



# ANNUAL REPORT 2016

EUROPEAN FEDERATION OF GEOLOGISTS



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# 1 EFG IN BRIEF



FÉDÉRATION EUROPÉENNE DES GÉOLOGUES  
EUROPEAN FEDERATION OF GEOLOGISTS  
FEDERACIÓN EUROPEA DE GEÓLOGOS

The European Federation of Geologists (EFG) is a not-for-profit organisation whose purpose is to represent the professions of geology in Europe, especially to the European Union (EU) and its various bodies. EFG is based in Brussels, was established in 1980 and represents today geoscientists from 26 European countries.

EFG contributes to protection of the environment, public safety and responsible exploitation of natural resources by

- promoting excellence in the application of geoscience;
- supporting research and teaching that underpins it;
- raising public awareness of the importance of geoscience to society.

Public safety, sustainable development, responsible use of natural resources, wealth creation and effective prediction, prevention and mitigation of natural hazards are best served by educated and appropriately trained professional geologists working transparently with other professionals and communicating effectively with the public. To those

ends, EFG encourages professional development by promoting training and Continuing Professional Development and offering validation (certification) through its internationally recognised title of European Geologist (EurGeol).

To fulfil its vision and values EFG considers five drivers, with the following aims:

- improving education and outreach in the field of geosciences;
- increasing professional mobility and recognition of qualifications;
- ensuring ethical professional practice;
- supporting its National membership Associations (NAs) in delivering its strategy.

In 2013, the EFG Council unanimously approved a Strategic Plan, together with a summary of actions arising from it, for the period 2014 to 2017. Those actions were subsequently grouped to seven thematic sets, which represent the framework for this annual report: EFG Members, European Network, Global Network, GeoExpert, Services, Projects and Communication.



## 2 MESSAGE FROM THE PRESIDENT

In 2016 we attained the objectives of all seven thematic sets encompassed by the EFG Strategic Plan for 2013–2017. This was possible thanks to the work made in previous years, but this time we ended the year with first-class results. Details on 2016 activities are provided in the message from Isabel Fernandez, the EFG Executive Director, but as a starting point to the discussion on EFG's Strategic Plan for 2018–2022, I would like to draw your attention to some of EFG's accomplishments since 2013 in each strategic area.

### **EFG Members**

This area of the Strategic Plan is focused on improving engagement of National Associations (NAs) in EFG activities, sharing of best practices and expansion of membership. The NAs are the reason why EFG exists, and facilitating the exchange of information on current activities and practices between NAs, supporting the initiatives the NAs develop and voicing the concerns they have to influencers and policy makers are the most important strategic activities of EFG. This is done on a regular basis, through the combination of several initiatives and instruments, but I would like to highlight two examples of solid cooperation in the EFG family:

1. Many NAs are supporting the activities of EFG in H2020 projects. Throughout EFG these NAs have access to EU funds that are, in many cases, a relevant contribution to their income, and EFG benefits from a wider European coverage;
2. In 2015 the translation into 14 European languages of an appealing publication named *Geology for Society*, created by the Geological Society of London, was fostered by EFG, and made possible the organisation of a launch event (of the publication in 14 languages) at the EU Parliament.

These examples show how EFG has evolved into a more cohesive organisation, with shared objectives and a strong sense of mutual support. And this is expressed also by the growth in EFG membership, from 21 members in 2013 to 25 members in 2016.

### **European Network**

The aim of this strategic area is to increase the visibility of EFG among EU institutions and to leverage EFG's capacity to influence EU policy on all geoscience issues. The political attention recently given to raw materials has benefited EFG. Our active role in the European Innovation Partnership on Raw Materials and in the Raw Materials Supply Group has been reinforced since 2013, with the participation of EFG in many activities organised by the European Commission. We developed raw materials commitments, participated in discussions about Conflict Minerals, and contributed to the revision of the EU Critical

Raw Materials List and the EU Raw Materials Scoreboard. Beside minerals, we have also been active in catching the attention of policy makers for groundwater management, geothermal energy and soils protection, all this with the support of EFG's 9 Panels of Experts, which now include 211 experts.



In these interactions we have reinforced our ties with several General Directorates of the European Commission (Growth, Trade, Internal Market, Environment, Research), with European Institutions (Joint Research Center, EASME, European Environment Agency, European Economic and Social Council) and with other geoscience related associations from Europe (EGU, EuroGeoSurveys, EAGE, IMA-Europe, Euromines, ETP-SMR, EIT-KIC).

As a result, awareness of EFG's capabilities is now stronger among policy officials and politicians in the European Commission and Parliament.

### **Global Network**

Leveraging EFG's visibility in Europe has facilitated the expansion of EFG's international ties. This was in line with the strategic pathway seeking enhanced cooperation with geoscience organisations from all over the world, covering professional practices, ethics, reporting and training. In the last years we reinforced our bonds with EFG's counterparts from Australia, Canada, South Africa and the US, seeking more dialogue and mutual knowledge exchange. We also enhanced our collaboration with international geoscience organisations such as IUGS, YES, GSAf and CRIRSCO, and with intergovernmental organisations such as UNESCO, UNEP and UNECE. And recently, we received the joint support of IAPG (International Association for Promoting Geoethics) and IAGETH (International Association for Geoethics) in updating our Code of Ethics. As a consequence of EFG's international visibility, rooted in past activities and leveraged by our participation in the H2020 funded projects INTRAW (which is building the European Observatory on Raw Materials) and FORAM (that will advance a World Forum of raw materials), we have been active agents of "geosciences diplomacy", contributing to several international joint statements, meetings and conferences.

### **EurGeol Competent Person**

The EurGeol title is paramount to EFG, and the Strategic Plan stresses the importance of promoting and increasing the recognition of the title. With this aim we

advanced in 2014 a fast-track method for holders of the EurGeol title to obtain the professional titles issued by EFG's counterparts, and we set in place a corresponding system with our colleagues from the US (the American Institute of Professional Geologists). We are now trying to expand this to Australia and Canada, contributing to breaking down all barriers to the mobility of professional geologists.

In the same year we took the first steps to highlight (and differentiate) the different professional areas of activity encompassed by the EurGeol title, thus expanding the Competent Person concept, well developed in mining, into other areas of geosciences such as hydrogeology, where the marketplace and regulators value the delivery of high levels of professional competence.

In all conferences and events we organised in the past 4 years targeting policy makers, mainly addressing hydrogeology, natural disasters and raw materials, we have stressed the importance of ensuring the participation of Competent Professionals in the decision-making process. In this line we started the renovation of the 9 Panels of Experts of EFG, reinforcing the participation of EurGeols in those panels.

The number of EurGeols increased, in the period 2013–2016, from 702 to 928, but the potential for growth in some European countries remains very high.

### **EurGeol Services**

To increase the number of EurGeols it is necessary to increase also the benefits to title holders, and this area of the Strategic Plan is focussed on expanding the perceived value of the EurGeol title.

We launched in 2014 a web platform (EurGeol tool) where EurGeols can directly update their continuing professional development (CPD) activities and where the public can search for information on EurGeol title holders. And we use our social media to periodically advertise the existence of this online Directory, with detailed information on EurGeols (area of expertise, country of origin, languages spoken, etc.).

We set up a European endorsement programme of training courses on geosciences topics, asking in return (only) the offer of exclusive discounts for EurGeols. Discounts for EurGeols are always available in all conferences and workshops organized by EFG, and we are expanding the concept by launching specialised training courses (which will be co-organised by EFG in several EU countries) having complementary benefits for EurGeols.

In addition, tangible actions are being made to provide advantageous access of EurGeols to published scientific articles and to professional insurance.

### **Projects**

The participation of EFG in H2020 funded projects has increased (EFG is now active in eight H2020 projects), focussed mainly on dissemination and/or data collection activities, and this has five relevant consequences: 1) it raises EFG's profile as a trusted organisation that delivers; 2) it enlarges the networking capacities of EFG,

linking companies, universities, research centres and professionals from all over the world; 3) it reinforces bonds with NAs and counterparts that participate in the projects as third parties of EFG; 4) it engages members of the Panels of Experts in the development of project proposals; and 5) it contributes to the EFG budget, leveraging EFG's capacity to amplify other actions.

### **Communication**

This is one of the most relevant areas of the Strategic Plan, since communication is fundamental to building trust and fostering engagement with all stakeholders. We have basically two pathways of communication, one directed to the EFG Council/NAs, and the other aimed at external stakeholders. In our communication with the Council and the NAs we periodically share the results of Board meetings (by email) and the status of the H2020 projects we participate in (with the quarterly newsletter 'Project News'). For communicating with external holders we combine newsletters (EFGGeoWeek and Geonews), the European Geologist journal and social media. Our presence on LinkedIn, Facebook and Twitter is consolidated (with thousands of interactions every month), and all these platforms are available through the EFG website, with linkages to all media and existing publications.

This overview shows that we still have a lot to do. And to do it wisely, we will start by revising and updating our Strategic Plan for the coming five years (2018–2022), ensuring that EFG will be capable of facing the many challenges of the Anthropocene Era, not only in political and social arenas, but also for the development and provision of advice to policy makers.

The good news is that we have a fully committed Board, recently renewed, that brings together a vast pool of experience and know-how and is willing to consolidate and build on the work made to further expand the influence of EFG and its services to members and EurGeols.

To close, I would like to express my gratitude to the Board Members that were replaced in the Board in 2016: Nieves Sanchez, Domenico Calcaterra and Tamás Hamor. I have a debt of gratitude for their ongoing support, and for the faithfulness and insight they offered to EFG. Gabriele Ponzoni, Marko Komac and Michael Neumann are the new Board Members, and they have already demonstrated their enthusiasm, energy and commitment towards EFG.

Finally, a tweet to recognise the dedication of Anita Stein, Éva Hartai, Isabel Fernandez, Ruth Allington, Balazs Bodo, Bob Hoogendoorn, Carlos Almeida, János Szanyi, Kris Piessens, Marco Petitta, Markku Iljina, Pavlos Tyrologou, Pierangelo Bianco and Vanja Bisevac. All these colleagues made significant contributions to the EFG results in 2016 with their work, insight and creativity.

Vitor Correia  
EFG President



# 3 MESSAGE FROM THE EXECUTIVE DIRECTOR

In 2016, the European Federation of Geologists (EFG) continued with the implementation of the EFG Strategic Plan 2014-2017, completing actions according to the seven strategic pillars: supporting EFG Members, European Network, Global Network, EurGeol as Competent Persons, Services, Projects and Communication. This report presents the main outcomes in each of these actions during 2016.

## **EFG Members**

EFG welcomed two new Members in 2016. At the Lisbon Council meeting, May 2016, the EFG Council approved as the Turkish Association of Economic Geologists (TAEG) as a full member, and at the Brussels Council meeting, November 2016, the EFG Council approved the application of the Bulgarian Geological Society (BGS) as a full member. Today, EFG represents 26 European countries and around 45,000 geologists are represented through EFG national associations (NAs).

One of the objectives of EFG Members strategy is the sharing of best practice and benchmarking among professional geologists in Europe. With this objective, in February 2016 EFG launched a new section in the monthly GeoNews, “One Day in Europe”. Each month, EFG interviews one of its National Associations (NAs) to discover the challenges faced by European geoscientists in different countries. Hearing from NAs across the continent, it appears that the members of this European family share a lot of the same objectives and all work towards a better communication to their members, to young professionals, and to the public.

## **European Network and Panel of Experts**

The EFG Panel of Experts (PE) platform played an important role in the implementation of the European Network. Special mention should be made to the work done by the PE on Natural Hazards. In June 2016, EFG published a position paper on protection against floods: “Geoscience, a tool for civil protection against floods”, in relation to the events in Germany, Belgium and France in June 2016. A few months later, in August 2016, another terrible natural hazard event occurred in central Italy. The PE reacted again and in September 2016 EFG published a new press release on “Geoscience, a tool for civil protection against earthquakes”. The PE on Education has also contributed to the European Networking, mapping the geology in public education in Europe. Other PEs such as Geothermal Energy,

Hydrogeology and Minerals have contributed to the European projects carried out directly by EFG or through similar organisations.

## **Global Network Activities**

EFG’s Global Network was extended during this reporting period by attending some international events. In April, EFG attended the United Nations, Economic Commission for Europe (UNECE) Committee on Sustainable Energy Expert Group on Resource Classification. This meeting allowed us to become more active in this international group and plan collaborative actions for the future, materialised in the joint EFG-UNECE Conference in February 2017.

In September, EFG participated in the 35<sup>th</sup> International Geological Congress, IGC, Cape Town, South Africa. We took that opportunity to meet EFG Associate Members from Australia, Canada, South Africa and the US. In collaboration with the IUGS Task Group on Global Geoscientists Professionalism we organised several activities in the Congress. This active participation has contributed to better integrate “professionalism” as a relevant area in the IGC.

During this year, the EFG has also collaborated with UNESCO Earth Sciences and Geo-hazards Risk Reduction Section to deal with sexual harassment. Following the request from this relevant international organisation, the EFG Board decided to include in our Code of Ethics a zero tolerance policy on all types of harassment. We received the joint support of IAPG (International Association for Promoting Geoethics) and IAGETH (International Association for Geoethics) to update our Code of Ethics. In November 2017 a new article was approved by the EFG Council in our Code of Ethics for Geologists on “working environment”, stressing that the discrimination or harassment, either sexual or of any other kind, is unacceptable because it offends the dignity of persons and seriously undermines the atmosphere of trust essential to the work of all geologists.

## **EurGeol as Competent Persons**

EFG continues promoting the EurGeol title to ensure delivery of high levels of professional competence based



on individual responsibility and international standards. Today, 20 EFG NAs can facilitate the awarding of the EurGeol title, a professional title which validates a high level of professional experience and acknowledges the ability to deliver a high quality of services within the practice of geology.

In the GeoNews section, “European Geologist of the month”, we had the opportunity to know more about individual European Geologist title holders, learning about the professional experiences and what role the title has played in their careers. Our EurGeols indeed often meet at various events and share their dedication to their fulfilling and challenging job.

### **EFG Services**

In the EFG Services strategic action, EFG promoted the “Interactive Directory of European Geologists” included in the EurGeol Tool, allowing companies and organisations to search for European Geologists (EurGeols) active in one specific country and/or one specific professional geology domain. To support the EurGeols CPD activity, EFG continues to promote the training endorsement of EFG and has organised events in cooperation with other NAs of EFG.

### **European Projects**

2016 was also the second year for four EFG H2020 projects and consequently during this year we completed the technical and financial reporting for the following projects: KINDRA, knowledge inventory for hydrogeology research; INTRAW, fostering international raw materials cooperation; MINATURA 2020, mineral deposits of public importance; and VAMOS, a revolutionary underwater mining system.

In addition, during this year four new projects have been approved by the H2020 and launched: CHPM2030, Combined Heat, Power and Metal extraction from ultra-deep ore bodies; UNEXMIN, autonomous Underwater Explorer for Flooded Mines; MICA, Mineral Intelligence Capacity Analysis; and FORAM, Towards a World Forum on Raw Materials.

From the total of 8 projects in which EFG is involved, 4 projects have direct participation of EFG NAs as “Linked Third Parties”. 2016 has been a learning process to all of us on how to ensure the deliverables and reports requested by the projects. The combined efforts from 20 associations participating in the projects present a difficult challenge that helps us to build a stronger organisation, and it has inspired several other similar organisations at European level.

### **Communication and staff**

In order to respond to the constantly increasing activity of EFG, the EFG Office has reinforced its staff to ensure its day-to-day activities. We now count on four EFG staff members in the Brussels office and three more staff members working on-line from different European locations. 2016 has offered us an opportunity to strengthen the collaboration with EFG members, and we are grateful for the excellent collaboration with EFG Delegates and EFG Board. EFG is growing, thanks to all of you.

Dr. Isabel M. Fernández Fuentes  
EFG Executive Director

# 4 ORGANISATIONAL STRUCTURE

## BOARD

The EFG Board comprises the Officers of the EFG (President, Vice President, Secretary General, Treasurer, and External Relations Officers) elected from the officially appointed delegates. The EFG Board acts as the executive body of the Council, to carry out the approved business of the EFG, to implement policy decisions by Council and to make policy proposals.

During the 71<sup>st</sup> EFG Council meeting that was held in Lisbon, Portugal, on 21 and 22 May 2016, two new Board officers were elected:

Following the end of the term of Nieves Sánchez (ICOG), Michael Neumann has been elected Vice-President. He has more than 30 years of experience in economic geology, mining and environmental geology and has been working in over 15 countries worldwide, in different positions, involving various languages, people and social groups. Michael Neumann is currently operations manager and chief geologist at Sachtleben Bergbau Verwaltungs-GmbH, Lennestadt, Germany. He is a member of the German Association of Professional Geologists (BDG).

