on Responsible, Innovative and Sustainable Public Procurement could you help to undertake Procurement on Climate Services?

examples:

- "climate adaptation of new buildings"
- "climate adaptation of new to develop urban area"
- ...

please add your free answer hereafter \*

Testo risposta lunga

Dopo la sezione 4 Continua alla sezione successiva

Sezione 5 di 6

### Topic 4 - Addressing climate change through innovation (by [CKIC](#))

The following section aims at gathering information on how are climate needs addressed and perceived along the whole structure of your organisation.

11/06/2024

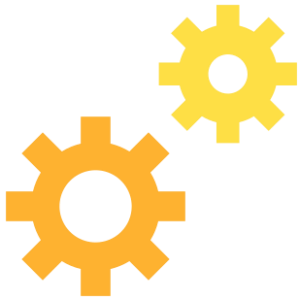


# Broader outcomes



Prioritize and Specify Needs

Explore Innovation Procurement



Engage in Technical Planning

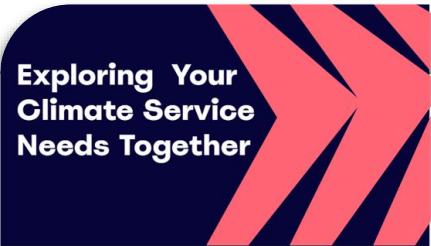
Strategic and Budget Planning



Utilize Available Platforms and Communities



# Step 2 SWOT analysis



**Overview**

Our Miro board is a collaborative platform that contains essential information about your pilot, the climate services criteria, and the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis. This exercise will help you become familiar with the content, enabling more in-depth discussions to be further refined in F2F meetings you may require at your convenience.

At the beginning you will find a brief overview of your Climate related challenge we understood from your answers to the framing questionnaire, feel free to modify it.

Pilot XX

short description of the CS needs from the framing questionnaire

your CS identified : <https://@@@>

Criterion xxx

At the beginning you will find a brief overview of your Climate related challenge we understood from your answers to the framing questionnaire, feel free to modify it.

**Practicalities**

**How to Navigate the Miro Board:**

- **Move & Zoom:** Use the arrows and the zoom tool to drag and move across the board. You can also zoom in/out with your mouse's scroll wheel.

**Explore Your Pilot Information:**

- **Start by locating and reviewing the brief description of your pilot on TOP of the board.** This section provides insights into your specific climate-related challenges and goals to understand if we are on the same page. Please change this description at your convenience.

**Discussion & SWOT Analysis Tips:**

- **3. Dive into the Criteria:**
  - navigate to the criteria sections where you will find four key criteria that we have prepared to analyze your climate service needs. Take some time to read through each criterion and understand its relevance.
  - We are using the provided SWOT questions to guide the reflection around each criterion for the example Climate Services you selected (your CS).

**Note Your Initial Thoughts:**

- Jot down any initial thoughts or questions that arise as you explore the criteria. Use sticky notes.

**An In-depth discussion may follow at your convenience.**

Our aim is for you to gain a clearer understanding of your Climate Service (CS) needs and Pre-Commercial Procurement (PCP) through this Miro board; should you find it beneficial, you can add a follow-up online face 2 face session later on with our experts to delve deeper.

**At The end**

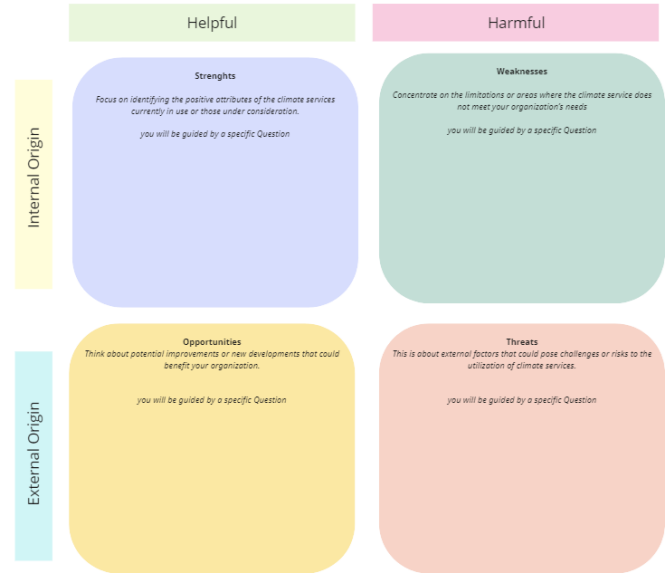
At the end of each session, please set aside a moment to ponder the key insights and knowledge you've acquired. This reflection helps grasp the direct and broader impact of your analyses on your procurement strategies.

