



KINDRA DELIVERABLE D2.1

ORIENTATION WORKSHOP FOR NATIONAL EFG REPRESENTATIVES

Summary:

With the participation of experts from 20 European countries, representing EFG's Linked Third Parties (National Associations) in the KINDRA project, an orientation workshop was organised in Sevilla, Spain. The aim of the workshop was to explain the project goals in great detail to the experts who will participate in data collection on groundwater research at a national level, during the second year of the project, and populate the European Inventory for Groundwater Research (EIGR). During the workshop the EIGR was tested, and detailed guidelines for populating the EIGR have been provided. The response of the participants was very positive and valuable suggestions were given to improve the EIGR's user functionalities. This report offers an impression of the contents of the workshop and some notes on follow-up activities that were performed.

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1. INTRODUCTION

One of the main aims of the KINDRA project is to carry out a Europe-wide assessment of existing groundwater-related practical and scientific knowledge focusing on international (in EU dimensions), national and regional scientific activities. The data collection and assessment will be implemented with the help of the member National Associations of the European Federation of Geologists. They take part in the project as EFG Linked Third Parties. Based on the data provided, the European Inventory (database) of Groundwater Research (EIGR) will be populated in the form of a web-service.

During the summer of 2015, in the frame of WP1, Task 1.2, a survey called *Inventory of information sources* was carried out, in order to clarify where the information for EIGR would be collected. The answers for the questionnaire were given by the EFG's National Associations from 20 European countries and a summary was provided in deliverable D1.4 in September 2015.

The *Orientation workshop for national EFG representatives* is the Task 2.1, within Workpackage 2. The workshop was originally dated for 24-25 November 2015, in Brussels. Speakers and participants were invited, all organisational matters (venue, accommodation, meals, etc.) were arranged. However, on 22 November, because of the highest terror attack alert level in Brussels, the organisers decided to postpone the workshop.

The new date of the workshop was 5th February, 2016, and it was organised in Sevilla, Spain, where the project partner REDIAM is located. This deliverable (D2.1) summarises the background and the content of the workshop, as well as its conclusions and follow-up.

2. COUNTRIES AND EXPERTS INVOLVED IN DATA COLLECTION FOR EIGR

Experts in hydrogeology from 20 countries were identified in 2015 by the member National Associations (EFG Linked Third Parties) to participate in the data compilation for the European Inventory of Groundwater Research (EIGR). In *Table 1* the National Associations and the identified experts are indicated. The total number of National Experts is 21, considering the presence of two Belgian experts.

Table 1 EFG's KINDRA Linked Third Parties with the participating experts, their contact details and background