Gabriele Ponzone has been unanimously elected Secretary General. He graduated in 1993 and acquired professional experiences in different Italian government agencies (municipalities, provinces, regions, national institutions and ministries) and as a freelance by various types of consulting (with small businesses and large industrial customers as well). He is a member of

the Italian CNG and replaces Domencio Calcaterra as Secretary General.

During the autumn Council meeting held in Brussels on 19 and 20 November 2016 two further Board members were elected: Vitor Correia was re-elected unanimously as EFG President and Marko Komac was elected External Relations Officer. Marko is currently an independent consultant and researcher, an occasional lecturer at two Slovenian universities as the associated professor and an ardent sportsman. He has been involved in several international organisations in the past, more precisely from 2006 on and during that time he has gained excellent networking, facilitating and diplomatic skills, excellent managing and organisational skills in the field of research institutions and teams (also at the international level). During the period 2006 – 2014, he was a director of the Geological Survey of Slovenia and, from 2013 to 2016, he was a Managing Director of OneGeology Consortium. In the years 2011 and 2012, he was the EuroGeoSurveys President and, during the period of 2012 to 2016, the Vice-President of the IUGS. Since 2015, he has also been the officially appointed delegate of the Slovenian Geological Society (SGD) at EFG. Marko holds a PhD in geology and is specialized in GIS application in geological sciences, spatial analysis, remote sensing, satellite imagery and graphical analysis, geohazard analysis and assessment, landslide susceptibility analysis, and spatial modelling.



**Vitor Correia, Portugal**  
President

*«How do you evaluate EFG's evolution in the past year and what would you consider as your main personal contribution to the fulfilment of EFG's strategic objectives in 2016?»*

« In my opinion, 2016 was a year we fortified EFG's bonds. This happened with the National Associations (NAs), now more engaged in EFG's activities, with our international counterparts from Australia, Canada, South Africa and the US, who are participating in activities promoted by EFG, and with many European organisations (not only the ones connected to the European Commission, but also with organisations linked to geosciences or to the raw materials industry).

This was not a result of my work. It was, as always, a result of team work, involving my Board colleagues, the office staff and many other colleagues who voluntarily offered to EFG their creativity, commitment and effort.»

***Is there any event in the European geosciences community last year that you consider as particularly relevant?***

« I have participated in several relevant events (e.g. the European Geothermal Congress in Offenburg, the EGU Conference in Vienna), some organised by the NAs (e.g. Workshop on sustainable land uses in Lisbon, Conference on floods in Florence), but the most relevant was, in my opinion, the workshop held in Cornwall by the project INTRAW. I choose this one, because I had there the opportunity to deepen, in an informal setting, the relations of EFG with representatives of our counterparts from Australia (Australian Institute of Geoscientists), Canada (Geoscientists Canada), Chile (Sociedad Geológica de Chile), South Africa (Geological Society of South Africa) and the US (American Institute of Professional Geologists).»

**Michael Neumann, Germany**  
Vice-President



*How do you evaluate EFG's evolution in the past year and what would you consider as your main personal contribution to the fulfillment of EFG's strategic objectives in 2016?*

« The year 2016 was characterised by the increased public presence of the EFG Board members in international events and conferences as well as participation and leadership within the European and international geoscientific projects (such as INTRAW, KINDRA and many others). And we welcomed our Turkish and Bulgarian colleagues in the European family of geoscientists organised in the EFG.

My personal contribution to EFG's strategic objectives was primarily to represent the EFG within the raw material and mineral reporting sector and to improve the professional training possibilities for the European Geologists in collaboration with the EFG and the National Associations. We created two new series of training possibilities, the EuroWorkshop on specific regional geological specialties and the EuroSeminar on general geological problems. Both events will be launched in 2017. A further point of my activities concerned with the support of the activities of the Board to attract more members to the EFG.

Another point of activity was the start of the preparation of a European mentoring program for young professionals. A questionnaire has recently been circulated to the member associations. »



**Gabriele Ponzoni, Italy**  
Secretary General

*How do you evaluate EFG's evolution in the past year and what would you consider as your main personal contribution to the fulfillment of EFG's strategic objectives in 2016?*

« I am with the role of Secretary since May 2016. Since then I have had the opportunity to appreciate the great dynamism of this group and the continuous search for new possibilities. My contribution is given by the test as geologists with strong skills on the management of natural hazards can be useful both to society and to EFG. »

*Is there any event in the European geosciences community last year that you consider as particularly relevant?*

« I would like to report the National Congress of Italian geologists which took place in Naples in April 2016. As a special guest we invited Vitor Correia, the President of the EFG. »

**Marko Komac, Slovenia**  
External Relations Officer



Marko Komac was elected as the EFG ERO in November 2016 and has not been much involved in the EFG Board activities in 2016. Still Marko immediately started the duties of the ERO with contacting and inviting associations from European countries that have no representatives in the EFG. In addition he actively contributes to the operational matters of the EFG. In 2017 and beyond the main goal of Marko is to bring on-board EFG new member associations, to contribute to finding additional funding sources for EFG activities, such as H2020. Marko's aims are also to strengthen relations with sister organisations around the world.



**Bob Hoogendoorn, The Netherlands**  
Treasurer

Bob Hoogendoorn, a delegate of the Dutch KNGMG, is EFG Treasurer since August 2013. Dr. Hoogendoorn is an applied scientist with experience in studying architecture of sedimentary systems, project management and business development in geosciences. From 2000-2010 he held several positions at Delft University of Technology including assistant professorship in engineering geology. During this time, he worked to improve the integration between geology, geophysics and geotechnology. Bob Hoogendoorn is currently the manager of the department of applied geology and geophysics at Deltares.

## COUNCIL

The Council is the governing body of EFG. It comprises two to three officially appointed delegates for each of the full members and the Officers of the EFG who constitute the EFG Board. EFG holds two Council meetings per year, one official meeting in springtime, and one formal or informal meeting in autumn.

In 2016 the meetings were held in Lisbon, Portugal, on 21 and 22 May and in Brussels, Belgium, on 19 and 20 November.

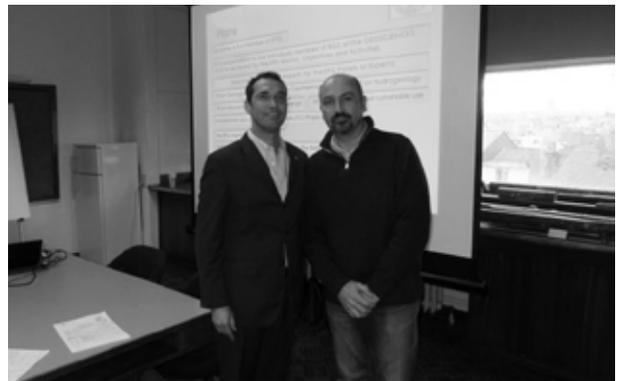
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## MEMBERSHIP STATUS

During the Lisbon Council meeting, the EFG Council unanimously decided to welcome the Turkish Association of Economic Geologists (TAEG) as a full member. TAEG was founded in 2011. It is headquartered in Ankara and open to all geologists that are graduates of an accredited geology faculty in Turkey or of universities from other countries with equivalent academic standards. More information: <http://mjd.org.tr/tr.aspx>

During the Brussels Council meeting, the EFG Council approved the application of the Bulgarian Geological Society (BGS) to become a full member. BGS was founded in 1925 and is presently headquartered in Sofia. The BGS mission is to: contribute to the geological knowledge and the active protection of geological heritage of Bulgaria; promote the achievements of its members

and the national geology; advance cooperation with similar organisations in Bulgaria and abroad; support the development of geological education and raise the qualification of workers in the field of earth sciences and geological practice; take care in raising the prestige of the geological profession, protecting the interests of Bulgarian geologists and being the public corrective of state policy in the field of geology. More information: <http://www.bgd.bg>



ABOVE:  
EFG PRESIDENT VITOR CORREIA WITH  
BULGARIAN COLLEAGUE LUBOMIR METODIEV (BGS)



BELOW:  
VITOR CORREIA  
WITH DELEGATES FROM TAEG.

# 5 STRATEGIC ACTIONS

## EFG MEMBERS

### OBJECTIVES AND DRIVERS

1. Improving engagement of NAs in EFG activities makes a stronger Federation and mobilises time and talents beyond just the Board, Officials and permanent staff to deliver EFG's aims and programme;
2. Sharing of best practice and benchmarking among professional geologists in Europe, contributes to mobility, recognition by governments and European institutions of geologists and the work that they do, and provides opportunities for continuing professional development to individual geologists;
3. Retaining members protects EFG's core budget;
4. Recruiting additional members will either bring in more revenue allowing the annual budget to be met and with more contributions, fees can be reduced.



### OUTCOMES

1. Developing a more cohesive Federation with shared objectives and a strong sense of mutual support;
2. Sharing the work involved in delivering the EFG strategic plan beyond just the Board, Officials and permanent staff – doing more by mobilising more resources from member associations;
3. Providing central services to member associations that lack resources to develop for themselves;
4. Facilitating mutual support between groups of member associations to pool resources or learn from each other.

## STATISTICS

The following map displays the distribution of EFG's membership figures by country. In 2016, EFG represented through its national member associations a total of 43,677 geologists.

EFG currently counts 25 national membership associations representing 26 European countries. The graph on the following page shows the evolution of EFG's membership since 2007.



FIGURE 1: DISTRIBUTION OF EFG MEMBERSHIP BY COUNTRY.

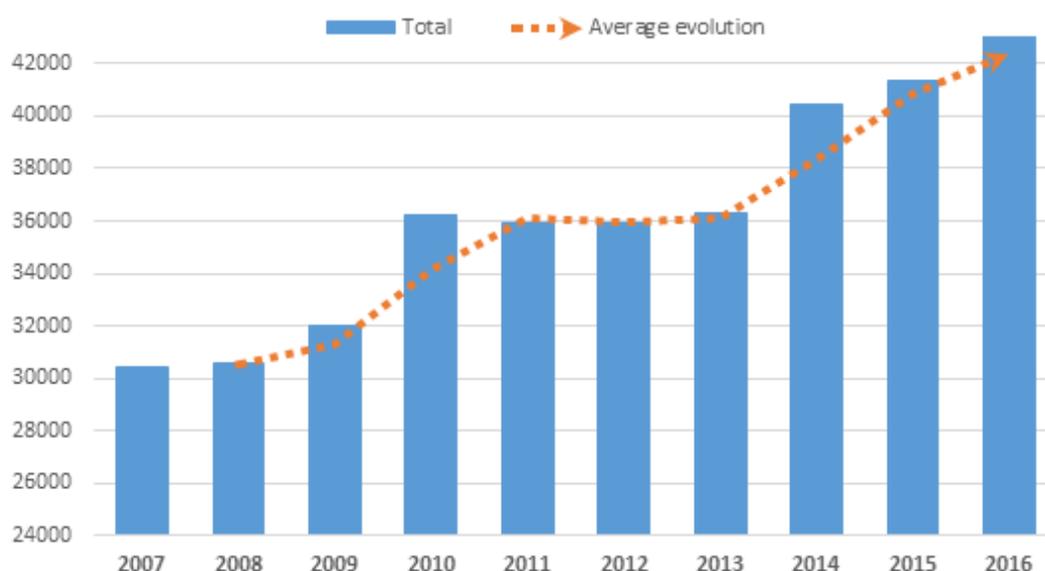


FIGURE 2: TOTAL EFG MEMBERSHIP EVOLUTION SINCE 2007.  
SOURCE: EFG OFFICE. DATA PROVIDED THROUGH NATIONAL ASSOCIATION REPORTS.

## NATIONAL ASSOCIATIONS



### Belgo-Luxembourg Union of Geologists (UBLG/BLUG)

[www.blug-ublg.be](http://www.blug-ublg.be)

Delegates: Robrecht Schmitz, Yves Vanbrabant & Nuno da Silva



### Bulgarian Geological Society (BGD)

[www.bgd.bg](http://www.bgd.bg)

Delegates: Eugenia Tarassova & Lubomir Metodiev



### Croatian Geological Society (CGS)

[www.geologija.hr](http://www.geologija.hr)

Delegates: Miklin, Željko, Lilit Cota, Morana HERNITZ KUČENJAK & Igor Vlahović



### Cyprus Association of Geologists And Mining Engineers

[www.geomines.org.cy](http://www.geomines.org.cy)

Delegates: Antonis Antoniou & Iordanis Dimitriadis



### Czech Association of Economic Geologists

[www.calg.cz](http://www.calg.cz)

Delegates: Mirko Vanecek & Miroslav Raus



### Geological Society of Denmark (DGF)

[http://2dgf.dk/dgf\\_uk/main.html](http://2dgf.dk/dgf_uk/main.html)

Delegates: Joakim Stiel Korshøj, Jørgen Overgaard Leth & Karen Hanghøj



### Finnish Union of Environmental Professionals (YKL)

[www.ykl.fi](http://www.ykl.fi)

Delegates: Pekka Ihalainen & Markku Iljina



### French Geological Society (SGF)

[www.sgfr.org](http://www.sgfr.org)

Delegates: Antoine Bouvier, François Leparmentier, Dennis Lahondes, Brenda Lothion & Daniel Mariton



### Professional Association of German Geoscientists (BDG)

[www.geoberuf.de](http://www.geoberuf.de)

Delegates: Hans-Jürgen Weyer, Andreas Hagedorn, Hans-Jürgen Gursky & Michael Neumann



### Association of Greek Geologists (AGG)

[www.geologist.gr](http://www.geologist.gr)

Delegates: Xenofon Stavropoulos, Pavlos Tyrologou & Trantafillos Kaklis



### Hungarian Geological Society (MFT)

[www.foldtan.hu](http://www.foldtan.hu)

Delegates: Csaba Baksa, Eva Hartai, Tamas Hamor & Péter Scharek



### Institute of Geologists of Ireland (IGI)

[www.igi.ie](http://www.igi.ie)

Delegates: Gerry Stanley, Claire Clifford, Catherine Buckley, Marie Fleming & James Hodgson



### Italian National Council of Geologists (CNG)

[www.cngeologi.it](http://www.cngeologi.it)

Delegates: Francesco Peduto & Gabriele Ponzoni



### Royal Geological and Mining Society of the Netherlands

[www.kngmg.nl](http://www.kngmg.nl)

Delegates: Bob Hoogendoorn, Lucia Van Genus & Michiel van der Meulen



Polish Association of Mineral Asset Valuers

Polskie Stowarzyszenie  
Wyceny Złóż Kopalin

**Polish Association of Mineral Asset Valuers**

<http://www.polval.pl>

Delegates: Krzysztof Galos & Jacek Sobczyk

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ASSOCIAÇÃO PORTUGUESA DE GEÓLOGOS

**Portuguese Association of Geologists (APG)**

[www.apgeologos.pt](http://www.apgeologos.pt)

Delegates: José Mário Castelo Branco, Monica Sousa,  
Carlos Almeida & Vitor Correia

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**Russian National Association for Subsoil Use Auditing (NAEN)**

[www.naen.ru](http://www.naen.ru)

Delegates: Alexandr Ezhov, Giravov Shakhbulat & Anton Chupilko

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**Serbian Geological Society (SGD)**

[www.sgd.rs](http://www.sgd.rs)

Delegates: Meri Ganic, Uroš Đurić, Iris Vukovic, Radoslav Vukas, Darko Spahic &  
Tivadar Gaudenyi

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**Slovenian Geological Society (SGD)**

[www.zrc-sazu.si](http://www.zrc-sazu.si)

Delegates: Matevž Novak, Uros Herlec, Slavko Solar & Marko Komac

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**Official Spanish Association of Professional Geologists (ICOG)**

[www.icog.es](http://www.icog.es)

Delegates: Manuel Regueiro, Nieves Sanchez & Luis E. Suarez

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**Geosection (Swedish Association of Scientists, NA)**

[www.naturvetarna.se](http://www.naturvetarna.se)

Delegates: Magnus Johansson, Pia Hansson, Otto Pile, Elin Hulth & Mats Fehrm

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**Swiss Association of Geologists (CHGEOL)**

[www.chgeol.ch](http://www.chgeol.ch)

Delegates: Pierre Christe, Marianne Niggli, Jean-Bernard Joye, Alessandro Menegatti &  
Christoph Haemming

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**Ukrainian Association of Geologists (UAG)**

[www.geolog.org.ua/en](http://www.geolog.org.ua/en)

Delegates: Pavlo Zagorodnyuk, Bezvynnyi Volodymyr & Hanna Liventseva

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## Turkish Association of Economic Geologists (TAEG)

[www.geolsoc.org.uk](http://www.geolsoc.org.uk)

Delegates: İbrahim Güney & Mesut Soylou



The Geological Society  
*servicing science & profession*

## Geological Society of London (GSL)

[www.geolsoc.org.uk](http://www.geolsoc.org.uk)

Delegates: Chris Brown, Richard Hughes, Chris Eccles & Nic Bilham

### ONE DAY IN EUROPE: A WIDE RANGE OF UNIQUE NATIONAL ASSOCIATIONS WALKING IN THE SAME DIRECTION

In February 2016, EFG launched « One Day in Europe », a new feature within its newsletter GeoNews. Each month, EFG takes you to one of its National Associations (NAs) and allows you to discover the challenges faced by other European geoscientists. A unique way of connecting.

