

# Danube Hazard m<sup>3</sup>c

Tackling hazardous substances pollution in the  
Danube River Basin by **M**easuring, **M**odelling-  
based **M**anagement and **C**apacity building

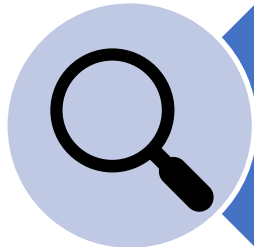
1.7.2020 – 31.12.2022

Ad hoc WG „Emission to water“ Meeting 08 June 2021  
Oliver Gabriel, Austria

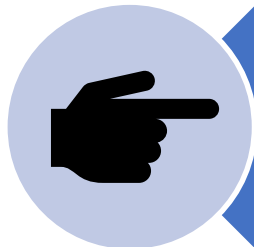
# Partners



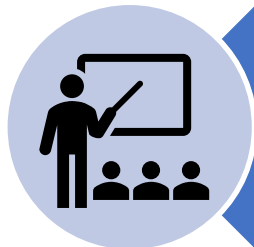
We aim to ... 



improve baseline knowledge on the status quo of HS water pollution and on the relevance of different emission pathways



elaborate recommendations for the national and transnational river basin management plans



enhance skills and competence regarding inventorying, modelling and management of HS pollution in the DRB

# Project structure

Management

Inventory of hazardous substances

Scenarios modelling and assessment in pilot regions

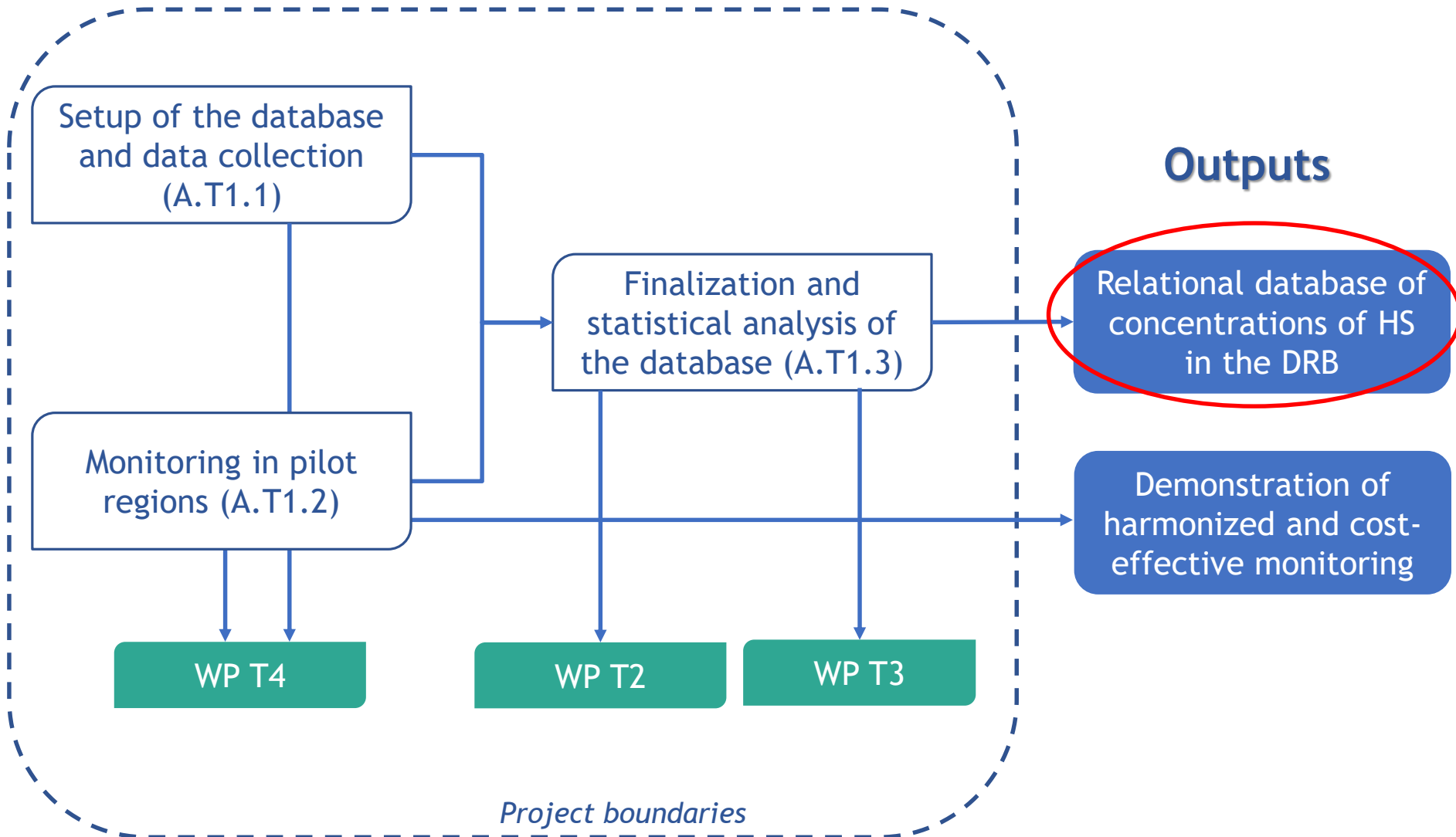
Transnational HS pollution assessment and recommendations

