

# KINDRA, the EIGR and YOU!

Each member of the groundwater community is now **invited to contribute** to the EIGR, for producing synergies, implementing policies and optimising water management in Europe.

Once registered in the EIGR, anyone from the “groundwater” community will be able to share their research, activities, projects, data, etc., by uploading related **metadata information** to the EIGR. The EIGR does not only include links to classical research products, such as scientific papers, it is also a repository for information about technical reports, guidances, databases and websites related to groundwater.

Following the Inspire directive, the EIGR is implemented under the GeoNetwork platform and interface.

In addition to the standard metadata information, KINDRA allows **classifying your contribution** according to the three main categories and subsequent five overarching keywords defined by the developed classification system (HRC-SYS).

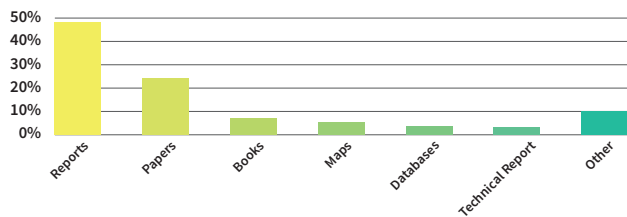
**Additional indicators** of HRC-SYS included in EIGR are the research and knowledge classes, where the provided resources are grouped into either research products or general knowledge resources.

To assess the stage of development of innovations and their readiness for broad application, Technology Readiness Level (TRL) and Policy Readiness Level (PRL) can also be indicated, as well as information on patents, awards and grants.

Simple **tools for quick analysis and visualisation** of EIGR contents are also provided, and selected records can be downloaded for in-depth analyses by registered users.

## NEAR 2000 COMPLETED METADATA RECORDS\*

FROM EUROPEAN RESEARCH SINCE 2000



\*Data as of January 2017

# MAKING GROUNDWATER ACCESSIBLE

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The KINDRA Partnership:

Project Coordinator: Sapienza University of Rome, Earth Sciences Department, ITALY

EFG - European Federation of Geologists, BELGIUM

EFG 20 National Associations

REDIAM - Environment and Water Agency of Andalusia, SPAIN

LPRC - La Palma Research Centre for Future Studies S.L., SPAIN

UM - University of Miskolc, Faculty of Earth Science and Engineering, HUNGARY

GEUS - Geological Survey of Denmark and Greenland, DENMARK

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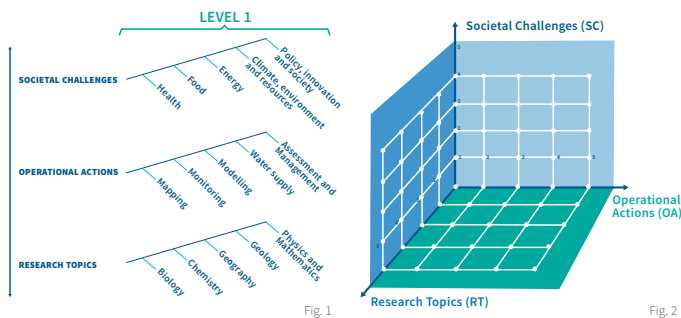
## How to classify groundwater research & knowledge

A new dedicated classification system (HRC-SYS) developed a common terminology for classifying results of hydrogeological research and activities. About 240 keywords have been selected from [EU directives and documents](#) and from [the most important journals publishing groundwater research](#).

The complete list of keywords has been organised in a [tree hierarchy](#), identifying [three main categories](#): Societal Challenges (SC), Operational Actions (OA) and Research Topics (RT). In each of these three categories, [five overarching keywords](#) refer to the main research areas. The classification system shows the interaction and the relationships between the three main categories through a [3D approach](#).

- Societal Challenges (SC) include the pertinent fields considered in Horizon2020: Health; Food; Energy; Climate, Environment and Resources; Policy, Innovation and Society.
- Research Topics (RT) relate to basic scientific disciplines: Biology; Chemistry; Geography; Geology; Physics and mathematics.
- Operational Actions (OA) refer to the hydrogeological activities: Mapping; Monitoring; Modeling; Water supply; Assessment and management.

The classification intends to demonstrate and enhance interdisciplinarity of groundwater studies and their impact on society. A 3D approach is helpful to identify trends and gaps, more easily shown by 2D graphs (RT-OA plots) for each of the societal challenges.



## The European Inventory of Groundwater Research is online!

A new dedicated inventory ([EIGR](#)) has been realized on the basis of the proposed classification, where metadata identifying various information sources can be stored and consulted and everyone can add records and retrieve information.

The inventory has been populated by experts of the EFG national member associations with more than [2000 metadata records](#) referring to groundwater research carried out in Europe since the year 2000. They comprise relevant reports and databases from universities, research centres, government bodies, regional and local authorities and other parties involved in groundwater research & knowledge.



The EIGR tool allows users to showcase their research, serving multiple aims:

- Making visible information pertaining to [groundwater research and knowledge](#) (including non-scientific products) Europe-wide;
- Consultation [during and after the KINDRA project](#) by individuals and organisations dealing with groundwater research and management, possibly also by non-experts;
- Analysis of collected and classified information to identify [trends, challenges and gaps](#) in groundwater research, and to produce recommendations for the implementation of the Water and Groundwater Directives.

## Raise the awareness of groundwater

KINDRA seeks to make groundwater visible in Europe, addressing technical and scientific communities, stakeholder groups and citizens in general, by several targeted activities:

- Participation in [networks and groups](#) to stress the importance of groundwater in the water-food-energy-climate nexus, the smart city concept, the circular economy, ICT for water, etc.;
- Adaptation of results of the project into [outreach materials](#) to help citizens understand the importance of groundwater in daily life;
- Making the ["groundwater" scientific community](#) aware of the need to better share knowledge, and the assets of KINDRA and its EIGR in this respect;
- [Dissemination](#) at workshops, meetings, conferences, including the 20 National Workshops organized across Europe, under the EFG umbrella

KINDRA is active at:



## Added Values

KINDRA gives you many opportunities to be actively involved in the water community!

- KINDRA's on-line inventory (EIGR) is the only tool exclusively dedicated to groundwater research & knowledge.
- KINDRA combines research and knowledge, merging academic and practitioner communities.
- The classification system locates your products, papers, projects, reports, databases, etc., within the framework of groundwater research & knowledge at EU level.
- The EIGR promotes networking and enlarges the community of groundwater scientists, managers and policy makers with the common interest of protecting groundwater quantity and quality, and the health of people and ecosystems.
- The EIGR represents an international access point to national knowledge sources.
- The database analysis is useful for EU policy support and implementation of Water and Groundwater directives.