Consider sharing your main takeaways or insights from the session. Focus on aspects related to the climate services explored, the findings from the SWOT analysis, or any new perspectives on your strategy for procuring innovative climate services.

## Criterion xxx Example

The SWOT scheme is a strategic planning tool used to identify and analyze Strengths, Weaknesses, Opportunities, and Threats related to project management, decision-making, and strategic planning.

- Strengths Section:**
- "Under 'Strengths', identify and note the advantages and positive aspects your organization could experiences with the climate service. Consider what is working well and how the service aligns with your goals. Reflect on the specific functionalities that give your organization a competitive edge or operational efficiency."
- Weaknesses Section:**
- "In the 'Weaknesses' area, address any shortcomings or areas where the climate service does not meet your needs. Think about any gaps, limitations, or aspects of the service that could be improved to better support your organization's objectives."
- Opportunities Section:**
- "The 'Opportunities' field is for potential improvements or favorable external conditions that could be capitalized on. Look into future trends, emerging technologies, or untapped data sources that could enhance the climate service's usefulness for your organization."
- Threats Section:**
- "On the 'Threats' side, consider external challenges or risks that could impact the effectiveness or viability of the climate service. This might include regulatory changes, technological advancements among competitors, or environmental and market variability that could pose a risk."



Final Free style insights and reflections

- is there one or more key takeaway or insight from the session? This can be in relation to the climate services discussed, the SWOT analysis findings, or any new perspective you've gained regarding the procurement strategy of innovative Cs
- How do you envision implementing your procurement strategy? What challenges or hurdles do you foresee? Any idea on how to overcome these challenges?
- Are there areas or topics You'd like to delve deeper?
- When do you expect to start your procurement?

**At The end**

At the end of each session, please set aside a moment to ponder the key insights and knowledge you've acquired. This reflection helps grasp the direct and broader impact of your analyses on your procurement strategies.

Consider sharing your main takeaways or insights from the session. Focus on aspects related to the climate services explored, the findings from the SWOT analysis, or any new perspectives on your strategy for procuring innovative climate services.

# SWOT broader outcomes



Leverage Cross-Sector Collaboration

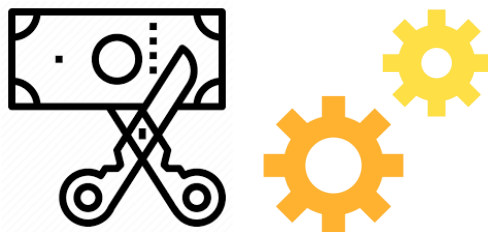


Focus on User Needs and Interface



Data Quality and Integration

Anticipate Regulatory and Technological Changes

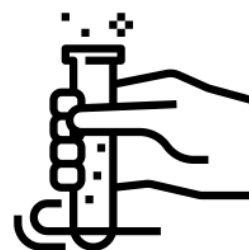


Address Budgetary and Technical Challenges

# Face 2 Face meetings (partial) outcomes



The integration of ground and satellite data



Pilot Testing as a Crucial Step



User-centric Design for Climate Services

Leverage Cloud Computing for Data Management



EU funding for collaborative testing



# 16.00 - 17.00: Panel discussion 4: From PROTECT CSA to PCP WISE

Moderated by Matty van Sloten, Corvers Procurement Services



**Hans van Leeuwen**  
SATWATER Program  
Leader at **STOWA**



**Valentina Schippers**  
Chair of the Urban  
Agenda Partnership for  
Innovative and  
Responsible Public  
Procurement, **City of  
Haarlem**