One of EFG's missions is to strengthen the European idea within the family of geoscientists. Hearing from NAs across the continent, it appears that the members of this international family share a lot of the same objectives and work together towards a better communication to the members, young professionals, and the public.

#### THE QUALITY OF THE RELATIONSHIP WITH THE MEMBERS, OFFLINE AND ONLINE

*"This past year, many associations have particularly understood the importance of being more active online."*

Each NA's aim is to better represent its members, a mission that grows more efficient as the amount of members grows as well. Every year, NAs therefore put a lot of efforts into connecting with their members, and 2016 was no different. This past year, many associations have particularly understood the importance of being more active online. The Hungarian Geological Society (MFT) has for example accomplished the digitalization of their periodicals. The Belgo-Luxembourg Union of Geologists (BLUG/UBLG) has also worked towards a stronger involvement online, including on social medias. Being visible online is therefore, more than ever, a priority for NAs that also work on the quality of their content. The Spanish Official Professional Association of Geologists (ICOG) has for example developed online training courses. As relevant as an online presence is, nothing can however compare to a qualitative offline relationship with the members, something each association constantly works on. A prime example is the MFT, which organises many annual thematic events,

such as the Annual Convention on Palaeontology, that work towards building a closer community of geologists. A community that is also defined by its love for being on field, something the BLUG/UBLG has understood and smartly capitalized on with the organization of visits to a dredging project in the Netherlands or to mining and quarrying sites, to name just a few.

#### YOUNG PROFESSIONALS, SUPPORTING THE FUTURE OF GEOLOGY

*"First and foremost, mentoring plays a great role in helping Young Professionals in the development of their career..."*

Each NA works on a strong representation of their members and is involved in a lot of current national and international projects, which does not stop each and every one of them from investing in the future of the profession. Young Professionals are indeed a main subject of attention for the different NAs that constantly, and 2016 was no exception, develop new initiatives to better support them. First and foremost, mentoring plays a great role in helping Young Professionals in the development of their career, as shown by the Professional Association of German Geoscientists (BDG). The association has indeed developed a programme that brings together young professionals and experienced geoscientists, and which efficiency is supported by other initiatives such as training courses and a weekly email-based jobticker. Another example of such inspiring initiatives is the work of the Institute of Geologists of Ireland (IGI), which has organized a workshop on Career Planning that has led to the creation of a free, voluntary mentorship scheme. Mentoring is thus very important, and so is education with initiatives such as the various advanced education projects supported by the Swiss Association of Geologists (CHGEOL).



CONNECTING WITH THE PUBLIC, FOR THE SAKE OF THE PROFESSION, AND SOCIETY

*"NAs therefore make sure that the public can easily find information, for example with the brochure "Geology for Society", originally published by the Geological Society of London (GSL) and later translated in many languages thanks to a joint effort of other National Members."*

Multitasking is a common thread among the different associations. Not only do they communicate to their (potential) members and young professional, but they also work towards raising awareness on the profession among society. NAs therefore make sure that the public can easily find information, for example with the brochure "Geology for Society", originally published by the Geological Society of London (GSL) and later translated in many languages thanks to a joint effort of other National

Members. Another great way to raise awareness and interest is to organize events. The MFT notably organised the Earth Science Weekends, which was attended by 3000 kids, students and adults. Originality and interaction are indeed an important component of what makes an event successful, as illustrated also by the BDG and their "Stone in the board" price awarded to non-geoscientists who contributed to geoscience and that was this year awarded to a musician working with instruments made from stone. The imagination of the NAs seems to know no boundaries, and their target no age-limit, as shown by the efforts displayed by the Geological Section of the Swedish Association of Scientist to have geology taught in school.

Which such imagination and abnegation to raise interest in society while growing their member base and supporting the profession, the impact National Associations can make on the profession, society, and national decision makers can only grow stronger.



FIGURE 3: SOME FACES BEHIND EFG'S NATIONAL MEMBERS - BOARD AND STAFF MEMBERS OF THE GERMAN BDG, STAFF MEMBERS OF THE SPANISH ICOG, BOARD MEMBERS OF THE SWISS CHGEOL, BOARD MEMBERS OF THE HUNGARIAN MFT, PRESIDENT OF THE IRISH IGI MARIE FLEMING AND THE SWEDISH EFG DELEGATE PIA HANSSON.

## EUROPEAN NETWORK

### OBJECTIVES AND DRIVERS

1. Increasing the visibility of EFG among EU institutions and EFG's capabilities to influence the EU in policy development regarding geosciences related issues;
2. Building and maintaining an updated database of contacts in European institutions;
3. Reinforcing EFG's capability to act as facilitator to NAs.



### OUTCOMES

1. Reinforcing EFG's role in the development of EU policies that relate to the geosciences;
2. Building awareness of EFG among European Commission officials;
3. Reinforcing EFG's collaboration with kindred European associations;
4. Reinforcing communication between EFG, the NAs and relevant national organisations such as Geological Surveys or industry associations;
5. Reinforcing EFG's role to set standards for geologist's professional practice under European guidelines.

## PANELS OF EXPERTS

**E**FG's Panels of Experts (PE) are a platform encouraging the collaboration among professionals from different European countries working in the same field of geosciences. They have been set up to provide high quality advice and information to the European Commission (EC), to the European Parliament, to international NGO's and to global professional associations, to participate in EC congresses, working groups and consultation meetings. In addition, they proactively respond to relevant issues in the press and to those items on the European Commission and European Parliament agenda. Furthermore, in all these activities, it is the intention to take every opportunity to emphasize the importance of geology to society, the benefits of incorporating geological advice and to promote the importance of the geoscientific profession.

The participation of experts is on a voluntary basis. The advantage for the participating experts is their active involvement in a European and/or worldwide network of experts with the same specialty. Although in most cases several of these specialist networks already exist, the EFG expert panels are different, because they mainly focus on raising the awareness of technical and professional issues and try to influence or convince politicians and decision makers to adjust their directives so that geology is taken into account.

As the following map shows, EFG's Panels of Experts platform currently consists of a total of 211 experts from 22 European countries.



FIGURE 4: EXPERTS BY COUNTRY.

As Figure 5 shows, the Panels of Experts on Minerals and on Natural Hazards & Climate Change have the highest number of experts and are currently very active. In 2016, the Panel of Experts on Natural Hazards has notably produced two press releases about the role of geosciences in the prevention of floods (June 2016) and earth quakes (September 2016). Both press releases were

directly linked to hazards that concerned citizens living in different European countries and were immediately prepared by the Panel.

The different Panels of Experts are listed on the following pages and more information on their activities may be found on the EFG website [www.eurogeologists.eu](http://www.eurogeologists.eu) in the section "Panels of Experts".

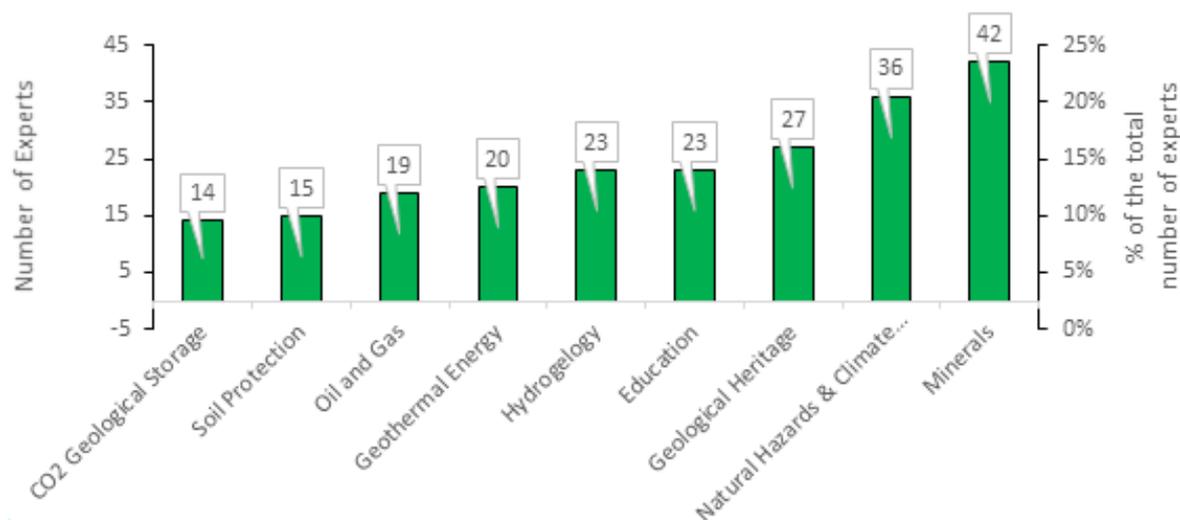


FIGURE 5: NUMBER OF EXPERTS BY PANEL.

## PE ON CO<sub>2</sub> GEOLOGICAL STORAGE

### MISSION

The mission of the PE on CO<sub>2</sub> Geological Storage is closely aligned with the principal objectives of the European Federation of Geologists, which are representing, safeguarding and promoting the geological profession, promoting best practices and responsible use of resources, and establishing policies on environmental matters and sustainability. The current development of Carbon Capture and Storage makes these objectives highly relevant for the topic of CO<sub>2</sub> storage. The success of CCS will largely depend on how reliably CO<sub>2</sub> can and will be stored, justifying the dedicated mission of the PE CO<sub>2</sub> Geological Storage: emphasizing the role of professional geologists and the importance of the geological perspective in the overall concept of carbon capture and storage.

### COORDINATOR

Kris Piessens / Belgium / [kris.piessens@naturalsciences.be](mailto:kris.piessens@naturalsciences.be)

### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

"The panel was not active in 2016 because of a complete passive attitude of its chair. The same can be feared for 2017 (with exception of the presentation for the EFG-UNECE conference, but this did not involve a reactivation of the group)."

### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

"With respect to the topic of CO<sub>2</sub> geological storage (CGS): the outcome of the COP21, which was more positive than expected. This does make it more likely that certain countries will take stringent emission targets sufficiently serious to realise that CGS is an inevitable or logical choice."

### Is there any research or the work of a particular geologist that was particularly interesting last year?

"Good question, but nothing comes to mind."



## PE ON EDUCATION

### MISSION

The PE on Education was established in 2011. It intends to deal with educational questions in geology (earth sciences) at all education levels from primary school to postgraduate courses. In 2015-16 the Panel carried out a survey on geology in school education, public courses and outreach activities in the countries represented by the panel members. The results will be combined with another survey involving university students in order to know how these factors influence university and career choice.

### COORDINATOR

Eva Hartai / Hungary / [foldshe@uni-miskolc.hu](mailto:foldshe@uni-miskolc.hu)



### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

*"In the first half of 2016 the PE on Education was in correspondence with the representative of the UNESCO Regional Office for Science in Latin America and the Caribbean. They initiated collaboration on an extended survey on education of earth sciences. IGEO (International Geoscience Education Organisation) also joined this collaboration. They wanted to use the related questionnaire by the EFG PE on Education.*

*The Hungarian representative of the PE on Education joined the initiation of IGEO. They prepare an E-book about Earth Science Education. In the book, there is a section for each contributing country, until now, 27 countries have been involved. The PE member provided material about Hungary.*

*In September, a new member from Germany joined the Panel. There are 15 members at the moment. They are all involved in the survey by the UNESCO as experts who fill the questionnaire.*

*As an overall evaluation, the Panel was not too active in 2016. In the first months of 2017, the coordinator of the Panel participated in the preparation of a H2020 proposal related to education: "INTERMIN - international network of raw materials training centres" (EFG is a partner). If the project wins, the PE on Education, through EFG, may contribute to the implementation. The Panel also plans to make a survey in the circle of university students to find out their motivation on career choice."*

### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

*"All events related to raw materials could be mentioned."*

### Is there any research or the work of a particular geologist that was particularly interesting last year?

*"The coordinator of the Panel of Experts on Education coordinates the H2020 research project CHPM2030 – Combined heat, power and metal extraction from ultra-deep ore bodies. She was the leader of work package 1 – Methodology framework definition."*

## PE ON GEOLOGICAL HERITAGE

### MISSION

The EFG Panel of Experts on Geological Heritage aims to support the European Institutions in finding answers to the Geoconservation and Geological Heritage challenges, contributing to the development of European policies to protect the Geological Heritage in Europe. In collaboration with other organizations this PE prepares advice documents and organizes and disseminates scientific events and outreach events on Geoconservation and Geological Heritage.

### COORDINATOR

Mónica Sousa / Portugal / [msousa@apegeologos.pt](mailto:msousa@apegeologos.pt)

### What are your plans for 2017?

"For 2017 I expect to organise some web meetings with the panel's experts in order to reactivate the panel's activities. Until the end of the year I would like the PE to organise a Europe-wide event related to Geological Heritage and Geoconservation."

### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

"The APG 40<sup>th</sup> anniversary and EFG Workshop "The importance of geological knowledge for sustainable land use" was held in Lisbon, on the 19<sup>th</sup> and 20<sup>th</sup> May 2016. This event was organised by the Portuguese Association of Geologists and the European Federation of Geologists and aimed to look at ways in which geological knowledge can contribute to the understanding and management of land use in order to provide a better decision-making and policy-planning framework."



### Is there any research or the work of a particular geologist that was particularly interesting last year?

"Last year the Portuguese palaeontologist, Octávio Mateus, discovered in Greenland fossils of a plesiosaurus, a prehistoric marine reptile, that attests the first incursion in the sea during the opening of the Atlantic Ocean, 200 million years ago."

## PE ON GEOTHERMAL ENERGY

### COORDINATOR

Janos Szanyi / Hungary / [szanyi@iif.u-szeged.hu](mailto:szanyi@iif.u-szeged.hu)

### MISSION

The Panel of Experts on Geothermal Energy contributes to the development of European Policies of interest to geologists and geological issues around the European policy on Geothermal Energy. The panel has identified as sensitive problems in geothermal energy sector:

- Technological innovation.
- Predictable and coherent legislation training and promoting.

### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

"The Geothermal Panel's activity was low in 2016. This was for 2 reasons. First was my own business and the second was a low interest from the members.

Nevertheless the panel did collaborated on a frame of the Specifications for the application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009) to Geothermal Energy Resources.

One of the most important things for the year 2017 is to increase the activity of the panel members. I would like to poll the members about their future activities, their interest in continuing the collaboration and also to invite a few new members into the panel. If I do not manage in increasing the activity of the panel members (myself included), I will resign. I believe that the conference in Santorini will be opportunity to jumpstart our activities once again."

### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

"I have no knowledge of such events. The geologists are considered to pursue a mystical career by most people. In the case of an earthquake or a volcanic eruption greater attention is directed to them, other times they seem to work in isolation either on site or behind the gates of their institutions."

### Is there any research or the work of a particular geologist that was particularly interesting last year?

"I think the climate change related projects and renewable energy projects (like geothermal energy research and development) have particular interest. Also rare elements exploration may in the future have a significant effect on the European citizens, so that is of importance too. Unfortunately, the row materials exploration and mining still has a high disapproval rate."

## PE ON HYDROGEOLOGY

### MISSION

Hydrogeology is a main topic among technical and professional skills of the geologists, and it is probably the most strictly related to the environmental protection and preservation. In the 21st century, the pursuit of the equilibrium between human needs and environmental sustainability involves as a main element the water resources, representing at the same time a resource and a risk. It is a task of modern geologists to contribute to the management and protection of water resources, with particular attention to groundwater. EFG PE on Hydrogeology mission is to contribute to the development of knowledge, to the awareness of groundwater relevance in daily life, to the introduction of policies and to the technical improvement of professional geologists in this field.

### COORDINATOR

Marco Petitta / Italy / [marco.petitta@uniroma1.it](mailto:marco.petitta@uniroma1.it)



#### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

*"Activity in my panel was limited, and activities done in 2016 were exclusively related to the KINDRA project; many members of the Panel are directly involved in the project, which is still ongoing during 2017. My plan is to continue developing the KINDRA project with the involvement of the Panel of Experts on Hydrogeology."*

#### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

*"I think, also for personal reasons, that a very important event which underlined the importance and the role of geologists was the earthquake that struck Central Italy in the last 8 months."*

#### Is there any research or the work of a particular geologist that was particularly interesting last year?

*"As hydrogeologist, I found very interesting the on-line free publication of a historical book, GROUNDWATER by Freeze and Cherry. In addition, the authors are preparing a 2.0 version of their book, which, step by step, is growing as an open access publication at the link <http://hydrogeologistswithoutborders.org/wordpress/textbook-project/gw2-0-project>."*

## PE ON NATURAL HAZARDS AND CLIMATE CHANGE

### MISSION

The group was established in March 2003, in relation to EC initiatives on Civil Protection, DG Environment, and has since then provided many contributions to the EC. The coordinator of this Panel of Experts is Chartered Geologist and holder of EurGeol title on the field of Engineering and Environmental Geology. Furthermore, he is a member of the Technical Committee in Engineering Practice of Risk Assessment and Management of the International Society for Soil Mechanics and Geotechnical Engineering.

