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Géosciences pour une Terre durable

**brgm**

# **GROUNDWATER MANAGEMENT AND CLIMATE CHANGE IN CENTRAL ASIA:** a French initiative project

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# The Solidarity Fund for Innovative Projects

The Solidarity Fund for Innovative Projects (FSPI) is a financing mechanism of the French Ministry for Europe and Foreign Affairs.

It allows french embassies to implement, in partnership with local actors, innovative projects in many fields: education, health, environmental protection, agriculture, gender equality, etc.

## Characteristics of FSPI :

- Exists **since 2017**
- Duration of **two years**
- Budget from **100 00 € to 600 000 €**
- **74 eligible countries**
- Since 2020, Central Asian countries can also benefit from this financing mechanism, provided that the projects involve at least two countries in the region.

# BRGM

## THE FRENCH GEOLOGICAL SURVEY

The BRGM is France's public reference institution for Earth Science applications for the management of surface and subsurface resources and risks. Its activities are geared to scientific research, support to public policy development and international cooperation.

The BRGM is  
**a public industrial  
and commercial  
institution** created in 1959  
and working under the Ministry  
for Higher Education, Research  
and Innovation, the Ministry for the  
Ecological Transition and the  
Ministry for the Economy and  
Finance.

**Over  
1000 staff**  
including more  
than 700  
engineers and  
researchers



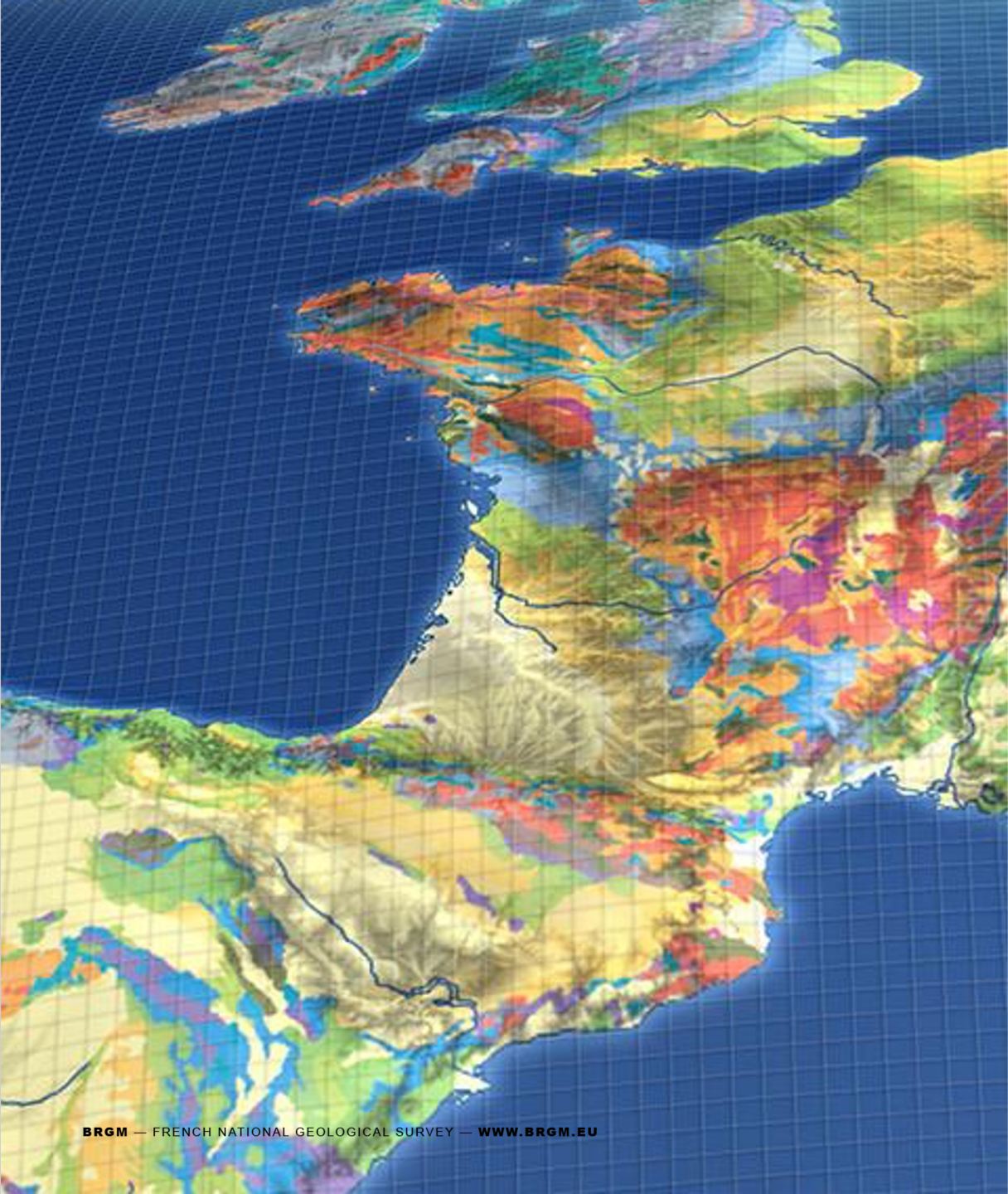
## KEY ROLES

**Scientific research**

**Support to public policy  
development**

**International cooperation**






## EUROPE

# The BRGM in Europe

At the EU level, the BRGM has been involved for many years in research programmes, support to public policy development and international cooperation, thereby forging many enduring partnerships.