**Martin Tuchyna**  
GeoICT & Environmental  
infrastructure coordinator  
at **Slovak  
Environmental Agency**



**Hugo Goncalves**  
Senior Development  
Manager and Head of  
EU R&I collaboration at  
**Forum Virium Helsinki**

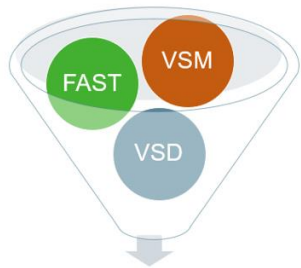


# From PROTECT CSA to PCP-WISE

## 5 Application domains



## Value methodologies used in pain point workshops



## Functions, use cases, value pilots

As is (present) situation	Step 1	Step 2	Step 3	Step 4	Step 5	Desired dreamed (future) situation
<p>The demand for sweet water is unpredictable. The supply and demand of sweet water is not connected. There are regulations determining the use of water from channels, treated water from the sewage and drinking water (in each EU Member State). There is no common language among different stakeholders in the water cycle chain. There is a lot of data in certain regions but the data hubs or repositories are not connected.</p>	<p>1. Understand what is happening at present and the mechanisms in place (also from a policy perspective). Learn how the problem of drought regarding supply and demand of water is addressed, to define the type of new services that support coping with stress situations based on a common language. Understand which are the relevant responsible public authorities and users. Also, identify the data gaps.</p>	<p>2. Develop a system that combines data and uses AI for modelling.</p>	<p>3. Use database driven solutions to improve the distribution of water (e.g. identify saline concentration, pollution, substances, algae, etc.).</p>	<p>4. Provide information to water authorities that need to know how to collect, when and how to distribute water (treated in a certain way) to supply the specific demand, and avoid discharging sweet water.</p>	<p>5. Build a resilient system where different stakeholders (water companies, farmers, industry) cooperate during drought.</p>	<p>The demand for sweet water is predictable. The regulatory landscape and policies are clearly defined. The system can cope with stress situations based on data for informed decision making and interventions. Supply and demand for sweet water are connected based on needs of diverse users (e.g. farmers, companies, industry) and the understanding on the conditions and water quality required for different purposes. Decision and guidance from a policy perspective is achieved to understand the consequences and combine relevant data in the whole water chain cycle under a taxonomy.</p>
<p>Keywords: Drought, AI for modelling, data combination, water demand and supply connection, water quality, distribution.</p>	<p>Keywords: Drought, AI for modelling, data combination, water demand and supply connection, water quality, distribution.</p>					<p>Keywords: Drought, AI for modelling, data combination, water demand and supply connection, water quality, distribution.</p>

## PROTECT CHALLENGES

### 1 • FLOODS CHALLENGE

Rapid mapping, predicting, preventing different types of floods and improving coordination efforts, relevant to marine and coastal environments, sustainable cities and civil protection and security agencies.



### 2 • FIRES CHALLENGE

Predicting, preventing fires, tracking and tracing causality (causers) in different scenarios (waste, forest/nature, other), relevant to environmental agencies, sustainable cities, agriculture, forestry and land use, as well as for civil protection and security agencies.



### 3 • WATER CHALLENGE

Climate-resilient solutions for predicting, connecting data, planning, supply-demand, relevant to the application domains marine and coastal environments, energy and utilities, sustainable cities, agriculture, forestry and land use, as well as for civil protection and security agencies.



### 4 • INFRASTRUCTURE CHALLENGE

Sustainable and resilient re-development, restoring & adaptation of existing neighbourhoods, relevant to sustainable cities and regions, energy and utilities and civil protection and security agencies.



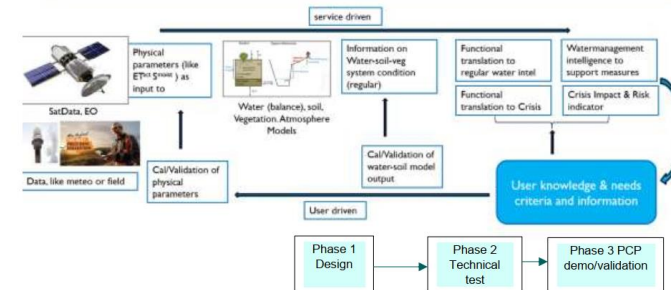
## PCP WISE

Pre-Commercial Procurement for the Customisation/pre-operationalisation of Water management Innovations from Space for European Climate Resilience