	Country	Organisation	Expert's name	Expert's contact	Expert's background
1	Belgium	Belgo-Luxembourg Union of Geologists, http://www.blug-ublg.be/	Alain Dassargues; Dirk Decoster	alain.dassargues@uig.ac.be dirk.decoester@vdcmilieu.be	Professor at Hydrogeologie et Geologie de l'Environnement, Universite de Liege, Chair of the IAH Belgian Chapter; Hydrogeologist, VDC Milieu Consulting Company, Belgium
2	Croatia	Croatian Geological Society, http://www.geologija.hr/	Kosta Urumović	kurumovic@hgi-cgs.hr	PhD, hydrogeologist, research associate at Department of Hydrogeology and Engineering Geology, Croatian Geological Survey
3	Czech Republic	Czech Association of Economic Geologists, http://www.calg.cz/	Michal Vaněček	vanecek@isatech.cz	Hydrogeology expert, director of ISATECH s.r.o.
4	Denmark	Geological Society of Denmark, http://2dgg.dk/dgf_uk/main.html	Lisbeth Flindt Jørgensen	lfj@geus.dk	Senior Geologist, Department of Hydrology, GEUS - Geological Survey of Denmark and Greenland, Danish Ministry of Climate, Energy & Building
5	Finland	The Finnish Union of Environmental Professionals, http://www.ykl.fi/	Ulpu Väisänen	ulpu.vaisanen@gtk.fi	PhD, Hydrogeologist, senior specialist, Geological Survey of Finland, Department of Land Use and Environment
6	France	French Geological Society, http://www.sgfr.org/	Patrick Lachassagne	patrick.lachassagne@danone.com	Phd, Hydrogeologist, Head of the Environment and Water Resources Division, Danone Waters, France
7	Germany	Professional Association of German Geoscientists, http://www.geoberuf.de/	Walter Lenz	walter.lenz@buero-hg.de	Phd, Geologist, CEO, authorized expert on gwcontamination, HG Büro für Hydrogeologie und Umwelt GmbH
8	Greece	Association of Greek Geologists, http://www.geologist.gr/	Triantafillos Kaklis	kaklis@geo.auth.gr	Geologist, PhD, MSc, Aristotle Univ. of Thessaloniki, Dept. of Geology, Lab. of Engineering Geology & Hydrogeology
9	Hungary	Hungarian Geological Society, http://www.foldtan.hu/	Nóra Gál	gal.nora@mfgi.hu	Hydrogeologist at Geological and Geophysical Survey of Hungary
10	Ireland	Institute of Geologists of Ireland, http://igi.ie/	Henning Moe	moeh@cdm.com	Hydrogeologist, CDM Smith Ireland Ltd
11	Italy	Italian National Council of Geologists, http://www.cngeologi.it/	Andrea Del Bon	andrea.delbon@libero.it	Hydrogeologist, Ordine dei Geologi del Lazio n. 1522
12	The Netherlands	Royal Geological and Mining Society of the	Jan Stafleu;	jan.stafleu@tno.nl	PhD, EurGeol, TNO – Geological Survey of the Netherlands;

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	ds	Netherlands, http://www.kngmg.nl/	Robert Warmer	robertwarmer@gmail.com	Hydrogeologist at TNO
13	Poland	Polish Association of Minerals Asset Valuers, http://www.polval.pl/	Barbara Tomaszewska Marta Dendys	tomaszewska@min-pan.krakow.pl marta.dendys@gmail.com	Phd, Associate Professor at the Mineral and Energy Economy Research Institute of the Polish Academy of Sciences Phd student
14	Portugal	Portuguese Association of Geologists, http://www.apgeologos.pt/	Mónica Sousa	msousa@apgeologos.pt	APG Board member; Geologist, PhD candidate, Dep. Of Geosciences, Environment and Territory Management, Porto University
15	Serbia	Serbian Geological Society, http://www.sgd.rs/	Vesna Ristic Vakanjac	vesna_ristic2002@yahoo.com	PhD, Associate Professor at University of Belgrade, Faculty of Mining & Geology
16	Slovenia	Slovenian Geological Society, http://www.geoloskodrustvo.si/	Mihael Brenčič	mihael.brencic@geon.tnf.uni-lj.si	PhD, Department of Geology, Faculty of Natural Sciences and Engineering, University of Ljubljana
17	Spain	Official Spanish Association of Professional Geologists, http://www.icog.es/	Silvino Castaño Castaño	silvino.castano@cedex.es	Hydrogeology expert, Centro de Estudios de Técnicas Aplicadas, Centro de Estudios y Experimentación de Obras Públicas (CEDEX)
18	Switzerland	Swiss Association of Geologists, http://www.chgeol.ch/	Pierre Christe	pierre.christe@adm.in.vs.ch	Geologist, Head of the Groundwater Group at the Environmental Protection Agency of Canton Valais, Switzerland
19	Ukraine	Ukrainian Association of Geologists, http://www.geolog.org.ua/en	Mykhailo Heychenko Alexander Bobrov	geich@ukr.net albobrov@ukr.net	PhD, Head of the research department of the Tutkovsky Institute Deputy Head of the Board GED - Geologists Union of Ukraine
20	United Kingdom	Geological Society of London, http://www.geolsoc.org.uk	Andrew McKenzie	aam@bgs.ac.uk	Manager of Groundwater Information, British Geological Survey, Groundwater Science Programme

3. BACKGROUND AND AIMS OF THE WORKSHOP

Groundwater and hydrogeology-related research activities cover a wide spectrum of research areas at EU and national levels. However, groundwater issues are quite often either ignored or considered only in insufficient detail and separated from the associated surface water bodies, despite of its critical importance as renewable, high-quality, naturally protected (but still vulnerable) resource that has significant impacts on both surface water bodies and ecosystems.