### COORDINATOR

Pavlos Tyrologou / Greece / [pavlos.tyrologou@gmail.com](mailto:pavlos.tyrologou@gmail.com)



#### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

*"In 2016, the EFG's Panel of experts on Natural Hazards and Climate Change published a number of press releases that correspond to the tragic events following the floods in Central Europe and earthquakes that took place respectively, in June and August of the same year."*

*The press releases communicated to the public and stakeholders affected, the importance and the risk reduction that can be achieved by incorporating geology in the strategic planning. The group's outreach activities were enhanced by a presentation delivered by the panel's representative at the "La Geologia e la gestione del rischio" conference in Florence, Italy, in relation to the historical floods of the Arno river that took place in 1966."*

## PE ON RESOURCES AND RESERVES - MINERALS AND THEIR SUSTAINABLE USE

### MISSION

Collaboration in, a) the adoption of The Reporting Code by the major professional geological associations in Europe and its recognition as a template for an international code; and b) in the EFG participation in the United Nations Framework Classification for Fossil Energy and Mineral Resources («UNFC») adopted by the UN in June 2004.

### COORDINATOR

Carlos Almeida / Portugal / [calmeida@apegeologos.pt](mailto:calmeida@apegeologos.pt)



### How would you evaluate your panel's activity in 2016?

*"The PE on Minerals was very active and proactive in the EFG context. Our PE members were very active in several projects and initiatives contributing to enhance the EFG in our sector as we can see below:*

*INTRAW: The EFG members of the PE Minerals participated in a truly cooperative approach. The INTRAW project has recently developed three scenarios that describe the world of raw materials in 2050. After having elaborated the scenarios in a series of workshops run by the European participants of the project consortium in mid-2016, the current version of the scenarios was discussed in Brussels with more than 30 participants during the EU Raw Materials Week that took place in Brussels from 28 November to 2 December 2016. Participants from various nationalities and backgrounds – including researchers, policy-makers, and raw materials practitioners – had the opportunity to learn more about the scenarios, to provide their perspectives and to discuss the plausibility of alternate futures. Given the current uncertainties that global politics have to deal with, scenarios are an excellent means to prepare for the future and to safeguard against developments that are not desirable, but yet still plausible. The workshop results will help to refine the scenario story lines and to make them more robust. The final scenarios, named "Unlimited Trade", "Sustainability Alliance" and "National Walls", will be available through the INTRAW website in early 2017. The workshop was also an excellent opportunity to raise awareness for the launch of the International Observatory for Raw Materials which is foreseen for 2017/2018. The Observatory will be a permanent international body that will remain operational after the end of the project aiming at the establishment and maintenance of strong long-term relationships with the world's key players in raw materials technology and scientific developments.*

*MINATURA2020: Several members participate in the MINATURA2020 project. The consortium recently finalised its working definition of "Mineral Deposits of Public Importance" (MDoPI) and further enhances its pan-European approach through an online survey, the organisation of several national stakeholder workshops and the publication of promotional material in various languages.*

*Participation in STONECHANGE 2016 (16-17 June 2016) & PERC training course (15 June 2016), Marina di Carrara, Italy: The international conference STONECHANGE 2016 ("Stone Sector and Changing Trends") held on 16 and 17 June 2016 intended to bring to the famous marble hub of Carrara the private sector and institutional stakeholders of the Dimension Stone Industry to discuss the sector's changing trends and how to take advantage of existing opportunities for a sustainable development. STONECHANGE 2016 was intended as a key "turning point" for the modernisation of the EU stone sector in a global perspective with the aim of making the stone community aware that making the Dimension Stone Industry innovative and sustainable is the sole way to keep it alive and make it more mature and modern to face the present and next future global challenges. A PERC training course on "Best practice for Assessment and Reporting of Exploration Results, Mineral Resources and Mineral Reserves" was held on 15 June 2016. This event was supported by EFG and CNG.*

*Participation in ¡VAMOS!: Focus and specific objectives: ¡VAMOS! will enable access to high grade EU reserves of deeper seated minerals by providing a new Safe, Clean and Low Visibility Mining Technique and will prove the Environmental and Economic Viability of extracting currently unreachable mineral deposits, thus encouraging investment and helping to safeguard the EU access to strategically important minerals. The ¡VAMOS! mining technique will enable: Re-opening abandoned mines; Extensions of opencut mines which are limited by stripping ratio, hydrological or geotechnical problems; and opening of new mines with limited environmental impacts in the EU."*

### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

*"In my opinion the positive event was not one but several events and initiatives regarding the EU policy and strategy for mineral resources. The Participation of the EFG including the board but mainly the Executive Director are fundamental for the future of our sector. The most negative event was the "Brexit" process."*

## PE ON RESOURCES AND RESERVES - OIL & GAS

### MISSION

The oil and gas industry plays a significant role in the supply of the world's energy demand in the 21<sup>st</sup> century. While responding to this demand, it has to face serious challenges such as: continuously rising world demand and newly emerging big consumers; uncertain energy policy; political constraints and competition for proven reserves; international borders; new operational challenges for conventional resources and reserves in deep offshore, arctic regions, etc.; unconventional resources and technology; worsening fiscal terms; oil price volatility, speculations, eco-political pressures; corporate social responsibility, health, safety and environmental risks; climate change concerns; competition and/or collaboration with new technologies (e.g. geothermal energy); R&D, innovation; lack of experienced and skilled experts/professionals; potential function change of depleted hydrocarbon reservoirs (e.g. to CCS, UGS, geothermal energy production); exploration of upside potentials in mature accumulation zones; advanced portfolio management techniques in hydrocarbon exploration in low oil price environment;

The answers to these problems require adequate regulation systems and skill backgrounds. The mission of the EFG PE on Oil & Gas is to support the European Institutions in finding answers to the industrial challenges and to participate in their activities.

### COORDINATOR

Viktor Sőreg / Hungary / [vsoreg@mol.hu](mailto:vsoreg@mol.hu)

## PE ON SOIL PROTECTION

### MISSION

The role of geologists in soil protection covers a wide range of topics. Firstly, the geological soil-forming processes, which include those that underpin soil fertility and carbon capture in soils. Secondly, soil protection, including sediments, which covers both the identification and characterization of different stressors in order to manage the potential risks and avoid contamination, starting from the understanding of the probability of a contaminant event occurring. Soil protection also includes the evaluation of the most suitable remediation techniques, and leading where necessary to the design and execution of engineering works to make a soil meet specific required quality criteria to deliver a new function. Extending from site-specific tasks, the geologist plays an important role in understanding soil processes globally, in the context of the overall Earth System. In this work, the geologist has to work closely with professionals from other disciplines, including life scientists, ecologists, geographers, hydrologists and civil engineers, as well as planners and land-use specialists.

### COORDINATOR

Maria Jose Rubial Fernandez / Spain / [mjrubial@gmail.com](mailto:mjrubial@gmail.com)



#### How would you evaluate your panel's activity in 2016 and what are your plans for 2017?

*"We haven't been very active during 2016. As the panel coordinator, I am still looking for interesting initiatives to engage the experts and gain more visibility."*

#### In your opinion, is there an event that occurred in Europe (positive or negative) that particularly highlighted the importance of geologists' work in Europe?

*"I wouldn't talk about any particular event but about our role as important contributors to the Sustainable Development Goals (SDG). Especially during these past two years, I have noticed an increase in our visibility in the field of sustainability and there are numerous technical works and papers from other colleagues that explain in a very clear way how our work contributes to, at least, 13 of the 17 SDG. We are gaining momentum also in this field of competence."*

#### Is there any research or the work of a particular geologist that was particularly interesting last year?

*"Yes, I am particularly interested in the application of drones technology in the field of soil protection from contaminant sources and risks posed by natural events."*

## CONFERENCES

### APG/EFG WORKSHOP "THE IMPORTANCE OF GEOLOGICAL KNOWLEDGE FOR SUSTAINABLE LAND USE"

At the occasion of the 40<sup>th</sup> anniversary of the Portuguese Association of Geologists (APG) and the 71st EFG Council meeting, a workshop on “The importance of geological knowledge for sustainable land use” was held on 19 May 2016 in Lisbon. The workshop’s aim was to look at ways in which geological knowledge can contribute to the understanding and management of land use in order to provide a better decision-making and policy-planning framework. Mattia Pellegrini, Head of Unit for Raw Materials, Metals, Minerals and Forest based industries from the European Commission set the European tone by providing an overview on recent developments in the implementation of the 2nd Pillar of the Raw Materials Initiative (RMI). Further international and Portuguese high-level speakers like William J. Siok (American Institute of Professional Geologists), John Cowley (Director of Mineral & Resource Planning Assoc.), Luca Demicheli (Secretary General of EuroGeoSurveys), Carlos Zorrinho (Member of the European Parliament), Teresa Ponce Leão (President of the National Laboratory of Energy and Geology), Constantin Ciupagea (Head of Unit, Joint Research Center, European Commission) and Jorge Seguro Sanches (Portuguese Secretary of State for Energy) contributed with their knowledge and their ideas to enhance the event. In the roundtable discussions held in the final session of the workshop, the importance of conveying unbiased and clear scientific information to policy makers was highlighted. It was underlined that this is clearly the role of geoscientists working in the public sector and it was stressed as the most important aspect of communication with policy makers and the public. The speakers concluded that without clear, simple, straightforward information on geosciences topics it is risky (or even impossible) to take appropriate action,

and that this affects not only territorial planning but many other aspects of society (e.g. water management, natural hazards, energy supply, etc.). Geosciences professionals have therefore an important role to play, and it is paramount they combine knowledge and ethical considerations, to produce insight useful to the society.

The workshop was completed on Friday, 21 May, by a fieldtrip to the Lousal Mining Complex and Science Centre, an international example of success in socio-economic, environmental and mining heritage rehabilitation.

### 35TH IGC

One of the most prominent events for geoscientists in 2016 was the 35<sup>th</sup> International Geological Congress held from 27 August to 4 September in Cape Town, South Africa. EFG actively participated in several sessions and had, in parallel, the opportunity to attend various meetings with affiliated organisations and other stakeholders. EFG President Vitor Correia and Executive Director Isabel Fernandez represented EFG in this event.

EFG was actively involved in the following themes:

- “Global Geoscience Professionalism and Geoethics” - Sessions: “Professional competencies in geoscience”; “Ethical practice in geoscience”; “Inconvenient truths: ethical dilemmas for geoscientists in protecting and informing the public”
- “Resourcing Future Generations” - Session: “Developing Europe's International Observatory for Raw Materials”
- “Groundwater” – Session: “Integrated geo-hydrological approaches to secure groundwater resources”

EFG PRESIDENT VITOR CORREIA MODERATES ROUND TABLE DISCUSSIONS IN LISBON



## GLOBAL NETWORK

### OBJECTIVES AND DRIVERS

1. Share and benchmark best practice among geoscience organisations (professional, technical, scientific, etc.);
2. Seek opportunities to develop international standards based on the concept of Qualified Person or Competent Person, to ensure delivery of high levels of professional competence (see also the Strategic Action Plan VII EurGeol Competent Person);
3. Develop a common and reciprocal process for the mutual recognition of professional qualifications among kindred professional geological bodies;
4. Develop a common code of ethics for all professional geologists;
5. Attract NAs from outside Europe to join EFG, initially as Observer Members.



### OUTCOMES

1. Widen recognition and acceptance of standards based on individual professional competence;
2. Ensure the recognition of the EurGeol title and the mobility of Eurogeologists in Canada, USA, South America, Asia and Africa;
3. Reinforce the EFG network with scientific and professional geoscientific organisations.

## IUGS AFFILIATE MEMBER

Since several years, EFG is an affiliate member of the International Union of Geological Sciences (IUGS). 2016 has been a busy year with the organisation of the 35<sup>th</sup> International Geological Congress (IGC) held in Cape Town, South Africa from 27 August to 4 September. As an affiliate member of IUGS, founding member of the IUGS Task Group on Global Geoscience Professionalism

(TG-GGP) and coordinator of the INTRAW project, EFG was involved in various sessions and promoted them actively throughout the year.



## TGGGP

As one of its sponsoring organisations, the European Federation of Geologists continues to support the Task Group on Global Geoscience Professionalism ("TG-GGP") and backs its activities through administrative support.

The Task Group's activities in 2016 have largely been focused on continuing to raise awareness on professionalism and ethics across geoscience and gearing towards significant contributions on this foundational topic as part of the program at 35<sup>th</sup> IGC in Capetown. More information: <http://tg-ggp.org>

Formed by the International Union of Geological Sciences (IUGS) at the 34<sup>th</sup> International Geological Congress in Brisbane, Australia, in August 2012, the TG-GGP provides a single global forum for interchange on professional affairs in geoscience worldwide. Its main purpose is to ensure that geoscientists, active in all areas of geoscience, are fully engaged in the transformation of their profession – a profession that is increasingly relied upon by the public to provide expert opinions and service, and to safeguard the public interest.

## PERC

EFG also continues to provide administrative support to PERC. The Pan-European Reserves & Resources Reporting Committee, PERC, is the organisation responsible for setting standards for public reporting of exploration results, mineral resources, and mineral reserves by companies listed on markets in Europe. It is a member of CRIRSCO, the Committee for Mineral Reserves International Reporting Standards, and the PERC Reporting Standard is fully aligned with the CRIRSCO Reporting Template. PERC is established formally as a not-for-profit organisation ('asbl') registered in Brussels



by its four founding professional organisations, the Institute of Materials, Minerals, and Mining (IOM3), the European Federation of Geologists, the Geological Society of London, and the Institute of Geologists of Ireland. More information: [www.percstandard.eu](http://www.percstandard.eu)

## COOPERATION AGREEMENTS

- The **American Institute of Professional Geologists (AIPG)** and **Geoscientists Canada** are associated members of EFG.
- In November 2014, EFG signed cooperation agreements with both the **Australian Institute of Geoscientists (AIG)** and the **Geological Society of South Africa (GSSA)**. The signing organisations recognise that their objectives, with respect to the professional practice of the geological sciences, are similar and further recognise the importance of cooperation as the practice of the geological sciences transcends international borders. The agreements extend to one another a standing invitation for a representative of the other organisation to attend all meetings and stipulate the cooperation in developing a mechanism for the mutual recognition of standards between their continents.
- The **International Association for Promoting Geoethics (IAPG)** and EFG have signed, on 12 December 2014, a Memorandum of Agreement (MoA) to collaborate on issues of common interest. EFG and IAPG shall collaborate in defining ethical problems, also through case-studies, affecting professional geologists, and in promoting geoethical principles and best practices in geosciences among their networks.
- In March 2015, the European Federation of Geologists (EFG) and the **Geological Society of Africa (GSAf)** signed a memorandum of understanding in Brussels to increase their mutual cooperation. Given the similar objectives and common benefits of their members, EFG and GSAf agree to promote activities fostering cooperation in scientific research and promote scientific opportunities between members of both organisations.
- On 17 September 2015, EFG signed a Memorandum of Understanding (MoU) with the **International Association for Geoethics (IAGETH)**. The objective of this MoU is to bring the two IUGS-affiliated organisations (IAGETH and EFG) together to focus attention on the conjunction of geoethical aspects and best practices in the context of geosciences, through joint actions, including professional and institutional cooperation on different subjects and the production of training material, roadmaps and protocols at different levels.
- In November 2016, EFG signed a Memorandum of Understanding (MoU) with **Edimas** (Italian civil protection organisation) on cooperation in training and general cooperation to enhance response capacity to natural hazards in Europe.