- **Close involvement in European research programmes.**
- **Activities to support EU public policy development,** interfacing between the authorities, public and private-sector managers and research.
- **International cooperation: promotion of French and European approaches,** exchanges of good practice, EU-funded development projects.
- **Partnerships with numerous excellence networks in the EU.** Decisive role in the organisation of Europe's geological sphere.





**Geology  
and knowledge  
of the subsurface**



**Groundwater  
management**

## KEY CHALLENGES



**Risks and  
spatial planning**



**Mineral resources  
and the circular  
economy**



**Subsurface  
potential for the  
energy transition**



**Data,  
digital services  
and infrastructure**



# Capacity building and promotion of French expertise and innovation in the field of water management in the context of climate change in Central Asia Kazakhstan & Uzbekistan

## Component 1

### Governance

## Component 2

### Operational tools

## Component 3

### Innovative approaches

- Seminars and Workshops on water resources management: exchanges of experience, best practices in France / EU and in C.A (Kazakhstan and Uzbekistan)

- Study visits in France
- Short-term capacity building
- Identification of projects and cooperation subjects

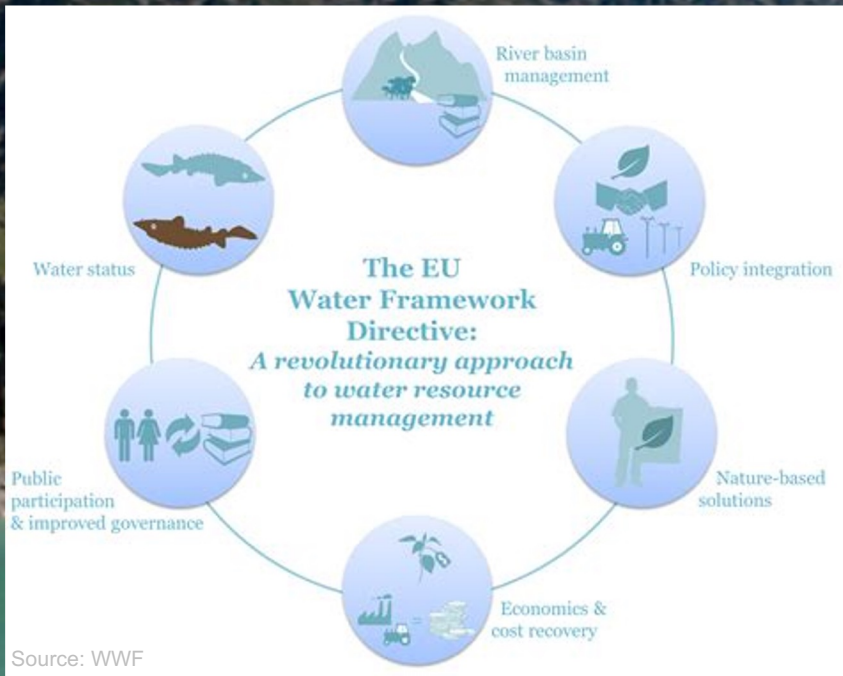


# 1/ WRM Governance

## The EU Water Framework Directive and its consequences

Socioeconomic considerations in water resources

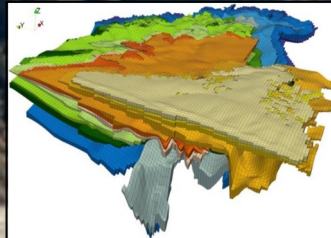
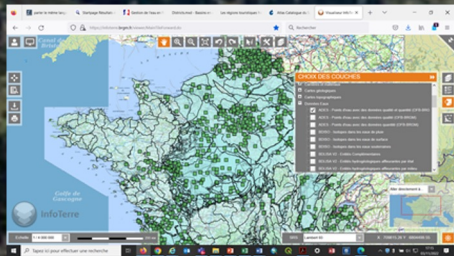
Transboundary water cooperation





## 2/ Operational approaches

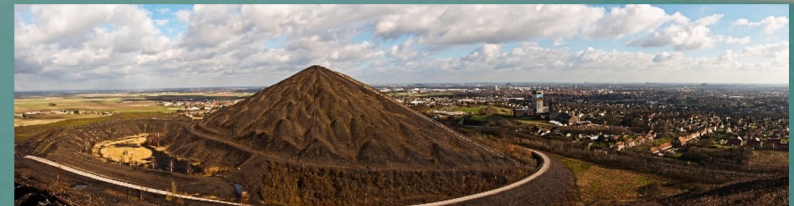
**Decision support tools**



**Quantitative resource evaluation  
and consumer needs**

**Pollution management:  
Polluted sites and soils  
Diffuse pollutions**

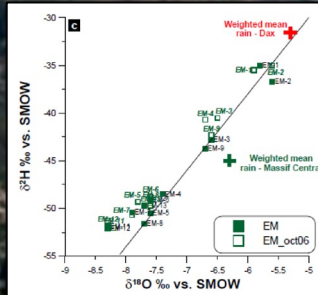
**Post-mining management**



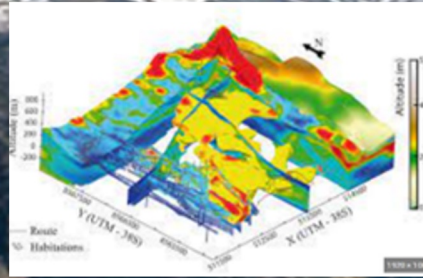


### 3/ Innovative approaches

#### Isotopic tools



#### Geophysics for hydrogeological characterisation



#### New platform of information: daily and weekly status of the groundwater resources



#### Managed aquifer recharge



#### Participation on exhibition in France (Pollutec) and Kazakhstan





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# THANK YOU FOR YOUR ATTENTION

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