## 22 Use cases in several domains

	Fast Onset Crises	Slow Onset Crises
Urban	Flash Flood Summer 2021 in Ahr Valley, GER	Slow Onset River Flood 2023/24 in Lower Saxony, GER
	Wild Fire: Slovakia Bratislava (Local city level)	Heat Island/subsidence: Multi Climate change scenarios in existing urban areas (Pforzen city, DE)
	Floods: Slovakia Bratislava (Local city level)	Soil saturation: Shallow ground water, Demig, Denmark
	Floods/stormwater: city critical water management, Helsinki	Subsidence: Terrain subsiding Lemvig Denmark
Rural	Coastal Flooding: Helsinki	Subsidence: City Infrastructure Rotterdam
	Flash Flood Summer 2021 in Ahr Valley, GER	Slow Onset River Flood 2023/24 in Lower Saxony, GER
	Vegetation and peat fire 2023/24 lower Saxony, GER	Drought Impact Model on Agricultural Production - Catalonia region, Andalusia or other (Spain)
	Wild Fire: Slovak Republic (National level), Self-governing regions Banská Bystrica, Žilina (Regional level), Spišská Nová Ves	Drought: Subsidence in rural agricultural grasslands in the water management area of water authority HDSR (NL)
	Floods: Surface Runoff Flows according to Rule 5.2-IC of the Beach Instruction (Andalusia, Spain)	Wild Fire: Nature area Kalhouska Heide (N, Belgium)
	Floods: civil protection initiative for the Myrtonia catchment area (Central Macedonia)	Natural/art. control ecosystem/residential area on groundwater/irrigation (in former airport region of Helsinki)

## EARTH OBSERVATION BASED VALUE CHAIN FOR WATER INTELLIGENCE



# Water management from space

## a new starting point for global climate challenges

### Cause

Climate change is leading to today global extremes such as drought, flooding, and therefore serious consequences for water distribution, soil subsidence, (drinking) water quality, wild fires, etc. The risk of damage is enormous. Damage for which the European governments are responsible.

Having access to the **right management information** is becoming increasingly relevant to manage such risks. This requires an improvement in the regular management & maintenance systems, but mainly the realization that enriching existing knowledge through smart monitoring and use of digital innovations is crucial. Just like the use of drones for inspection or AI for simulating models, the use and deployment of satellite data is a good example of this. In the near future, the water boards will have to be able to participate in the digital transformation towards information boards.

With its European financing program, HORIZON offers an excellent opportunity to take a big step forward in this transformation and contribute to the control of global climate challenges.

**HORIZON Program**  
In 2024, the EU will propose 15 through the HORIZON program million euros available for applied research & development into satellite-based solutions for better water management. A subsidy application has been submitted under the name **PCP WISE\***, which may be approved in **September 2024**. This infographic explains what the project entails and what it potentially delivers for the water boards.

\*Proposal for the Collaboration Pre-qualification of Water Management Innovators from Space for European Climate Resilience

\*Subside 2023 / Source: NOS 2023/24

Cost items for governments are increasing



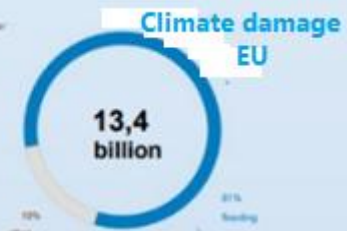
### Soil-water-vegetation system

The common thread within the project proposal consists of the possibility of updating the local water balance of the soil-water-vegetation system and monitoring it **with earth observation-based solutions**. This combination ultimately produces information that can be shared cross-border and uniformly. The daily operational and structural production of information is crucial for:

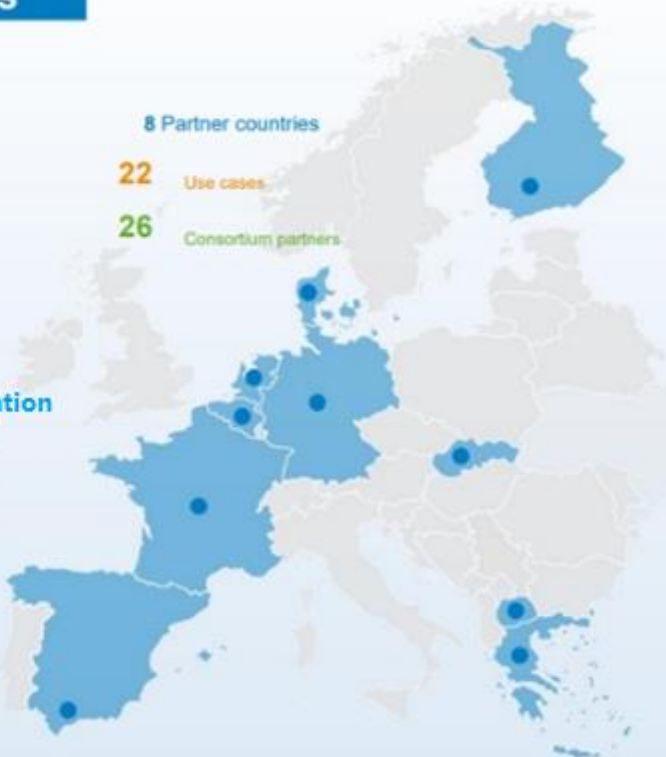
- Insight**
1. Into (climate) trends and current conditions
  2. Getting to know the critical boundaries of our water balance system
  3. Developing and simulating climate models



This updated status of water conditions helps local water managers, among other things, in prioritizing according to the displacement series from the Environmental Act. This means that as soon as a shortage threatens, fewer and fewer areas can be supplied with water. Current insight helps in making choices and thus correct water distribution to limit damage. In combination with specific sector information, it is possible to translate this into **risk maps** that ultimately strengthen situational awareness in the run-up to or during a water-related crisis.



Climate-proof together through the use of smart monitoring



### What do we do?

The Waterschapshuis is the director of this innovative tender process. Stowa is substantive involved and contributes knowledge and experience and is supported by Firma Corvers. In addition, various municipalities, water boards and knowledge institutes will be affiliated to jointly form a European consortium. Innovative requests will soon be placed on the market from this consortium. These requests will enable the business community to develop specific products. In addition to improved insight and monitoring of the water system, the parties within the consortium will also benefit from further development of advanced warning and monitoring systems.

Currently there are **22 use cases** distributed in Europe across 8 countries, 5 of which are in the Netherlands. These use cases are used to identify the needs of stakeholders in different situations, shape the joint task and test and refine the delivered products.



Dynamic satellite data in combination with local data takes water management to 'the next level'

### What does it provide the Water boards?

Water boards are responsible for this strong dikes and clean and sufficient water. To continue to perform these tasks properly the constant pressure of climate change and European regulations/policies involve experimenting pilots crucial. This project closes in that regard fits seamlessly with the increasing datafication and the ambition from the Vaarkaat for the sector and everyone individual water board to be ready by 2029 to work data-driven and digital innovations appropriately for their tasks. For the sector it is a huge opportunity to get ahead of the to stand up and take control of this part of the digital transformation, to expand the international network, collect cross-border uniform information and prepare for a **climate-proof future**. If it is possible to generate up-to-date risk maps at local and sectoral level, water boards will be at the forefront of risk management in the run-up to or during a water-related crisis in a European context.



# PCP WISE PBG

Role	Organisation	Country
Lead Procurer	STICHTING TOEGEPAST ONDERZOEK WATERBEHEER	THE NETHERLANDS
Public Buyer	HET WATERSCHAPSHUIS (hWh)	THE NETHERLANDS
Public Buyer	FORUM VIRIUM HELSINKI OY (FVH)	FINLAND
Public Buyer	MINISTERSTVO VNUTRA SLOVENSKEJ REPUBLIKY (MINISTRY OF INTERIOR SLOVAKIA) (MoI)	SLOVAKIA
Public Buyer	GEMEENTE HAARLEM (CITY OF HAARLEM)	THE NETHERLANDS
Public Buyer	BUNDESANSTALT TECHNISCHES HILFSWERK (THW)	GERMANY
Public Buyer	REGION OF CENTRAL MACEDONIA (RCM)	GREECE
Public Buyer	FORENINGEN KLIMATORIUM (KLIMATORIUM)	DENMARK
Public Buyer	BENEGO – GRENSPARK KALMTHOUTSE HEIDE	BELGIUM
Public Buyer	INSTITUT CARTOGRAFIC I GEOLOGIC DE CATALUNYA (ICGC)	SPAIN
Public Buyer	CITY OF ROTTERDAM	THE NETHERLANDS
Public Buyer	SLOVENSKA AGENTURA ZIVOTNEHO PROSTREDIA (SLOVAK ENVIRONMENTAL AGENCY) (SEA)	SLOVAKIA