The KINDRA project (Knowledge Inventory for hydrogeology research, Grant Agreement No. 642047, www.kindraproject.eu) seeks to create a critical mass for scientific knowledge exchange on hydrogeology research, to ensure wide applicability of research results, including support for innovation and development, and to reduce unnecessary duplicity of efforts. The overall objective of the project is to take stock of our current knowledge on hydrogeology through an inventory of research results, activities, projects and programmes. The inventory is then used to identify critical research challenges and gaps, with aims of avoiding overlaps.

The assessment process for European groundwater research and knowledge should be bottom-up, covering ongoing and recent activities, research agendas, priorities, etc in as many European countries as possible. EU-level research activities will also need to be assessed, but also with regards to participation in these activities by EU countries and the actual dissemination of European R&D in national innovation and deployment.

The orientation workshop for the national experts of EFG was organised in order to ensure that similar input will be collected from all countries covered by KINDRA. It was also the intention to familiarise the experts with the project details. By the time of the orientation workshop celebration, the reporting system (technical background, structure and design) for the European Inventory of Groundwater Research (EIGR) has been completed and consensus has been achieved on the scope of knowledge to be reported according to a uniform terminology/standard. Last aim of the orientation workshop was thus to explain and demonstrate the EIGR to participants and have it tested by them.

4. CONTENT OF THE WORKSHOP

The full-day workshop focused on the training of national experts (delegates from the EFG Linked Third Parties) who will actively take part in the groundwater-related data collection and processing. During the morning programme, there were two main sessions, related to (1) Harmonised Research Classification System (HRC-SYS) and (2) European Inventory of Groundwater Research (EIGR). During the afternoon session, the national experts had a practical training, using the web platform of the EIGR, in order to learn and put in practice the classification system.

The venue of the workshop was the headquarters of the Consejería de Medio Ambiente y Ordenación del Territorio; Av. Manuel Siurot, 50 – 41071, Sevilla.

In the orientation workshop, beside the representatives of the project partners, 16 national experts participated. Five experts could not take part due to different reasons. For these experts, detailed information and instructions will be provided in order to bring their knowledge on the use of EIGR to the same level as that of the participating experts. The attendance list is provided in Annex 1.

The agenda of the workshop was as follows:

OPEN SESSION

09:00 Welcome Address (Consejería de Medio Ambiente y Ordenación del Territorio – REDIAM)

09:30 KINDRA project overview (Marco Petitta, KINDRA project coordinator) (*Annex 2*)

HARMONISED RESEARCH CLASSIFICATION SYSTEM (HRC-SYS)

10:00 A Harmonised Research Classification System (HRC-SYS) for groundwater and hydrogeology research – introduction and examples (Klaus Hinsby, Senior Researcher, GEUS) (*Annex 3*)

10:40 Q & A Session and Discussion

11:10 Coffee Break

EUROPEAN INVENTORY OF GROUNDWATER RESEARCH (EIGR)

11:30 KINDRA survey on inventory of information sources (Eva Hartai, Assoc. Prof., EFG Delegate) (*Annex 4*)

12:00 The EIGR guidance – introduction (Klaus Hinsby, GEUS) (*Annex 5*)

12:30 Q & A Session and Discussion

13:00 Lunch Break

TRAINING SESSION: EUROPEAN INVENTORY OF GROUNDWATER RESEARCH (EIGR)