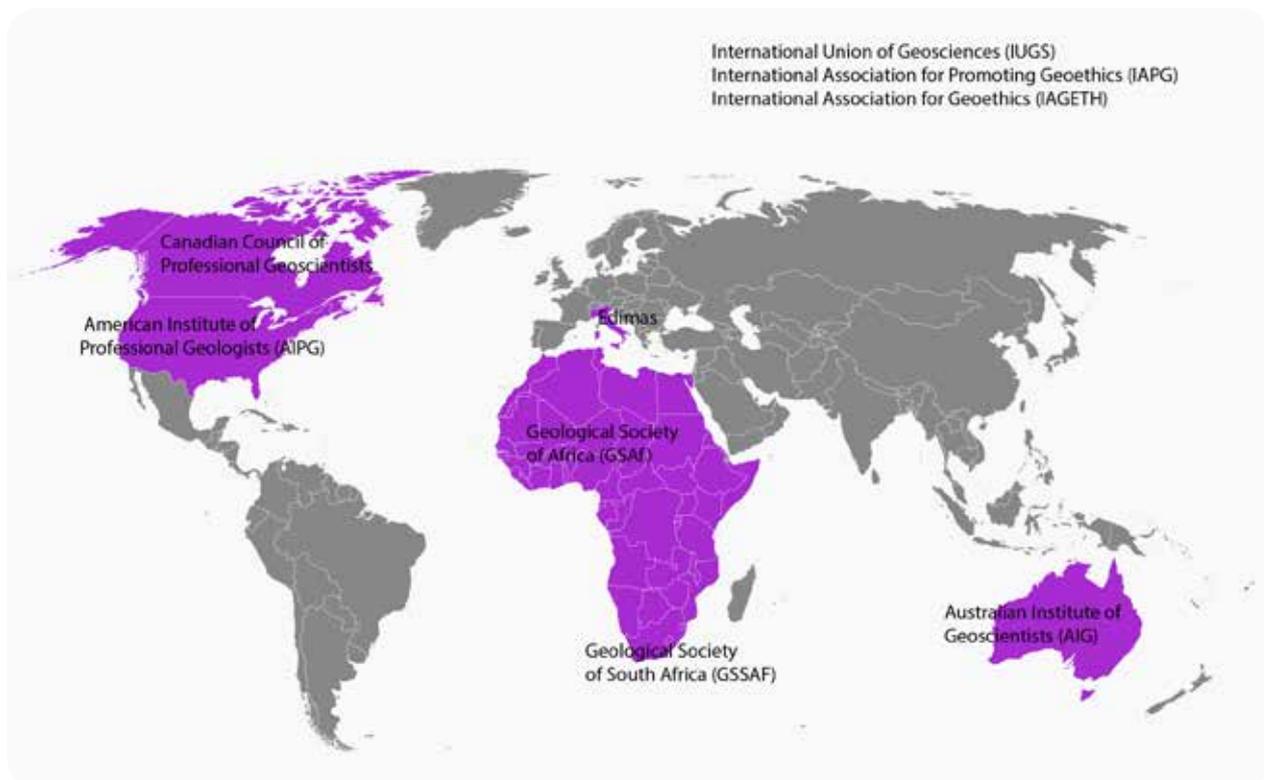


FIGURE 6: EFG'S INTERNATIONAL COLLABORATION AGREEMENTS.



## GEOEXPERT

### OBJECTIVES AND DRIVERS

1. Promote the EurGeol title to ensure delivery of high levels of professional competence based on individual responsibility;
2. Actively seek opportunities to develop global standards promoting responsible and sustainable exploitation of geological resources, based on simple and personal warrants given by an accredited professional.



### OUTCOMES

1. Increase the status of the EurGeol title;
2. Increase recognition of the EurGeol title at the National, European, and International levels;
3. Increase the number of EurGeol applications and the revenues from EurGeol fees;
4. Develop and implement new EU standards (or reinforcing existing ones) or certification schemes based on warrants given by EurGeols.

## EURGEOL TITLE

The European Geologist title (EurGeol) is a professional title created by the European Federation of Geologists which recognises the ability to deliver a high quality of services within the practice of geology. Title holders have achieved suitable academic training and a level of professional experience, skill and competence to perform tasks within their professional practice. It also means that the geologist undertakes continuing education and training, demonstrating a personal commitment to stay up to date and informed within the sphere of their professional work.



An application for the European Geologist (EurGeol) title must be submitted through one of the EFG's Licensed Bodies that are authorised to award the title. These Licensed Bodies are the:

- Institute of Geologists of Ireland (IGI)
- Italian National Council of Geologists (CNG)
- Geological Society of London (GSL)
- Spanish Association of Professional Geologists (ICOG)
- Swiss Association of Geologists (CHGEOL)
- International Licensed Body (ILB)

The ILB is operated by EFG for applicants who are not members of one of the above-mentioned National Licensed Bodies. The applications to the ILB need to be presented by a National Vetting Committee (NVC).

List of NVCs:

- Belgium/Luxembourg: UBLG
- Czech Republic: CALG
- Finland: YKL
- France: GSF
- Germany: BDG
- Hungary: MFT
- The Netherlands: KNGMG
- Poland: Polish Association of Mineral Asset Valuers
- Portugal: APG
- Russia: NAEN
- Serbia: SGS
- Slovenia: SGS
- Sweden: NA
- Turkey: TAEG
- Ukraine: UAG

As the following graph shows, the European Geologist title continued to gain popularity in the past few years. In total, nearly 1424 titles have been awarded and 928 titleholders are currently in good standing with EFG, which means that they comply with the obligation of submitting records of their Continuing Professional Development (CPD) on a regular basis.

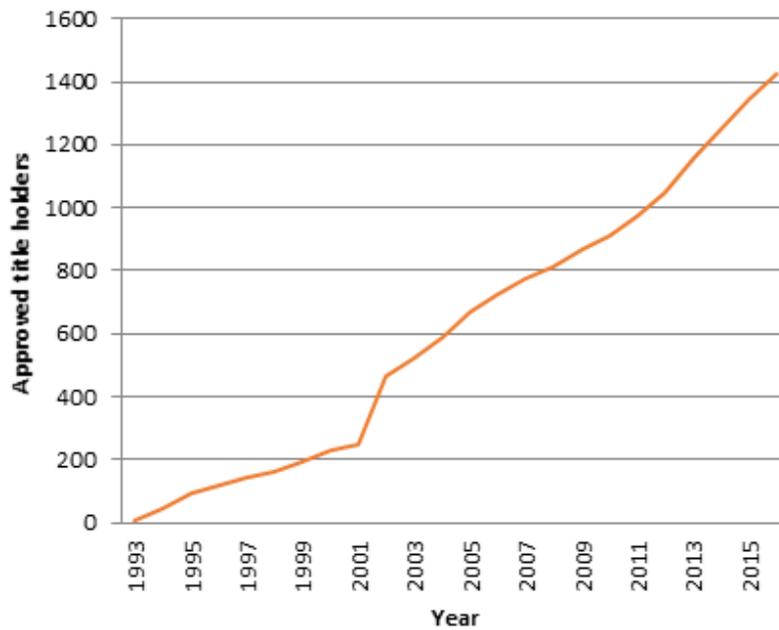


FIGURE 7: EURGEOL TITLE EVOLUTION. SOURCE: EFG OFFICE. DATA PROVIDED THROUGH NATIONAL ASSOCIATION REPORTS.

## EURGEOL OF THE MONTH: A DIVERSITY OF CAREERS, ONE PASSION, AND ONE TITLE

“European Geologist of the month” is a section of EFG’s monthly newsletter *GeoNews*. Each month, we introduce you to a European Geologist title holder and allow you to learn more about his professional experiences and which role the title has played for his career.

At the origin of every great career in geology is a child fascinated by our planet, at its surface and below, by rocks, by water and by all the other resources that make our environment so rich. So it seems, anyway, hearing from our EurGeols who all grew up to become renowned geologists, always willing to share why they love their work and what their title means to them.

### GEOLOGIST, MORE THAN A JOB, A CHALLENGING AND FULFILLING INTERNATIONAL CAREER

Ask a geologist why he loves his work, and you will hear him go on and on about his passion. Ask him what his average day looks like and it is suddenly really silent. The reason? There is no typical day in the life of a geologist. Which is what makes it beautiful, as explained by Michael Haschke, member of the BDG and currently Innovation Manager at DMT: “A career in geology is highly diverse, never boring, almost always challenging and always relevant to the needs of society.” Tasks can indeed be as diverse as communicating, doing administrative work, preparing conferences, writing articles, developing products, planning projects, designing, monitoring, searching for

materials,... and the list goes on endlessly, as does the list of industries that need geologists’ knowledge and skills. Those industries also happen to be spread out at every corner of the planet, much to the delight of geologists, as illustrated by Pierre De Geest, member of the Belgian Luxembourg Union of Geologists (BLUG/UBLG), currently working as a senior geologist for the Dredging Environmental Marine Engineering-group (DEME) and executive committee member of the Friends of Soqotra; when asked about his favourite part about his job: “*The job diversity, variety and travelling around the world to delve into specific needs at specific locations under particular circumstances related to geology.*” Those needs, as specific as they can be, always are of great importance for society, making a career in geology very fulfilling, according to Pertti Sarala, member of the Finnish Union of Environmental Professionals (YKL), currently working as a Research Professor of geochemical exploration in the Geological Survey of Finland (GTK) and Oulu Mining School (OMS) of the University of Oulu: “*Geosciences are the basic part of our understanding about the nature and processes behind wide things that influence our every-day life. Geoscientists are also researching things that without them, our modern society, industry and economy could not work*”. A challenging international career working on projects relevant to society, that is what geology is about. And this is what motivated, organised and open-minded young professionals can look forward to.

## EURGEOL TITLE, A PASSPORT TO INTERNATIONAL CAREERS, AND COLLEAGUES

Our EurGeols work across the globe, for a wide range of industries, completing a diversity of tasks. Although, through this diversity, there is one thing that brings them together: they are all recipient of the EurGeol title, a professional title created by the European Federation of Geologists, which recognises the ability to deliver a high quality of services within the practice of geology. And they all hold that valuable title proudly, considering its many advantages. According to them, the title is a testimony of relevant work experience and continuing professional development that is particularly useful to help advance a career, as explained by Marino Trimboli, member of the Italian Council of Professional Geologists and former EFG Board member: *"In the perspective of an open global market it will be a good instrument for the professional accreditation in foreign markets (...) In the countries where the title is recognized it could be easy to find quickly jobs and consulting act."* In some specific fields, the importance of the title is even greater, according to Remi Bosc, member of the Geological Society of France, working for Arethuse Geology: *"The European Geologist title is one of the few globally recognised organi-*

*sations in the minerals resources sector. As an exploration and resources geologist, it was for me a pre-requisite for becoming a geological consultant at a global scale."* Outside of its role as a passport to greater job opportunities, the EurGeol title also strengthens the bond between European geologists, which is something that Ana Meireles Serpa Santos, member of the Portuguese Association of Geologists (APG), working as a sales representative of several materials for Geotechnics by the Israeli PRS, the German Dywidag and the Swiss Geobrug, particularly values: *"It brings me a bigger interaction with geologists from other European countries with a high and diversified experience and skills and also the chance to participate in new and compelling events."*

Our EurGeols indeed often meet at various events and share their love for their fulfilling and challenging job. Until they go back to their field, somewhere around the globe, but always with their international passport in their pocket.

Read the full stories of our EurGeols of the month at <http://eurogeologists.eu/eurgeolofthemonth>



FIGURE 8: EURGEOLS OF THE MONTH 2016

## INTERNATIONAL RECOGNITION

Professional titles have become important in demonstrating the suitability of a professional to provide geological services. The professional title provides a quality mark to demonstrate to clients, regulators and the public that the individual is competent to provide geological advice, and allows employers to offer competitive commercial services. To adapt to the current and future challenges within the geo-political framework of the European Union, it is necessary that geologists achieve, and can demonstrate, a high degree of professional experience to be able to respond to the demands of society in practicing their profession.

Thanks to the harmonisation of training and experience underlying the EurGeol certification, the title acts as a

passport to professional practice in Europe, thereby encouraging free movement of professionals.

At international level, reciprocity recognition agreements have been set with the American Institute of Professional Geologists (AIPG) and the Canadian Council of Professional Geologists (CCPG). On a practical level, European Geologists are recognised by the mineral reporting authorities in Australia, Canada, South Africa and London as professionals accredited to sign reports on mineral resources within their area of expertise and in the valuation of mining companies quoted on the Stock Exchanges.

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## CPD PROVIDER AGREEMENTS

Based on the agreement signed between EAGE, the European Association of Geoscientists and Engineers, and EFG in March 2013:

- EAGE promotes the EurGeol Title to its European members, and maps the EurGeol Title competency matrix with EAGE's portfolio of training and educational programmes that could support those preparing for an application or the CPD of existing title holders;

- EFG recognises EAGE as an official CPD point provider in the EurGeol title process.

In November 2013, EFG signed agreements with its national association members BLUG/UBLG (Belgium/Luxembourg) and BDG (Germany) with the intention of increasing the promotion of the European Geologist title. Both associations are recognised as official CPD point providers.

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## CODE OF ETHICS

Besides Academic Qualifications, Professional Experience and Continuing Professional Development, the EFG "Code of Ethics" is one of the four pillars on which the European Geologist title is built. The aim of this "Code of Ethics" is to prescribe acceptable behaviour of each individual member of EFG's national membership associations and to establish a common ground of principles that apply to all - Full Members, Associate Members, Observer Members and all individual European Geologists. The code provides therefore a means of professional self-regulation, necessary condition to guarantee the quality and the legitimacy of the work of Geologists. This self-regulation within the profession of Geology can only be effective if it is unanimously, and regularly, approved by the profession itself. The latest version of the code, approved in November 2016 by the EFG Council, includes an amendment relating to the working environment, and more particularly to sexual harassment in the field of sciences.

This important update relates to the maintenance of a high level of professionalism in a working environment. This is particularly pertinent as geoethics and professionalism are core objectives of the EFG. Through consultation with and much appreciated cooperation and contributions from Silvia Peppoloni (IAPG - International Association for Promoting Geoethics) and Jesús Martínez-Frías (IAGETH - International Association for

Geoethics), the following addition has been made to the EFG's Code of Ethics:

“ (...) Working environment

*1. A respectful and fruitful working environment is fundamental for maintaining a high level of professionalism. Therefore, discrimination or harassment, either sexual or of any other kind, is unacceptable because it offends the dignity of persons and seriously undermines the atmosphere of trust essential to the work of all geologists. Such actions should be denounced immediately to authorities. It is unprofessional and unethical to condone any kind of discrimination or harassment or to disregard complaints of harassment from colleagues or staff. (...)*”

The approach adopted by EFG is fully in line with recent initiatives by several scientific societies speaking out against sexual harassment. Amongst others, leaders from scientific and professional societies, government agencies, and academia gathered in Washington DC in September 2016 to discuss the challenge of sexual and gender-based harassment in the sciences. This meeting was convened by the American Geophysical Union (AGU) following several recent cases of harassment in the field of sciences. As an outcome, AGU recently published the "Draft Organizational Principles for Addressing Harassment", a set of guidelines for organisations willing to affirm their opposition against harassment.

# SERVICES



## OBJECTIVES AND DRIVERS

1. Enhance the dialog between EFG and its stakeholders;
2. Enhance the value for mobility of geologists both within and outside Europe;
3. Establish web services relating to the EurGeol title, allowing the holders to upload personal data and to download information regarding job offers and training opportunities, and the general public to run queries (searching for EurGeols);
4. Establish an e-learning platform and develop training courses.

## OUTCOMES

1. Increase the status of the EurGeol title;
2. Increase the number of EurGeol applications and the revenues from EurGeol fees;
3. Increase the income from training courses and reinforce relations with NAs willing to cooperate in professional training (for example, in developing courses, teaching, promoting, publicising).

## EURGEOL TOOL: INTERACTIVE DIRECTORY OF EUROPEAN GEOLOGISTS

The EurGeol Tool is an electronic service for European Geologist title holders (EurGeols), companies, public authorities and other stakeholders:

- EFG has created an interactive directory allowing companies and organisations to search for European Geologists, EurGeols, active in one specific country and/or one specific professional geology domain.
- The section 'EurGeol searcher' provides information about all professional geologists (EurGeols) registered and validated by the European Federation of Geologists.
- The title held by a professional geologist means that the holder has achieved suitable academic training and a sufficient level of professional experience.

In addition the geologist undertakes continuing education and training activities, and is required to abide by the EFG Code of Ethics.

- In the section 'EurGeol Service', European Geologists can complete their annual record of Continuing Professional Development (CPD) online, and create their electronic CV or visit card.
- In terms of quality control each EFG Licensed Body can supervise and audit the EurGeol's CPD records in the section 'Licensed Bodies service'. Each Licensed Body has access to the details of the EurGeols registered in its organisation.

More information: <http://eurogeologists.eu/title/eurgeol>



## E-LEARNING PLATFORM

The EFG e-learning platform has been established in 2012 with the aim of providing a forum for electronic training for geoscientists.

Since 2013, the platform hosts a course on CO<sub>2</sub> capture and storage (CCS). It provides in-depth understanding of the role of CCS in the climate change mitigation portfolio, the technical approaches on CO<sub>2</sub> capture and transport,

the science behind geological storage, site selection and risk evaluation, and the role of policy in establishing market and business opportunities for CCS.