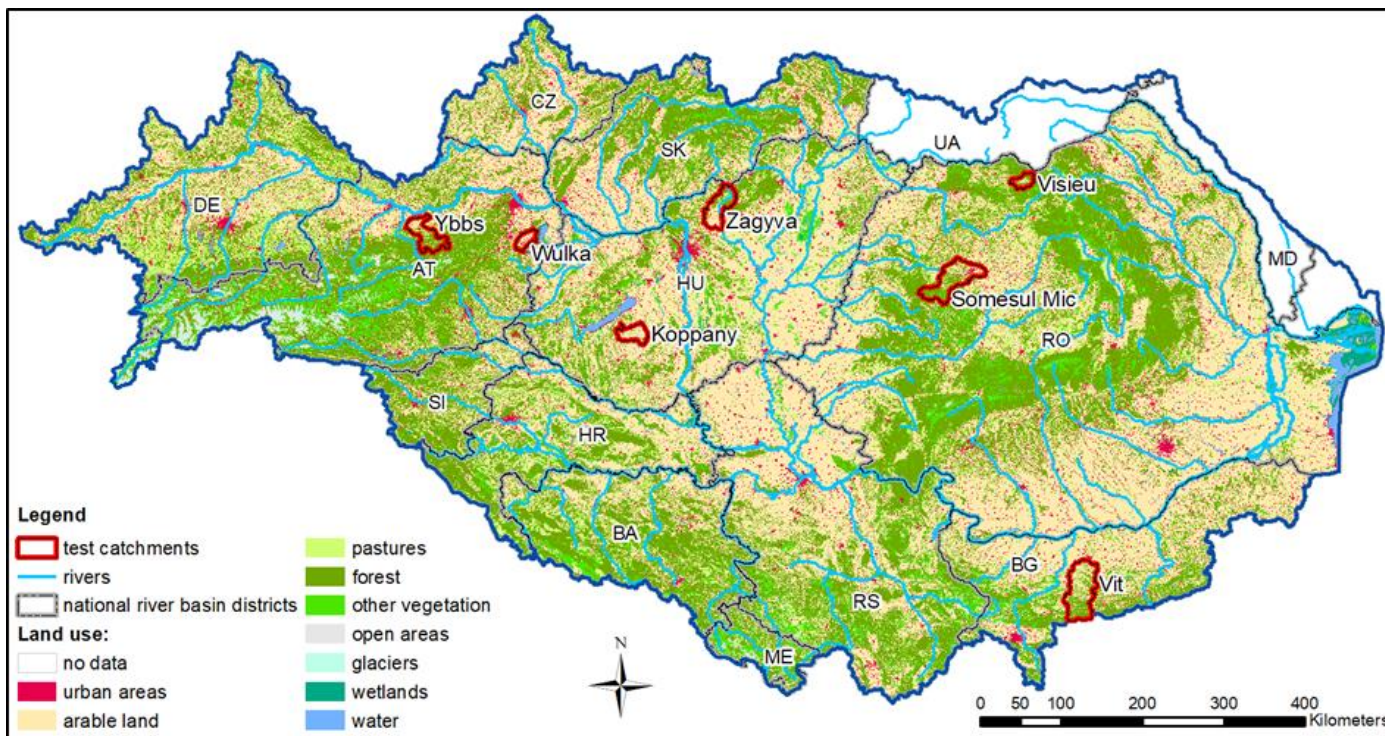
Capacity building

Communication

# WP T1

## Inventory of hazardous substances





- Surface water and suspended solids
- WWTPs
- Atmospheric deposition
- Soils