# PCP WISE Consortium partners

First Responders	BAYERISCHES ROTES KREUZ (BRK)	GERMANY
First Responders	ISEM-INSTITUT PRE MEDZINARODNU BEZPECNOST A KRIZOVE RIADENIE, NO (ISEMI)	SLOVAKIA
Technical Institution	INSTITUT D'ESTUDIS ESPACIALS DE CATALUNYA FUNDACION (IEEC)	SPAIN
Technical Institution	CLIMATE-KIC HOLDING BV (CLIMATE KIC)	THE NETHERLANDS
Technical Institution	AEROSPACE VALLEY (AV)	FRANCE
Technical Institution	FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV (FRAUNHOFER)	GERMANY
Technical Institution	UNIVERSITEIT TWENTE (UT-ITC)	THE NETHERLANDS
Technical Institution	FUNDACIO PRIVADA I2CAT, INTERNET I INNOVACIO DIGITAL A CATALUNYA (I2CAT)	SPAIN

# PCP WISE SG

No.	Organisation	Supporting	Stakeholder Group (SG)
1	ARPA Lombardia		X
2	European Association for Remote Sensing Companies (EARSC)		X
3	French National Fire Officers Academy (ENSOSP)		X
4	Hoogheemraadschap De Stichtse Rijnlanden (Regional Water Authority)		X
5	Irrigation Community Segarra-Garrides in Catalonia	X	X
6	Ministry of Climate Action, Food and Rural Agenda. Government of Catalonia		X
7	Ministry of Interior of France		X
8	Netherlands Space Office		X
9	Provincie of Limburg		X
10	Région Provence Alpes Côte D'azur (PACA)		X
11	Technology Centre of Catalonia (EURECAT)		X
12	Toulouse Métropole	X	X
13	Waterschap Limburg	X	
14	Zilina Self-Governing Region		X
15	Municipality of Fundão		X
16	Emschergenossenschaft/Lippeverband		X
17	Regional Council of Nouvelle-Aquitaine	X	



PROTECT'S FINAL EVENT AT EXPANDEO 2024



# PROTECT's final event PCP WISE contribution from Slovakia in domain of crisis challenges

From PROTECT CSA to PCP WISE session  
Martin Tuchyna, Slovak Environmental Agency  
11.06.2024



# 1. Motivation & objectives

## Main motivations to contribute to PCP-WISE

- Support adaptation to climate changes from „water“ perspective
- Improve public procurement (PP) effectiveness impact
- Built on knowledge and expertise of PROTECT project

## Objectives to be achieved

- Address practical requirements for crisis management via use cases
- Technical support of PP process preparation, execution & evaluation
- Improve awareness rising & user impact



## 2. Contribution scope

### Design and implementation of use cases:

- Floods
- Fires

### Support for public procurement innovations

- Consultations
- Pre-commercial procurement
- Public procurement of innovative solutions

### Target stakeholders levels

- National (Ministries of Interior & Environment)
- Regional (Self governing region Banská Bystrica)
- Local (Bratislava city & Spišská Nová Ves town)

### COPERNICUS a spracovanie údajov pri povodniach

- a takto to vyzeralo reálne pri dokumentovaní povodne dronom



### Na východe Slovenska horel sklad karavanov a skládka odpadu

TASR 16. júla 2023 o 13:22

- Okrem karavanov horí aj skládka odpadu
- Ide o čerstvú udalosť, ktoré boli nahlásené krátko po sebe



Ilustračné foto.

# 3. Expectations

## **Gains**

- Establish new contacts and knowledge transfer
- Obtain tangible solutions for use case requirements
- Pilot public procurement innovations

## **Shares**

- Offer domain expertise in crisis management
- ICT and Earth observation knowledge / experience
- Stakeholders communication and interaction

# Wrap-up and concluding remarks

# THANK YOU!