The e-learning platform is available to host other courses and EFG welcomes any initiative by its members in this sense.

## ENDORSED TRAINING COURSES

EFG's training course endorsement programme is a free service which benefits both course providers and EurGeol title holders. Applications are welcomed from the providers of short training courses, seminars, workshops, etc.

Benefits for course providers:

- Course endorsement raises your institution's profile and fosters recognition within the European and international geoscience community.
- Your event is advertised to European Geologist title holders and others who visit EFG's website, as well as the readership of EFG's monthly newsletter GeoNews (dissemination to more than 45.000 geoscientists all over Europe).

Benefits for European Geologist title holders:

- Information on CPD training approved by EFG provides quality reassurance.
- EurGeols benefit from a discount of 20% on the registration fee.
- Please see EFG's event calendar for information on dates, venues and fees for endorsed courses.

Endorsement is valid for 3 years, subject to receipt of satisfactory feedback from EurGeol title holders.

Please see EFG's event calendar for information on dates, venues and fees for endorsed courses.

DOES YOUR COMPANY ORGANISE  
TRAINING COURSES?



...YOU MIGHT THEN BE INTERESTED IN  
EFG'S ENDORSEMENT PROGRAMME!

## Projects

### OBJECTIVES AND DRIVERS

1. Ensure funding of EFG's current activity through participation in dissemination tasks (or management/co-ordination tasks) of EU funded projects where there is a geoscience element;
2. Strengthen the bond between the EFG, the NAs and national entities (countries and organisations in Europe and elsewhere) related to innovation and R&D;
3. Enhance the prestige and credibility of the EFG within the EU institutions, businesses and institutions of R&D;
4. Involve as (staff and individual members with appropriate expertise) for their financial benefit.



### OUTCOMES

1. Build on the existing accumulated project surplus funds to allow funding of all EFG non-core (investment) activities;
2. Make at least a 40% contribution to core funding before 2017 allowing reduction of NA fee budget;
3. Enhance the competences of EFG in communicating to the public, the community of geoscientists and decision makers;
4. Enhance the competences of EFG in the preparation of applications for EU funded projects and in delivering excellence as a project partner or co-ordinator;
5. Strengthen EFG relationships with NAs, Laboratories and Universities of the countries (European or not) involved in the applications/projects;
6. Establish EFG and its member NAs as 'first choice' partners for pan European dissemination of geoscience topics and leading to a 'pipeline' of unsolicited invitations to participate.

**H**orizon 2020 is the biggest EU Research and Innovation programme ever, with nearly €80 billion of funding available to secure Europe's global competitiveness in the period 2014-2020.

Following its *Initiative Looking Forward*, the EFG Board put a lot of energy in developing and participating in several project proposals within the Horizon 2020 programme.

From the beginning of 2015 the Federation is involved in four Horizon 2020 projects: INTRAW, KINDRA, MINATURA2020 and ¡VAMOS!.

Four new projects started in 2016: UNEXMIN, CHPM2030, MICA

## INTRAW

642130 - INTRAW

*International cooperation on Raw materials*

START DATE: 1 February 2015

DURATION: 36 MONTHS



INTRAW, which started in February 2015, aims to map best practices and develop new cooperation opportunities related to raw materials

between the EU and technologically advanced countries (Australia, Canada, Japan, South Africa and the United States) in response to similar global challenges. The outcome of the mapping and knowledge transfer activities conducted in the first two years of the project will be used as a baseline to set up and launch the International Observatory for Raw Materials as a permanent raw materials knowledge management body.

### EFG Role:

EFG is the coordinator of a consortium of 15 partners from different countries including Australia, the United States and South Africa. Most of EFG's members are also part of the consortium as Linked Third Parties.

### Current status:

- The consortium officially launched, in February 2016, a set of reports analysing the contextual environment of the project's five "Reference Countries". The reports present the countries' historical economic development during the 20th and 21st century in general, and in relation to primary raw materials management in particular.
- On 5 and 6 April 2016 a meeting dedicated to the upcoming tasks of Work Package 2 was held in the facilities of Fraunhofer (WP2 leader).
- Interim report: On 30 September, EFG reported on the first 18-months period, both technically and financially, including the reports from Linked Third Parties (LTPs). As a project coordinator, EFG collected the activity of the INTRAW partners and submitted the interim report to the European Commission.
- The project evaluation by the European Commission took place in Cornwall (UK) on 5 October 2016. The project received a very positive evaluation for the work done until now.
- Joint Panels of Experts workshop: The representatives of INTRAW's Joint Panels of Experts met in Falmouth, Cornwall, from 5 to 7 October 2016 in order to validate the reports prepared by the project consortium that focus on raw materials related research & innovation, education & outreach and industry & trade in the five reference countries. These three reports underpin the development of a better understanding of the achievements made in the five countries in relation to the entire raw

materials value chain and will be presented to the public in 2017. Moreover, the experts also provided precious input on the development of the business model of the International Observatory for Raw Materials. The workshop closed with a visit to the Geevor and Botallack tin mines, which are part of the UNESCO world heritage.

- Scenario workshop: In the framework of the Raw Materials Week (Brussels, 28 November - 2 December 2016 organised by the European Commission, DG Growth) the INTRAW Consortium co-organised a workshop. Participants were invited to comment and elaborate three different possible future scenarios for global raw materials provisioning in 2050. This attempt to look into the long-term future of the mineral raw materials world will be used to explore two pathways: 1) how to prepare for the three scenarios; and 2) which is the desired scenario and how to safeguard against the others.

### EFG Linked Third Parties

#### EFG member associations:

- Belgo-Luxembourg Union of Geologists (Belgium-Luxembourg)
- Croatian Geological Society (Croatia)
- Czech Association of Economic Geologists (Czech Republic)
- The Finnish Union of Environmental Professionals (Finland)
- French Geological Society (France)
- Professional Association of German Geoscientists (Germany)
- Association of Greek Geologists (Greece)
- Hungarian Geological Society (Hungary)
- Institute of Geologists of Ireland (Ireland)
- Italian National Council of Geologists (Italy)
- Royal Geological and Mining Society of the Netherlands (The Netherlands)
- Polish Association of Minerals Asset Valuers (Poland)
- Portuguese Association of Geologists (Portugal)
- Slovenian Geological Society (Slovenia)
- Serbian Geological Society (Serbia)
- Official Spanish Association of Professional Geologists (Spain)
- Geosection, Swedish Association of Scientists (Sweden)
- Swiss Association of Geologists (Switzerland)
- Ukrainian Association of Geologists (Ukraine)
- Geological Society of London (UK)

#### International counterparts:

- American Institute of Professional Geologists (USA)
- Australian Institute of Geoscientists (Australia)
- Geological Society of South Africa (South Africa)
- Geoscientists Canada (Canada)

More information: [www.intraw.eu](http://www.intraw.eu)

**KINDRA**

642047 - KINDRA

Knowledge Inventory for hydrogeology research

START DATE: 1 January 2015

DURATION: 36 MONTHS



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 groundwater's critical importance as renewable, high-quality, naturally protected (but still vulnerable) resource that has significant impacts on both surface water bodies and ecosystems. The EU-funded KINDRA project seeks to take stock of our current knowledge of hydrogeology through an inventory of research results, activities, projects and programmes.

**EFG Role:**

The European Federation of Geologists is the leader on the data collection and processing to carry out EU-wide assessment of existing practical and scientific knowledge (using the developed HRC-SYS) focusing on EU, national, regional, international and EU-third party scientific activities. This assessment will be implemented with the help of the national members of EFG (Linked Third Parties). EFG is also involved in the dissemination activity.

**Current status:**

- A workshop on the “State of the knowledge for hydrogeology research in Europe” was held in Sevilla, Spain, on 4 and 5 February 2016 in combination with a consortium meeting. The workshop focussed on the training of national experts (delegates from the EFG KINDRA Third Parties) who actively take part in the KINDRA activity “Data collection and processing”. The day was divided in two main sessions: Harmonised Research Classification System (HRC-SYS) and European Inventory of Groundwater Research (EIGR) that help demonstrating the large variation and importance of different groundwater research areas. Finally, the Third Parties Experts participated in a practical training session to learn and demonstrate the classification system.
- Amendments: An amendment to the KINDRA Grant Agreement was presented the 28 September 2016 for the termination of Linked Third Party (LTP) French Geological Society and assignment of tasks and budget to EFG.
- KINDRA Interim Report: EFG reported on the first 18-month period, both technically and financially,

including the reports from LTPs on 30 September 2016.

- KINDRA evaluation meeting: The project evaluation by the European Commission took place in Brussels, on 24 October 2016. The project received a very positive evaluation for the work done until now.
- KINDRA national workshops: National workshops were organised in the countries covered by the LTPs. A full calendar with the dates of all national workshops is available on the KINDRA website. The deadline for this action was October 2016, however some national workshops have been organised after this date due to relation with others national events.
- The national experts from each Linked Third Party (LTPs) populated the European Inventory on Groundwater Research (EIGR) with national data.
- In addition to the population of the KINDRA inventory, the national experts have also provided a Country report. In this report the LTPs report about the “qualitative” information concerning uploading research / knowledge to the EIGR in the particular country.

**EFG Linked Third Parties**

- Belgo-Luxembourg Union of Geologists (Belgium-Luxembourg)
- Croatian Geological Society (Croatia)
- Czech Association of Economic Geologists (Czech Republic)
- Danish Geological Society (Denmark)
- The Finnish Union of Environmental Professionals (Finland)
- Professional Association of German Geoscientists (Germany)
- Association of Greek Geologists (Greece)
- Hungarian Geological Society (Hungary)
- Institute of Geologists of Ireland (Ireland)
- Italian National Council of Geologists (Italy)
- Royal Geological and Mining Society of the Netherlands (The Netherlands)
- Polish Association of Minerals Asset Valuers (Poland)
- Portuguese Association of Geologists (Portugal)
- Slovenian Geological Society (Slovenia)
- Serbian Geological Society (Serbia)
- Official Spanish Association of Professional Geologists (Spain)
- Swiss Association of Geologists (Switzerland)
- Ukrainian Association of Geologists (Ukraine)
- Geological Society of London (UK)

More information: [www.kindraproject.eu](http://www.kindraproject.eu)

## MINATURA2020

642139 - MINATURA 2020

*Developing a concept for a European minerals deposit framework*

START DATE: 1 February 2015

DURATION: 36 MONTHS



MINATURA2020 was launched in February 2015 as a response to social needs to safeguard mineral deposits of public importance for the future. The overall objective of this three-year project is to develop a concept and methodology for the definition and subsequent protection of “Mineral Deposits of Public Importance” (MDoPI) in order to ensure their best use in the future.

### EFG role:

EFG is involved in the establishment of the Council of Stakeholders and leads the Work Package on Dissemination.

### Current status:

- In 2016 a survey on “Mineral Deposits of Public Importance” has been carried out aiming to collect information in order to obtain a Pan-European approach on the topic of safeguarding non-energy minerals.

- Several stakeholder workshops were organised at national level in the participating countries. More events will follow in the coming months.

Since the project beginning, EFG has

- Created the project website and the national pages on the website, collected information from 24 partners on their own languages for the pages.
- Prepared the communication and dissemination plan for MINATURA2020.
- Prepared a poster, two brochures, two press releases and a leaflet about the project,
- Created and maintains the “MINATURA Outreach Table” with all dissemination events,
- Co-organised with APG the international workshop “The importance of geological knowledge for sustainable land use” on 19-20 May, 2016 in Lisbon.
- Interim report: EFG reported the 18-month period, both technically and financially on time.
- The project evaluation took place in Dreistetten, Austria, on 27 October 2016. EFG presented the WP6 progress. The completion of the first half of the project was accepted.

More information: [www.minatura2020.eu](http://www.minatura2020.eu)

**¡VAMOS!**

642477 - VAMOS

*¡Viable and Alternative Mine Operating System!*

*START DATE: 1 February 2015*

*DURATION: 42 MONTHS*



The aim of the EU-funded ¡VAMOS! (Viable Alternative Mine Operating System) project is to design and build a robotic, underwater mining prototype with associated launch and recovery equipment, which will be used to perform field tests at four EU mine sites.

**EFG role:**

EFG supports the project through stakeholder engagement and dissemination activities.

**Current status:**

- Site visits to the 4 pre-trial locations were completed in April 2016. An evaluation of all acquired data will be taken into account in the selection process of test sites, which are due to take place from mid-2017. The locally available knowledge and documentation about each site’s exploitation history and the nearby availability of associated facilities for the test campaign will be relevant to the selection process.
- On 21 April EFG organized a workshop in São Domingos, a mining village founded to support the

exploitation of a copper-zinc mine in the Iberian Pyrite Belt in the 19th century. The mine closed in the 1960s and is now abandoned. The aim of this workshop was to bring together a wide group of local and regional stakeholders with interests in the Iberian Pyrite Belt, and to collect their views and insight on possible development scenarios linked to the reopening of some of the abandoned mines in the future. Public participation and public discussion were encouraged and nearly 50 people, representing regional authorities and local stakeholders, attended the workshop. The information collected is being processed and will be incorporated in the project deliverables.

- The deliverable D1.5 Stakeholder Workshop Report was produced and submitted to the European Commission on 7 July 2016.
- Interim report: EFG reported the 18-month period, both technically and financially on 30 August 2016.
- The project evaluation by the European Commission took place in Brussels, on 4 October 2016. Below the Work Package 1, EFG presented the outcome from the two stakeholder workshops organized during the project life time. The project received a very positive evaluation for the work done until now.
- After 18 months the ¡VAMOS! Consortium has reached the “design freeze” stage of the prototypes to be built. More info at <http://vamos-project.eu/vamos-reaches-design-freeze-milestone/>
- EFG will stay active in the project dissemination via the EFG news section and communication tools.

More information: <http://vamos-project.eu>



## CHPM2030

654100 - CHPM

Combined Heat, Power and Metal extraction from ultra-deep ore bodies

START DATE: 01.01.2016

DURATION: 42 MONTHS



The CHPM2030 project (project number: 654100) aims to develop a novel, pilot level technology which combines geothermal resource development, minerals extraction and electro-metallurgy in a single interlinked process. In order to improve the economics of geothermal energy production the project will investigate possible technologies of manipulating metal-bearing geological formations with high geothermal potential at a depth of 3-4 km in a way that the co-production of energy and metals will be possible and may be optimised according to the market demands in the future. Led by the University of Miskolc, the project will be implemented in the cooperation of 12 partners from 10 European countries.

### EFG role:

EFG supports the activities for the CHPM2030 methodology framework definition (WP1), particularly the European data integration and evaluation: EFG's Linked Third Parties (LTP) collected publicly available data at national level on deep drilling programmes, geophysical and geochemical explorations and any kind of geo-scientific data related to the potential deep metal enrichments. They also collected data on the national geothermal potential. Guidelines and templates for data collection were provided by EFG.

During the second year, EFG will support the road mapping and preparation for Pilots (WP6), European Outlook. EFG's Linked Third Parties will assess the geological data on suitable ore-bearing formations and geothermal projects, which were collected in WP1, in relation with the potential application of the CHPM technology. This work will combine these data with the outcomes of the most recent predictive metallogenic models. Only existing datasets will be utilised, no new surveys will be carried out.

EFG also leads the Work Package on dissemination.

### Current status:

- The kick-off meeting took place in Miskolc, Hungary, on 28 and 29 January 2016. The meeting was attended by partners from 9 European countries representing 11 different universities, associations and companies. The main objective of the meeting was to present the project plan in more detail, with a clear time frame, and to clarify the role of each partner in relation to the different work packages.
- The tenth edition of GeoTHERM, Europe's biggest meeting place for geothermal energy, took place on

25 and 26 February 2016 at Offenburg, Germany. EFG President Vitor Correia delivered at this occasion a key note speech about the importance of geothermal energy as a clean energy source in the future.