# WP T1

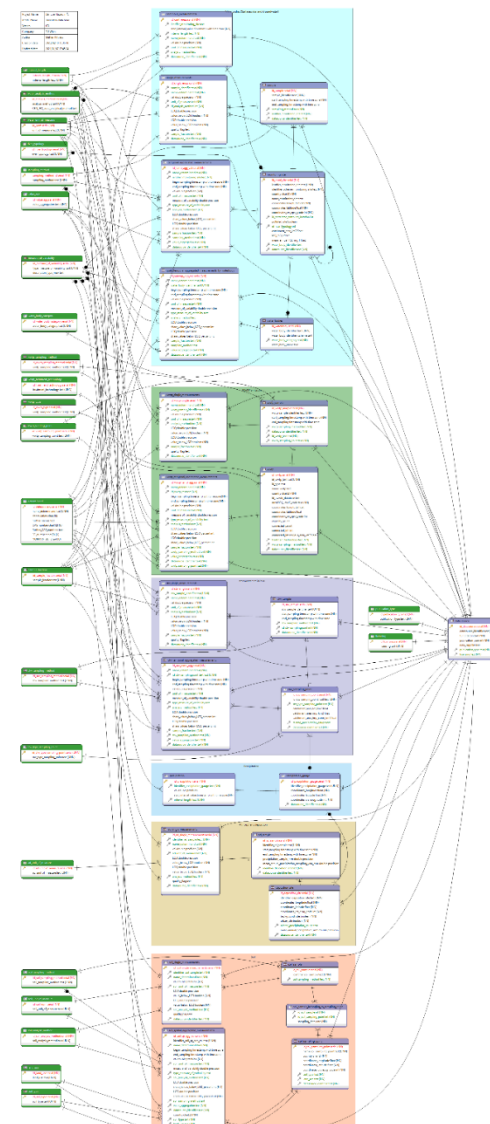
## Relational database of HS concentration in the DRB

### Specific media/pathways

- Surface water and groundwater
- WWTPs
- Stormwater overflows
- Atmospheric deposition
- Soils