- 14:00 European Inventory of Groundwater Research (EIGR) examples, how and what to include in the EIGR (Clint Garcia, REDIAM)
- 15:00 Training exercises
Basic tutorial on the GeoNetwork Interface adapted to the EIGR
User interface
EIGR Sections
EIGR Content
Content characterisation “What types of contents are to be uploaded to the EIGR”
Metadata Structure
Basic concepts: Mandatory, Recommended, Conditional and Optional Tags
- 16:00 Coffee Break
- 16:30 Practical examples of content upload to the EIGR: Walkthrough exercise
EIGR Applications/Tools
Troubleshooting, Support contact
- 18:00 Wrap up, end of workshop



Picture 1 Presentation in the morning session

In the morning session (*Picture 1*) the national experts asked questions concerning the presentations. The questions were related to the following topics:

- managing of EIGR after the end of the project,
- difficulties of the groundwater research classification system,
- using broader terminology,

- possibilities of translation of keywords in EIGR,
- using additional keywords in EIGR,
- some keywords occur more than once in the system,
- correction of factual errors in the inventory of information sources.

All questions were answered and clarified by the representatives of the project partners.



Picture 2 Training session in the computer room

The afternoon training session was held in a computer room (*Picture 2*). Each national expert had a separate computer and passwords were provided to them in order to access EIGR. During the practical exercise the experts tested the EIGR system, uploaded data, and revealed and discussed the possible difficulties. The participants concluded that detailed written instructions are needed for the efficient use of the system.

5. CONCLUSIONS AND FOLLOW-UP

The experts expressed their appreciation of classification system and the EIGR. They also appreciated the level of the workshop, the benefits of the outcomes and the hospitality of the organisers.

The KINDRA partners and the national experts agreed on the following actions to be taken in the following months:

- A Google Drive repository will be established with access rights for the national experts and all presentations of the workshop will be uploaded (all partners).
=> This was fulfilled by 09/02/2016 and all experts were informed.
- The functionality of EIGR will be tested and improved following recommendations (REDIAM).
=> Although the EIGR was yet fully functional when the workshop took place, suggested improvements to the user interface and some adjustments in the keywords were completed by 11/03/2016.
- Detailed guidelines for the use of EIGR, in a written document, will be provided to the national experts (REDIAM, GEUS, and SAPIENZA).
=> The manual was released by half of March as soon as the definitive user interface features had been implemented, to avoid confusion.
- Web seminars will be organised for the experts who could not attend the workshop
=> Their contents and organisation was discussed in detail by the partnership on 10th of March and a date will be proposed in April.
- Electronic meetings will be organised to clarify the questions that can be raised during the population of EIGR.
=> This will be done as soon as needs occur.
- Questions sent to the dedicated mailbox eigr@kindraproject.eu and relative answers will be filed under a FAQ section of the Google Drive repository for the national experts when their relevance goes beyond the interest of the individual requesting expert.

KINDRA partners will assess during the second half of the project the options that are available to assure management of EIGR after the end of the project. They agreed with the national experts that this is an issue that should carefully be studied as to allow for the future actualisation and sustainability of the inventory.

Annex 1: List of workshop participants

	Project partner	Representative's name
1	SAPIENZA	Marco Petitta
2	SAPIENZA	Mariachiara Caschetto
3	SAPIENZA	Gertruud van Leijen
4	EFG	Eva Hartai
5	EFG	Isabel Fernandez
6	GEUS	Klaus Hinsby
7	REDIAM	Mercedes García
8	REDIAM	Clint García
9	U Miskolc	Viktoria Mikita
10	LPRC	Adrienn Cseko
	Country	Expert's name
11	Belgium	Alain Dassargues
12	Belgium	Dirk de Coster
13	Czech Republic	Michal Vaněček
14	Denmark	Lisbeth Flindt Jørgensen
15	Finland	Ulpu Väisänen
16	Germany	Walter Lenz
17	Greece	Triantafillos Kaklis
18	Italy	Andrea Del Bon
19	Netherlands	Robert Warmer
20	Poland	Marta Dendys
21	Portugal	Mónica Sousa
22	Serbia	Vesna Ristic Vakanjac
23	Slovenia	Mihael Brenčič
24	Spain	Silvino Castaño Castaño
25	Ukraine	Alexander Bobrov
26	United Kingdom	Andy McKenzie