- Methodology framework definition (WP1): European data integration and evaluation. EFG and LTPs delivered the following actions:
  - i. EFG prepared template for data collection (M2)
  - ii. EFG Linked Third Parties (LTP) collected publicly available data at national level on deep drilling programmes, geophysical and geochemical explorations and any kind of geo-scientific data related to the potential deep metal enrichments using the data collection template. (M6)
  - iii. EFG supervised data collection, summarised the datasets at European level, and identified the data gaps (M4-8)
  - iv. Consultation with Partners: EFG summary report (M9)
  - v. EFG provided the datasets to the WP leader (M10)
- Dissemination and stakeholder involvement (WP7): EFG delivered the following deliverables: Final project web site (M6); Project image and stylebook (M4); Communication and dissemination plan (M6); Brochure 1st edition (M6); Newsletter 1 (M6) and Press release and media kits (M6).
- LTPs dissemination support: EFG requested the LTPs to disseminate the last CHPM press release about the Consortium meeting of the CHPM2030 project, Älvkarleby, Sweden, 12 October 2016.
- 

### EFG Linked Third Parties

- Czech Association of Economic Geologists (Czech Republic)
- The Finnish Union of Environmental Professionals (Finland)
- Professional Association of German Geoscientists (Germany)
- Association of Greek Geologists (Greece)
- Hungarian Geological Society (Hungary)
- Institute of Geologists of Ireland (Ireland)
- Italian National Council of Geologists (Italy)
- Royal Geological and Mining Society of the Netherlands (The Netherlands)
- Polish Association of Minerals Asset Valuers (Poland)
- Portuguese Association of Geologists (Portugal)
- Slovenian Geological Society (Slovenia)
- Serbian Geological Society (Serbia)
- Official Spanish Association of Professional Geologists (Spain)
- Swiss Association of Geologists (Switzerland)
- Ukrainian Association of Geologists (Ukraine)
- Institut Royal des Sciences Naturelles de Belgique (Belgium)

More information: <http://chpm2030.eu>

**UNEXMIN**

690008 - UNEXMIN

Autonomous Underwater Explorer for Flooded Mines

START DATE: 01.02.2016

DURATION: 45 MONTHS



UNEXMIN is an EU-funded project that develops a novel robotic system for the autonomous exploration and mapping of Europe’s flooded mines. The Robotic Explorer (UX-1) will use non-invasive methods for autonomous 3D mine mapping for gathering valuable geological and mineralogical information. This will open new exploration scenarios so that strategic decisions on the re-opening of Europe’s abandoned mines could be supported by actualised data that cannot be obtained by any other ways. The Multi-robot Platform will represent a new technology line that is made possible by recent developments in autonomy research that allows the development of a completely new class of mine explorer service robots, capable of operating without remote control. Such robots do not exist nowadays; UX-1 will be the first of its kind. Research challenges are related to miniaturisation and adaptation of deep-sea robotic technology to this new application environment and to the interpretation of geoscientific data.

Work is ongoing with component validation and simulations to understand the behavior of technology components and instruments to the application environment. This will then be followed by the construction of the first Prototype. Post processing and data analysis tools will be developed in parallel, and pre-operational trials are launched in real life conditions. The final, most ambitious demonstration will take place in the UK with the resurveying of the entire flooded section of the Ecton underground mine (UK) that nobody has seen for over 150 years.

**EFG role:**

Some of EFG’s national associations participate in this project as linked third parties and support the consortium through data collection for the Inventory of flooded mines. EFG also supports the Work Package on dissemination. The EFG Linked Third Parties disseminate the results of the UNEXMIN project at national level in web portals, newsletters, conferences, workshops, educational activities, exhibitions or through any other relevant means.

**Current status:**

- The project’s kick-off meeting was held in Miskolc, Hungary, on 18 and 19 February 2016.
- The “Stakeholder engagement protocol” has been delivered by EFG in March 2016. This document aims

to fulfil two functions. Firstly, the types and overall profile of project stakeholders have been identified. Secondly, it details the approach towards engaging stakeholders and involving them into the project in most efficient way in order to achieve quality results and successful implementation of the project’s final product. The document defines the main groups of potential stakeholders and provides general guidelines on how to establish the first contact and how to engage them. Additionally, it contains a list of challenges which may occur along the process together with possible solutions.

- Project Task “Requirements and Specification” - data collection from the pre-defined future stakeholders managed by EFG as WP5 Leader. The collected data will be used for design and specification of the future robot in order to meet and satisfy the stakeholder’s requirements and expectations.
- The UNEXMIN consortium had a meeting in Madrid, on 25 and 26 October 2016, to discuss advancements on software and hardware decisions related to the UX-1 robot development. The post-processing data analysis and respective database were also discussed. This second follow-up UNEXMIN workshop served to get the project team together in order to discuss very important aspects of the project and the UX-1 developments.
- Data collection template and communication finalisation in the framework of Task 5.4 – Inventory of flooded mines

**EFG Linked Third Parties**

- Belgo-Luxembourg Union of Geologists (Belgium-Luxembourg)
- Czech Association of Economic Geologists (Czech Republic)
- The Finnish Union of Environmental Professionals (Finland)
- Association of Greek Geologists (Greece)
- Hungarian Geological Society (Hungary)
- Institute of Geologists of Ireland (Ireland)
- Italian National Council of Geologists (Italy)
- Royal Geological and Mining Society of the Netherlands (The Netherlands)
- Polish Association of Minerals Asset Valuers (Poland)
- Portuguese Association of Geologists (Portugal)
- Slovenian Geological Society (Slovenia)
- Serbian Geological Society (Serbia)
- Official Spanish Association of Professional Geologists (Spain)
- Ukrainian Association of Geologists (Ukraine)
- Geological Society of London Country (UK)
- Instiut Royal des Sciences Naturelles de Belgique (Belgium)

More information: [www.unexmin.eu](http://www.unexmin.eu)

## MICA

689648 - MICA

Mineral Intelligence Capacity Analysis

START DATE: 01.12.2015

DURATION: 26 MONTHS



Primary and secondary raw materials are fundamental to Europe's economy and growth and play a prominent role as a source of prosperity in Europe. The Mineral Intelligence Capacity Analysis (MICA) project contributes to on-going efforts towards the establishment of such an infrastructure by projects such as ProMine, EURare, Minventory, EuroGeoSource, Minerals4EU, ProSum, I2Mine, INTRAW, MINATURA2020 and others. The MICA project brings together a multidisciplinary team of experts from natural and technical sciences, social sciences including political sciences, and information science and technology to ensure that raw material intelligence is collected, collated, stored and made accessible in the most useful way corresponding to stakeholder needs. Furthermore, the MICA project integrates a group of 15 European geological surveys that contribute to the work program as third parties. They have specific roles in the fulfilment of tasks and will provide feedback to the project from the diverse range of backgrounds that characterizes the European geoscience community.

The main objectives of MICA are:

- Identification and definition of stakeholder groups and their raw material intelligence (RMI) requirements,
- Consolidation of relevant data on primary and secondary raw materials,
- Determination of appropriate methods and tools to satisfy stakeholder RMI requirements,
- Investigation of (RMI-) options for European mineral policy development,
- Development of the EU-Raw Materials Intelligence Capacity Platform (EU-RMICP) integrating information on data and methods/tools with user interface capable of answering stakeholder questions,
- Linking the derived intelligence to the European Union Raw Materials Knowledge Base developed by the Minerals4EU project.

## EFG role:

EFG supports the Work Package on communication, outreach and linkages. EFG in collaboration with EuroGeoSurvey is involved in:

- Development of the Communication Strategy
- Engagement with Geosciences data providers
- Engagement with Professionals
- Public outreach

## Current status:

- The MICA partners and Linked Third Parties gathered for the first time at the project's kick-off meeting held in Copenhagen from 2 to 4 February 2016.
- On 14 April the European Innovation Partnership (EIP) on Raw Materials Operational Group's meeting took place at the Plaza Hotel in Brussels. During this one day-meeting, several projects and initiatives, including MICA, have been presented during plenary and parallel sessions.
- EFG participated in the second MICA consortium meeting in Brussels, from 27 to 29 September, where the WPs were presented and progress so far has been discussed.
- EFG prepared and distributed a questionnaire and collected data through the online survey in the frame of WP2 and also conducted two interviews with the stakeholders (Initiative for responsible mining and Industry All Global Union) in order to find out their needs and expectations of the MICA platform.

More information: [www.mica-project.eu](http://www.mica-project.eu)

**FORAM**

730127 - FORAM

*Towards a World Forum on Raw Materials*

START DATE: 01.11.2016

DURATION: 24 MONTHS



The project "Towards a World Forum on Raw Materials" (FORAM) will develop and set up an EU-based platform of international experts and stakeholders that will advance the idea of a World Forum on Raw Materials (WFRM) and enhance the international cooperation on raw material policies and investments. This platform will work together on making the current complex maze of existing raw material related initiatives more effective.

As such, the FORAM project will be the largest collaborative effort for raw materials strategy cooperation on a

global level so far. The FORAM Consortium is composed by twelve international organisations and government bodies, industries, SMEs, and universities with mixed and exclusive expertise in international dialogues in the field of non-energy abiotic raw materials.

The Project Coordinator is the Swiss based World Resources Forum Association (WRFA). The FORAM project was launched on 30 November 2016 in Brussels, during the first Raw Materials Week organised by the European Commission.

**EFG role:**

EFG leads Work Package 3 on "Strategic Planning" which will set the stage for the WFRM using a highly participative process. WP3 will define and present a long term vision and its strategic positioning as well as an appropriate framework to measure performance and to respond to geo-political, technological and economical changes.

More information: <http://foramproject.net>

**ERA-MIN 2**



In March 2014, EFG was formally admitted by ERA-MIN as an associated partner. ERA-MIN is a network of European organisations owning and/or managing research programs on raw materials. ERA-MIN's objectives are to contribute to overcome the current state of fragmentation and to foster research in the field of industrial production and supply of raw materials by:

- Networking stakeholders
- Roadmapping research priorities
- Implementing joint actions.

As an associate, EFG commits itself to applying its best efforts to supporting the goals, tasks and activities of ERA-MIN.

In December 2016, ERA-MIN 2, the second phase of the programme was launched in Brussels. More than 50 representatives of ministries, funding organisations, research and industry from EU and non-EU countries and the European Commission have participated in a networking cocktail to welcome the official start. Building on the experience of the former ERA-MIN (2011-2015), the main objective of the Horizon 2020 ERA-NET Cofund on Raw Materials ERA-MIN 2 (2016-2021) is to enhance and strengthen the coordination of national and regional European research and innovation (R&I) programmes in the field of non-energy, non-agricultural raw materials, namely, construction, industrial and metallic minerals.

The ERAMIN 2 network launched the first out of three joint calls for transnational collaborative R&I projects on 1 February 2017, with a deadline for pre-proposals on May 5<sup>th</sup> 2017. The scope of the Joint Call is needs-driven research addressing all aspects of the non-energy, non-agricultural raw materials life cycle covering both primary and secondary resources.

More information: [www.era-min-eu.org](http://www.era-min-eu.org)

## COMMUNICATION

### OBJECTIVES AND DRIVERS

1. Improve the use of geoscientific information on decision-making in public policies;
2. Raise public awareness of the importance of geosciences;
3. Improve elementary knowledge of the public on geology and geological processes.

### OUTCOMES

1. Reinforce the use of the EFG communication tools: EGM, GeoNews and webpage;
2. Reinforce the dissemination capacity between EFG Members NA;
3. Raise awareness of EFG, among the public and policy makers, as a trustworthy source for geoscientific information;
4. Reinforce EFG capabilities to contribute to the development of EU policies relating to the geosciences;
5. Strengthen the bonds between EFG, NAs and mineral industry associations;
6. Coorganise the EU Geology Day.



### WEBSITE

The EFG website is available at [www.eurogeologists.eu](http://www.eurogeologists.eu). It is structured according to EFG's strategic aims:

EFG Members, Panels of Experts, Global Network, EurGeol title, EFG projects, EFG services.

### EUROPEAN GEOLOGIST JOURNAL

European Geologist is the journal of the European Federation of Geologists. It is published twice a year and carries articles on geological issues, both technical, professional and other matters.

The May edition (EGJ41) was dedicated to the MINATURA2020 project and is entitled "Sustainable land use: how geology can contribute".

It is available for online reading at [https://issuu.com/efgoffice/docs/egj41\\_print3](https://issuu.com/efgoffice/docs/egj41_print3).

The November edition (EGJ42) was dedicated to the INTRAW project and is thus a special issue about "International collaboration on raw materials".

It is available at [https://issuu.com/efgoffice/docs/egj42\\_print](https://issuu.com/efgoffice/docs/egj42_print).



### NEWSLETTERS

Since several years, the EFG Office produces a monthly newsletter, **GeoNews**, with the most relevant information for the European geosciences community such as events, reports, regulations, or consultations for the main activity areas (Minerals, Natural Hazards, Hydrogeology, Soil Protection, Geothermal Energy, CCS, etc).

GeoNews also features each month one of the EAGE/EFG photo contest pictures and it contains two interview



series: "European Geologist of the month", a monthly interview with one of the EurGeol title holders, and "One day in Europe", an interview with one of EFG's national membership associations.

*GeoNews* is disseminated once per month to EFG's network of more than 45.000 geoscientists all over Europe and via the social media LinkedIn, Facebook and Twitter. More information: <http://eurogeologists.eu/geo-news>

**EFG project news** is EFG's new quarterly publication on the status of ongoing Horizon2020 projects.

## SOCIAL MEDIA

The popularity of all social media profiles is increasing steadily. All three accounts are electronically linked with each other and regularly updated with GeoNews, EGJ, events and other geoscience related news.

- Facebook: Account created in April 2011: +1382 likes
- Twitter: Account created in June 2012: +409 followers
- LinkedIn: Account created in June 2012: +2,223 connections



## PHOTO CONTEST

EFG and the European Association of Geoscientists and Engineers (EAGE) again jointly organised their photo contest 'Geoscientists at work'. Members of EFG and EAGE were invited to submit their photos in the following sub-categories: 1) Education & training, 2) Landscapes & environment, 3) Fieldwork and 4) Energy. An impressive number of photos was submitted by the deadline for participation (March 2016) and a vote determined the 12 most popular photos, which were shown during the 78<sup>th</sup> EAGE Annual Conference & Exhibition 2016 (30 May– 2 June 2016 in Vienna, Austria), at the EAGE Near Surface Geoscience Annual Meeting



2016 (September 2016 in Barcelona, Spain) and at the EFG/UNECE conference "International collaboration on raw materials" (February 2017 in Brussels, Belgium). They were also compiled in a 2017 desk calendar available through the EAGE bookshop.

Voting for the best three photos by EAGE and EFG members closed on 9 September. The competition winner is Mahmoud Hamdy for his photograph 'Tough Work' taken in August 2015 at Meliha Field, Western Desert, in Egypt. Second place went to Catalina Llano Ocampo for her 'Inside Out' (January 2014, Haukadalur Valley, Iceland) and third place to Nicolas Nosjean's 'Flying Publications' (December 2015, Engie Paris La Defense Head Office, France).



# 6 FINANCIAL REPORT

## JPS ACCOUNTING AND TAX NETWORK

“JPS A.T.N”

Société Civile à forme de société privée à responsabilité limitée  
Avenue de Jette, 32 / 3 - 1081 Koekelberg

### EUROPEAN FEDERATION OF GEOLOGISTS REPORT OF THE CHARTERED ACCOUNTANT ON THE CONTROL OF THE ACCOUNTS OF THE FINANCIAL YEAR ENDING ON 31 DECEMBER 2016

I undersigned, Jean-Pierre Verstraeten, Chartered Account, partner of the SPRL JPS ATN, certify by this document that, in accordance with statutory regulations. I have proceeded to the checking of annual accounts established under the responsibility of the management of the non-profit organisation “European Federation of Geologists” for the financial year ending on 31 December 2016 for which profit and loss accounts shows a profit of € 8.815,86 and a total balance of € 770.075,11.

The impact of project on the result is € 3.333,62, consequence of € 1.173.714,95 of turnover and € 1.170.381,33 of costs. There is deferred income on project of € 419.468,55. The total of cash in hand and in bank is € 749.798,29.

The liabilities show reserves for € 92.328,88.

Deferred income for € 419.468,55 and debts payable within one year of € 258.277,68.

This certificate is delivered without reservations as far as annual accounts are concerned.

My auditing has been effected in conformity with the norms of the “Institut des Experts Comptables”. These professional norms require that the audit is organised and done in a way to reach a fair certainty that the annual accounts do not have significant inaccuracies with regard to this statutory regulations applied to balance sheets in Belgium.

In accordance to these norms, I have taken into account the administrative and accounting structures of the Belgian branch organisation and of its internal control dispositions. The director of the Belgian branch has replied with clarity to my request for explanations and information, I have assessed the major evaluation and estimation accounting rules used by the Belgian branch. I come to the conclusion that it gives a fair ground for the expression of my opinion.

In my opinion, and in the light of the applicable laws and regulations, the annual accounts with closing date of 31 December 2016 reflect in a complete, faithful and correct way to assets, financial situation and results of the association.

Without prejudice to formal aspects of minor importance, the accounting of the “European Federation of Geologists” is in accordance with the regulations applicable in Belgium.