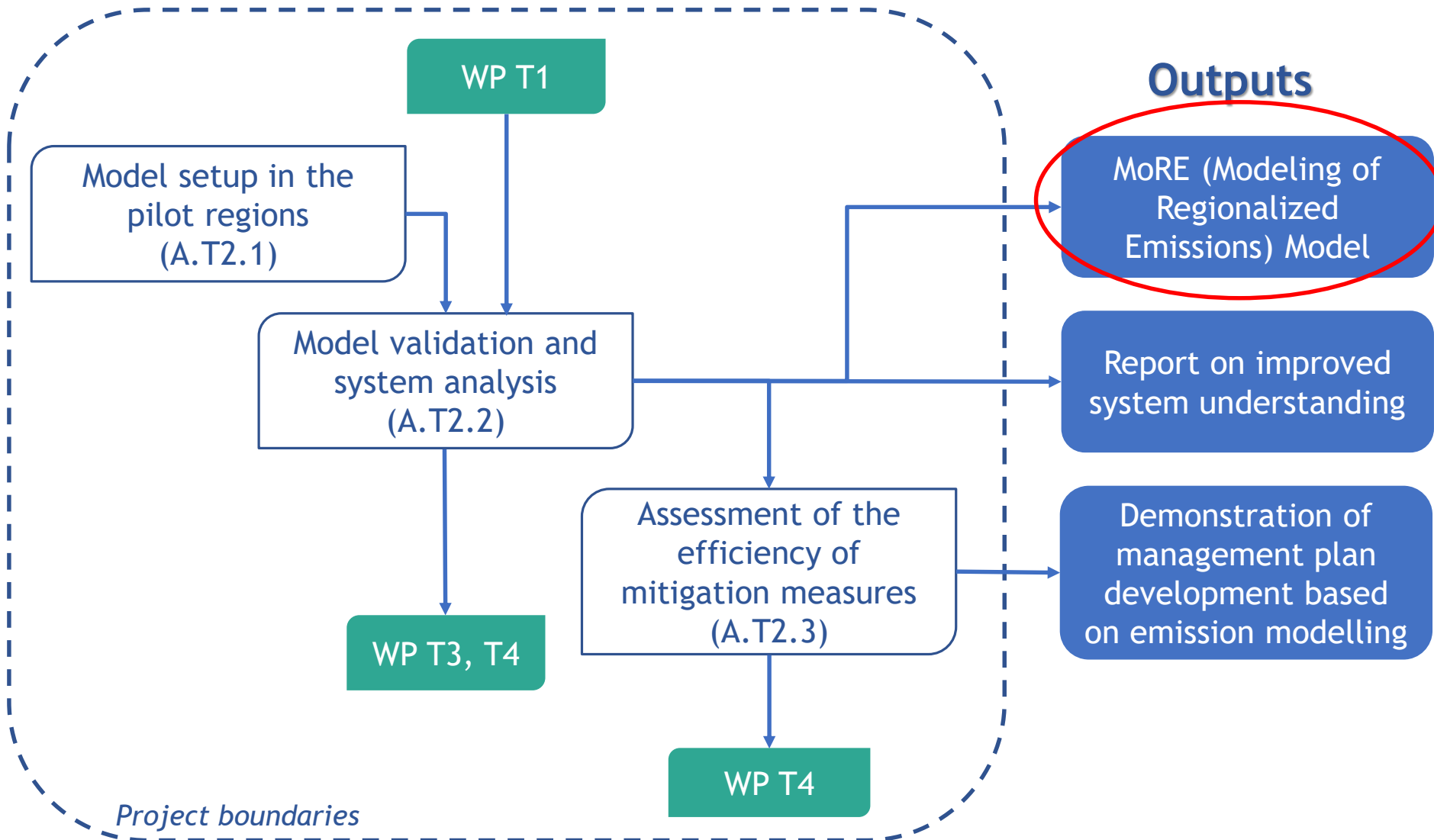
### Selection of substances for the inventory

- Substances monitored and modelled in the project
- Danube River Basin specific substances
- European regulated substances
- Watchlist candidates
- National river basin specific pollutants

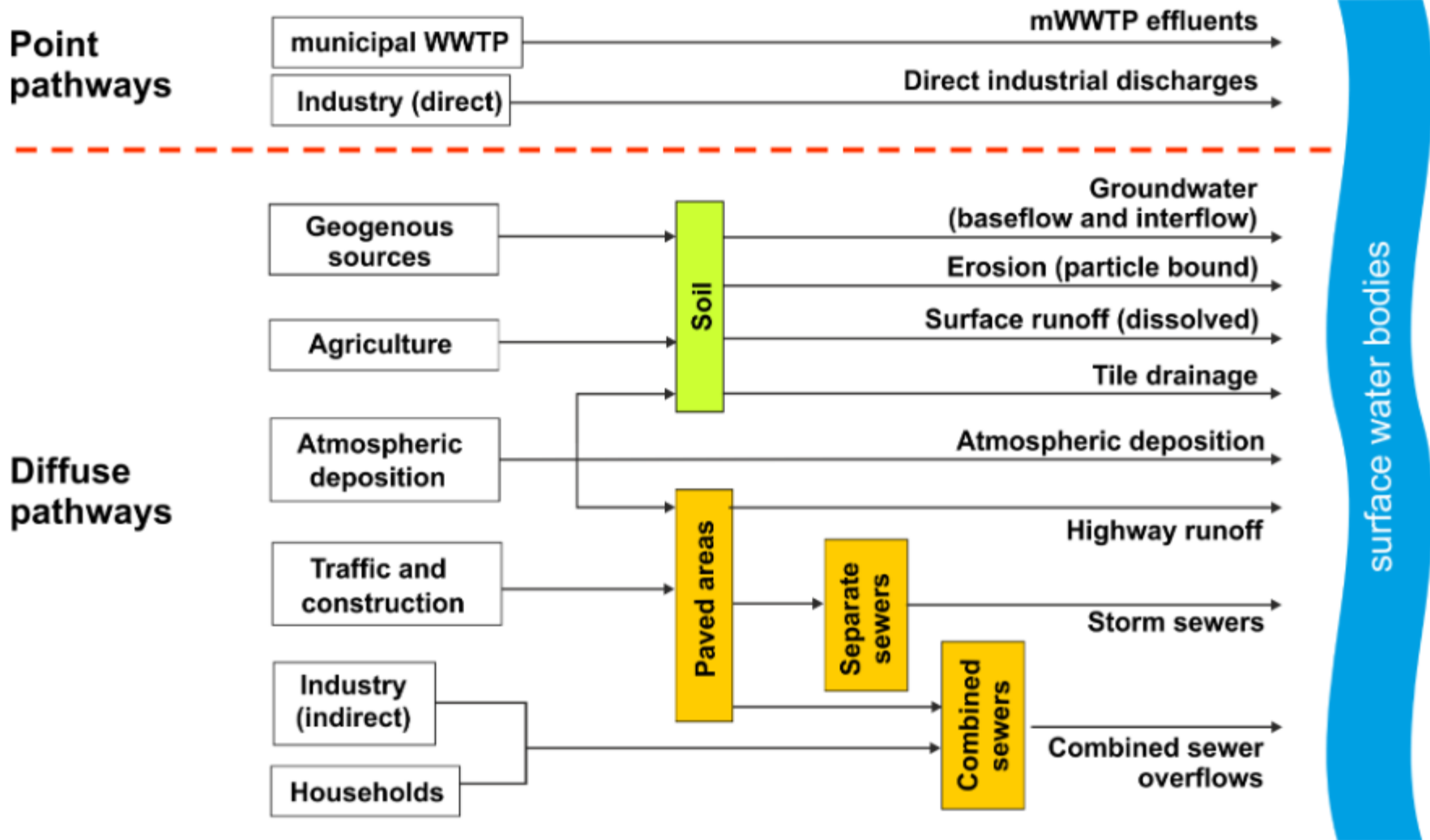


## WP T2

### Scenarios modelling and assessment in pilot regions

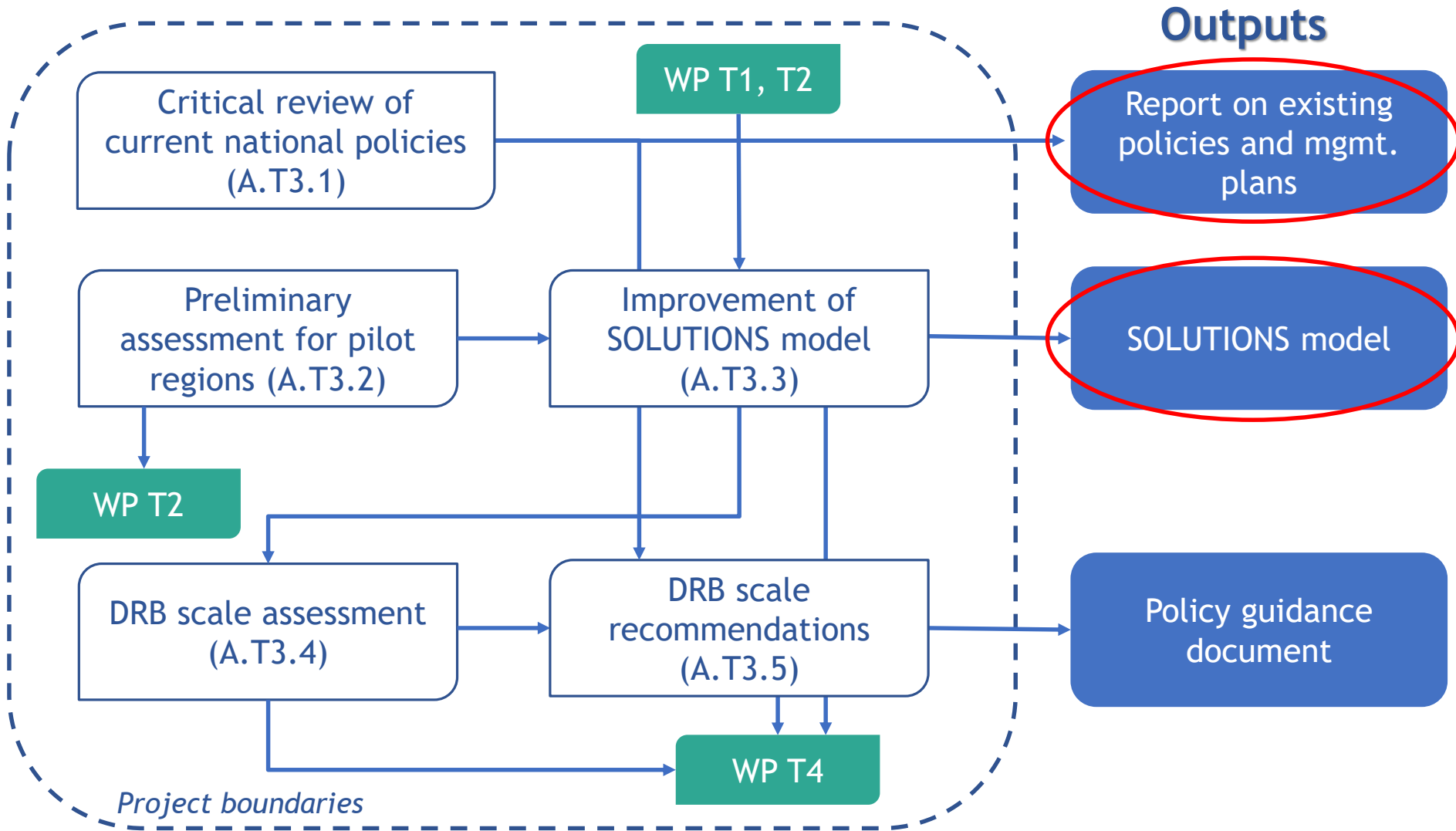






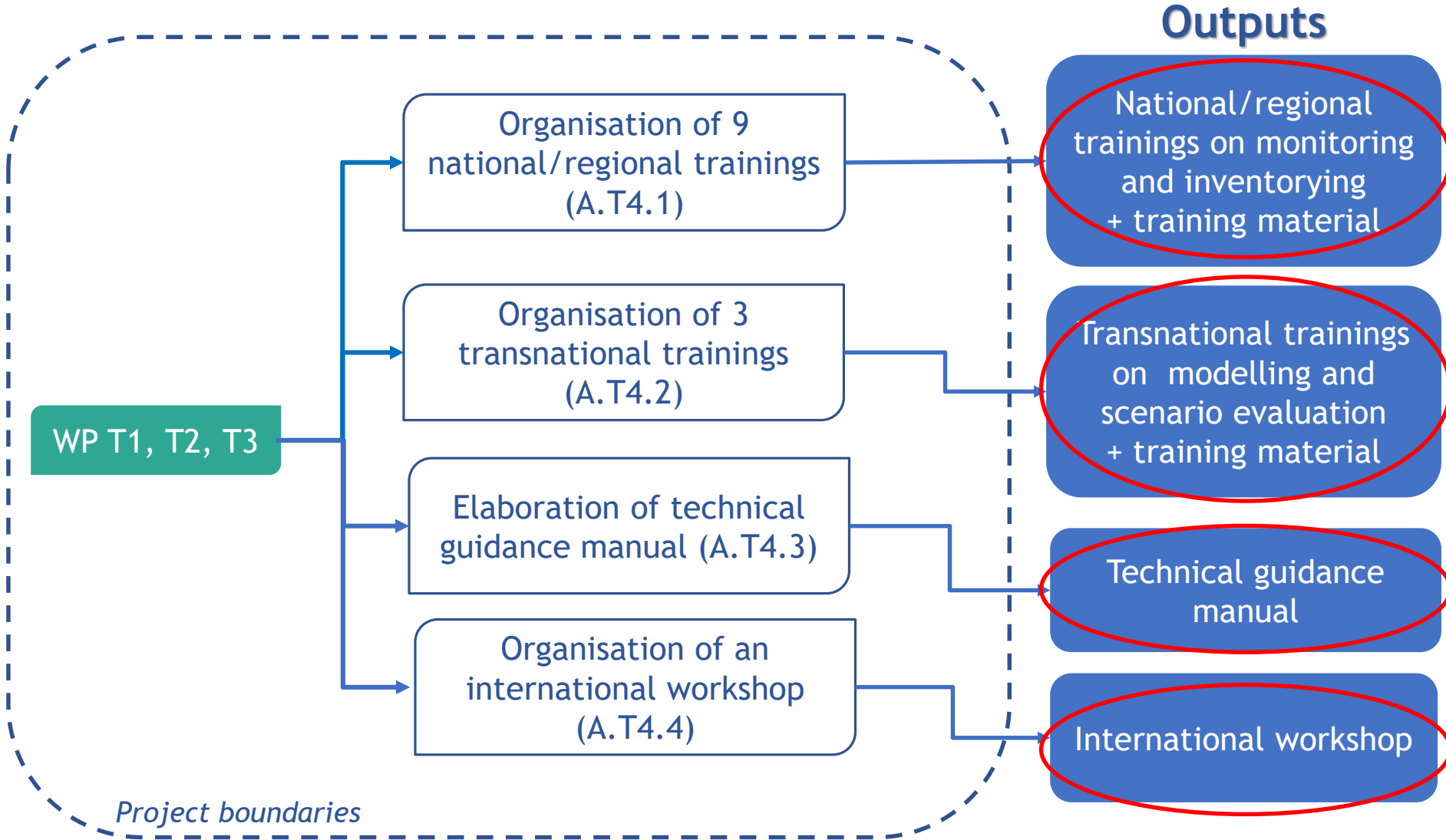
# WP T3

## Transnational HS pollution assessment and recommendations



# WP T4

## Capacity building



### Outputs

National/regional trainings on monitoring and inventorying + training material

Transnational trainings on modelling and scenario evaluation + training material

Technical guidance manual

International workshop

# Contact



<http://www.interreg-danube.eu/approved-projects/danube-hazard-m3c>



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Thank you for your attention!

# Project partners

TU Wien AT

Budapest University of Technology and Economics HU

University of Zagreb, Faculty of Chemical Engineering and Technology HR

Water Research Institute SK

Jozef Stefan Institute SI

Center for Ecotoxicological Research Podgorica ME

Institute of Chemistry MD

Environment Agency Austria AT

National Administration "Romanian Waters" RO

Bulgarian Water Association BG

International Commission for the Protection of the Danube River AT

**Higher education and research**

**Sectoral agencies**

**National public authorities**

**Interest groups**

**International organisations**

## Modelled Substances

- Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA) (industrial chemicals)
- 16 EPA Polycyclic aromatic hydrocarbons (PAHs, industrial chemicals and combustion by-products)
- Mercury (Hg), Cadmium (Cd), Copper (Cu), Nickel (Ni), Lead (Pb), Zinc (Zn), and Arsenic (As) (metals)
- Diclofenac and Carbamazepine (pharmaceuticals)
- 4-tert-Octylphenol, Nonylphenol (industrial chemical)
- Bisphenol A (industrial chemical)
- Metolachlor (herbicide) including Metolachlor-ESA and Metolachlor-OA (metabolites)
- Tebuconazole (fungicide)