Yours faithfully,  
Brussels, 10<sup>th</sup> February 2017

JP VERSTRAETEN

Chartered Accountant IEC (Institut des Experts Comptables)

Tel : +32 2 318.11.40  
[office@jpsatn.be](mailto:office@jpsatn.be)



IBAN : BE31 3631 1399 5955  
BIC : BBRUBEBB

**001 EUROPEAN FEDERATION OF GEOLOGISTS**  
**General accounts balance**  
 Year 2016 - Periods REP to CLO

Date 30/01/2017  
 Time 13:42:32  
 Currency EUR  
 Page 1

**Popsy 3.1.975**

| Reference       | Wording  | Debit               | Credit              | Balances          |                   |
|-----------------|--|---------------------|---------------------|-------------------|-------------------|
|                 |  |                     |                     | Debit             | Credit            |
| <b>14</b>       | <b>Accumulated profits / losses</b>                    |                     |                     |                   |                   |
| 140000          | Accumulated profits                                    | 0,00                | 77.414,00           | 0,00              | 77.414,00         |
| 140015          | Result 2015  | 0,00                | 14.914,88           | 0,00              | 14.914,88         |
| <b>Total 14</b> |  | <b>0,00</b>         | <b>92.328,88</b>    | <b>0,00</b>       | <b>92.328,88</b>  |
| <b>40</b>       | <b>Amounts receivable - Trade debtors</b>              |                     |                     |                   |                   |
| 400000          | Customers  | 121.703,00          | 101.391,50          | 20.311,50         | 0,00              |
| <b>Total 40</b> |  | <b>121.703,00</b>   | <b>101.391,50</b>   | <b>20.311,50</b>  | <b>0,00</b>       |
| <b>44</b>       | <b>Trade debts</b>                                     |                     |                     |                   |                   |
| 440000          | Suppliers  | 1.006.572,08        | 1.115.539,00        | 0,00              | 108.966,92        |
| 444000          | Invoices to be received                                | 23.085,23           | 147.305,38          | 0,00              | 124.220,15        |
| <b>Total 44</b> |  | <b>1.029.657,31</b> | <b>1.262.844,38</b> | <b>0,00</b>       | <b>233.187,07</b> |
| <b>45</b>       | <b>Taxes, remuneration &amp; social security costs</b> |                     |                     |                   |                   |
| 451100          | VAT to pay intracommunity                              | 12.129,45           | 24.435,88           | 0,00              | 12.306,43         |
| 453000          | Advance deduction - professional                       | 14.346,02           | 14.346,02           | 0,00              | 0,00              |
| 454000          | Social security contribution                           | 44.161,75           | 44.161,75           | 0,00              | 0,00              |
| 455000          | Remunerations  | 57.157,45           | 67.599,57           | 0,00              | 10.442,12         |
| <b>Total 45</b> |  | <b>127.794,67</b>   | <b>150.543,22</b>   | <b>0,00</b>       | <b>22.748,55</b>  |
| <b>48</b>       | <b>Other amounts payable</b>                           |                     |                     |                   |                   |
| 489000          | Other various debts                                    | 0,00                | 2.342,06            | 0,00              | 2.342,06          |
| <b>Total 48</b> |  | <b>0,00</b>         | <b>2.342,06</b>     | <b>0,00</b>       | <b>2.342,06</b>   |
| <b>49</b>       | <b>Regularization and suspense accounts</b>            |                     |                     |                   |                   |
| 493010          | Renewal to be deferred                                 | 96,00               | 96,00               | 0,00              | 0,00              |
| 493101          | Incomes to be deferred INTRAW                          | 89.266,25           | 208.256,94          | 0,00              | 118.990,69        |
| 493111          | Incomes to be deferred KINDRA                          | 70.273,09           | 122.000,20          | 0,00              | 51.727,11         |
| 493121          | Incomes to be deferred MINATURA                        | 37.539,75           | 59.834,17           | 0,00              | 22.294,42         |
| 493131          | Deferred income VAMOS                                  | 0,00                | 8.371,21            | 0,00              | 8.371,21          |
| 493141          | Deferred income CHPM 2030                              | 0,00                | 78.548,89           | 0,00              | 78.548,89         |
| 493151          | Deferred income UNEXMIN                                | 0,00                | 34.781,24           | 0,00              | 34.781,24         |
| 493161          | Income to be deferred MICA                             | 23.062,50           | 29.351,27           | 0,00              | 6.288,77          |
| 493201          | Deferred income FORAM                                  | 0,00                | 98.466,22           | 0,00              | 98.466,22         |
| 499000          | Suspense accounts                                      | 33,00               | 67,68               | 0,00              | 34,68             |
| <b>Total 49</b> |  | <b>220.270,59</b>   | <b>639.773,82</b>   | <b>0,00</b>       | <b>419.503,23</b> |
| <b>55</b>       | <b>Credit institutions</b>                             |                     |                     |                   |                   |
| 550001          | BNP MAIN   | 1.804.180,29        | 1.054.697,91        | 749.482,38        | 0,00              |
| 550002          | BNP OFFICE   | 3.038,23            | 2.432,66            | 605,57            | 0,00              |
| 550100          | Visa   | 7.145,42            | 7.145,42            | 0,00              | 0,00              |
| <b>Total 55</b> |  | <b>1.814.363,94</b> | <b>1.064.275,99</b> | <b>750.087,95</b> | <b>0,00</b>       |
| <b>58</b>       | <b>Internal transfers of funds</b>                     |                     |                     |                   |                   |
| 580000          | Internal transfers of funds                            | 1.340,00            | 1.340,00            | 0,00              | 0,00              |
| 580001          | Visa   | 6.958,77            | 7.248,43            | 0,00              | 289,66            |
| <b>Total 58</b> |  | <b>8.298,77</b>     | <b>8.588,43</b>     | <b>0,00</b>       | <b>289,66</b>     |
| <b>60</b>       | <b>Provisioning and goods</b>                          |                     |                     |                   |                   |
| 600010          | EurGeols costs   | 196,10              | 0,00                | 196,10            | 0,00              |
| <b>601</b>      | <b>PROJECTS</b>  |                     |                     |                   |                   |
| <b>60110</b>    | <b>INTRAW</b>  |                     |                     |                   |                   |
| 601101          | Intraw Conference                                      | 24.348,83           | 109,52              | 24.239,31         | 0,00              |
| 601102          | Intraw Inhouse consulting                              | 47.156,51           | 0,00                | 47.156,51         | 0,00              |
| 601103          | Intraw Travel  | 8.349,46            | 0,00                | 8.349,46          | 0,00              |
| 601104          | Intraw Other   | 1.676,60            | 0,00                | 1.676,60          | 0,00              |

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| Reference              | Wording                      | Debit               | Credit            | Balances          |             |
|------------------------|------------------------------|---------------------|-------------------|-------------------|-------------|
|                        |                              |                     |                   | Debit             | Credit      |
| 601105                 | Intraw salary cost           | 19.771,97           | 0,00              | 19.771,97         | 0,00        |
| 601108                 | Intraw Partners              | 630.050,00          | 0,00              | 630.050,00        | 0,00        |
| 601109                 | Intraw Third parties         | 721.471,25          | 643.718,75        | 77.752,50         | 0,00        |
| <b>Total</b>           | <b>60110</b>                 | <b>1.452.824,62</b> | <b>643.828,27</b> | <b>808.996,35</b> | <b>0,00</b> |
| <b>60111 KINDRA</b>    |                              |                     |                   |                   |             |
| 601111                 | Kindra Conference            | 8.808,15            | 0,00              | 8.808,15          | 0,00        |
| 601112                 | Kindra Inhouse consulting    | 8.917,00            | 0,00              | 8.917,00          | 0,00        |
| 601113                 | Kindra Travel                | 4.759,18            | 0,00              | 4.759,18          | 0,00        |
| 601114                 | Kindra Other                 | 130,84              | 0,00              | 130,84            | 0,00        |
| 601115                 | Kindra salary cost           | 22.392,65           | 0,00              | 22.392,65         | 0,00        |
| 601119                 | Kindra Third parties         | 115.787,54          | 14.850,23         | 100.937,31        | 0,00        |
| <b>Total</b>           | <b>60111</b>                 | <b>160.795,36</b>   | <b>14.850,23</b>  | <b>145.945,13</b> | <b>0,00</b> |
| <b>60112 MINATURA</b>  |                              |                     |                   |                   |             |
| 601122                 | Mintura Inhouse consulting   | 10.655,98           | 0,00              | 10.655,98         | 0,00        |
| 601123                 | Minatura Travel              | 491,14              | 0,00              | 491,14            | 0,00        |
| 601124                 | Minatura Other               | 96,80               | 0,00              | 96,80             | 0,00        |
| 601125                 | Minatura salary cost         | 4.001,41            | 0,00              | 4.001,41          | 0,00        |
| <b>Total</b>           | <b>60112</b>                 | <b>15.245,33</b>    | <b>0,00</b>       | <b>15.245,33</b>  | <b>0,00</b> |
| <b>60113 VAMOS</b>     |                              |                     |                   |                   |             |
| 601132                 | Vamos Inhouse consulting     | 7.192,97            | 0,00              | 7.192,97          | 0,00        |
| 601133                 | Vamos Travel                 | 142,80              | 0,00              | 142,80            | 0,00        |
| 601135                 | Vamos salary cost            | 841,39              | 0,00              | 841,39            | 0,00        |
| <b>Total</b>           | <b>60113</b>                 | <b>8.177,16</b>     | <b>0,00</b>       | <b>8.177,16</b>   | <b>0,00</b> |
| <b>60114 CHPM 2030</b> |                              |                     |                   |                   |             |
| 601142                 | Chpm 2030 Inhouse Consulting | 739,99              | 0,00              | 739,99            | 0,00        |
| 601143                 | Chpm 2030 Voyages            | 1.268,07            | 0,00              | 1.268,07          | 0,00        |
| 601144                 | Chpm 2030 Divers             | 2.112,45            | 0,00              | 2.112,45          | 0,00        |
| 601145                 | Chpm salary cost             | 18.450,28           | 0,00              | 18.450,28         | 0,00        |
| 601149                 | Chpm 2030 Third              | 92.720,27           | 0,00              | 92.720,27         | 0,00        |
| <b>Total</b>           | <b>60114</b>                 | <b>115.291,06</b>   | <b>0,00</b>       | <b>115.291,06</b> | <b>0,00</b> |
| <b>60115 UNEXMIN</b>   |                              |                     |                   |                   |             |
| 601152                 | Unexmin Inhouse Consulting   | 3.907,62            | 795,04            | 3.112,58          | 0,00        |
| 601153                 | Unexmin Travel               | 1.096,86            | 0,00              | 1.096,86          | 0,00        |
| 601154                 | Unexmin Miscellaneous        | 151,30              | 151,30            | 0,00              | 0,00        |
| 601155                 | Unexmin salary cost          | 11.146,38           | 0,00              | 11.146,38         | 0,00        |
| 601159                 | Unexmin Third                | 38.100,02           | 0,00              | 38.100,02         | 0,00        |
| <b>Total</b>           | <b>60115</b>                 | <b>54.402,18</b>    | <b>946,34</b>     | <b>53.455,84</b>  | <b>0,00</b> |
| <b>60116 MICA</b>      |                              |                     |                   |                   |             |
| 601162                 | Mica Inhouse Consulting      | 8.360,23            | 0,00              | 8.360,23          | 0,00        |
| 601163                 | Mica Travel                  | 1.462,11            | 0,00              | 1.462,11          | 0,00        |
| 601165                 | Mica salary cost             | 6.951,39            | 0,00              | 6.951,39          | 0,00        |
| <b>Total</b>           | <b>60116</b>                 | <b>16.773,73</b>    | <b>0,00</b>       | <b>16.773,73</b>  | <b>0,00</b> |
| <b>60119 TGGGP</b>     |                              |                     |                   |                   |             |
| 601193                 | TGGGP Travel                 | 1.384,00            | 0,00              | 1.384,00          | 0,00        |
| 601194                 | TGGGP Others                 | 922,70              | 0,00              | 922,70            | 0,00        |
| <b>Total</b>           | <b>60119</b>                 | <b>2.306,70</b>     | <b>0,00</b>       | <b>2.306,70</b>   | <b>0,00</b> |
| <b>60120 FORAM</b>     |                              |                     |                   |                   |             |
| 601202                 | FORAM in-house consulting    | 2.293,98            | 0,00              | 2.293,98          | 0,00        |
| 601203                 | FORAM travels                | 802,65              | 0,00              | 802,65            | 0,00        |
| 601205                 | FORAM salary cost            | 1.093,40            | 0,00              | 1.093,40          | 0,00        |

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| Reference    | Wording                                | Debit               | Credit            | Balances            |             |
|--------------|--|---------------------|-------------------|---------------------|-------------|
|              |  |                     |                   | Debit               | Credit      |
| <b>Total</b> | <b>60120</b>                           | <b>4.190,03</b>     | <b>0,00</b>       | <b>4.190,03</b>     | <b>0,00</b> |
| <b>Total</b> | <b>601</b>                             | <b>1.830.006,17</b> | <b>659.624,84</b> | <b>1.170.381,33</b> | <b>0,00</b> |
| <b>Total</b> | <b>60</b>                              | <b>1.830.202,27</b> | <b>659.624,84</b> | <b>1.170.577,43</b> | <b>0,00</b> |
| <b>61</b>    | <b>Services and other goods</b>        |                     |                   |                     |             |
| <b>611</b>   | <b>OFFICE EQUIPEMENT</b>               |                     |                   |                     |             |
| 611000       | Office supplies                        | 407,87              | 0,00              | 407,87              | 0,00        |
| 611001       | Computer equipments - IT               | 692,98              | 0,00              | 692,98              | 0,00        |
| 611012       | Internet                               | 89,68               | 0,00              | 89,68               | 0,00        |
| 611013       | Post                                   | 138,46              | 0,00              | 138,46              | 0,00        |
| 611015       | Printings (business card,...)          | 97,00               | 0,00              | 97,00               | 0,00        |
| <b>Total</b> | <b>611</b>                             | <b>1.425,99</b>     | <b>0,00</b>       | <b>1.425,99</b>     | <b>0,00</b> |
| <b>612</b>   | <b>MAGAZINE</b>                        |                     |                   |                     |             |
| 612000       | Printing                               | 1.722,27            | 0,00              | 1.722,27            | 0,00        |
| 612010       | Layout                                 | 1.820,00            | 0,00              | 1.820,00            | 0,00        |
| 612020       | Post                                   | 10,00               | 0,00              | 10,00               | 0,00        |
| <b>Total</b> | <b>612</b>                             | <b>3.552,27</b>     | <b>0,00</b>       | <b>3.552,27</b>     | <b>0,00</b> |
| <b>613</b>   | <b>COMMUNICATION</b>                   |                     |                   |                     |             |
| 613000       | Website                                | 3.499,49            | 0,00              | 3.499,49            | 0,00        |
| 613010       | Photo contest                          | 360,00              | 0,00              | 360,00              | 0,00        |
| <b>Total</b> | <b>613</b>                             | <b>3.859,49</b>     | <b>0,00</b>       | <b>3.859,49</b>     | <b>0,00</b> |
| <b>614</b>   | <b>MISCELLANEOUS</b>                   |                     |                   |                     |             |
| 614001       | Light meals                            | 108,87              | 0,00              | 108,87              | 0,00        |
| <b>Total</b> | <b>614</b>                             | <b>108,87</b>       | <b>0,00</b>       | <b>108,87</b>       | <b>0,00</b> |
| <b>615</b>   | <b>PROFESSIONAL SERVICES</b>           |                     |                   |                     |             |
| 615000       | Accountancy                            | 3.896,20            | 0,00              | 3.896,20            | 0,00        |
| 615001       | Payroll and social contribution office | 1.328,57            | 0,00              | 1.328,57            | 0,00        |
| 615100       | Professional Cotisations               | 300,95              | 0,00              | 300,95              | 0,00        |
| 615200       | Membership                             | 500,00              | 0,00              | 500,00              | 0,00        |
| <b>Total</b> | <b>615</b>                             | <b>6.025,72</b>     | <b>0,00</b>       | <b>6.025,72</b>     | <b>0,00</b> |
| <b>616</b>   | <b>TRAVELS</b>                         |                     |                   |                     |             |
| 616000       | Travel EFG                             | 2.025,38            | 0,00              | 2.025,38            | 0,00        |
| 616001       | Travel Board                           | 6.586,76            | 0,00              | 6.586,76            | 0,00        |
| 616002       | Travel EU delegates                    | 1.242,43            | 0,00              | 1.242,43            | 0,00        |
| <b>Total</b> | <b>616</b>                             | <b>9.854,57</b>     | <b>0,00</b>       | <b>9.854,57</b>     | <b>0,00</b> |
| <b>617</b>   | <b>EXTERNAL SERVICES</b>               |                     |                   |                     |             |
| 617000       | External services Stein Anita          | 21.333,60           | 0,00              | 21.333,60           | 0,00        |
| 617001       | Extenal service SMartbe                | 8.482,46            | 0,00              | 8.482,46            | 0,00        |
| 617100       | People placed at the disposal          | 200,00              | 0,00              | 200,00              | 0,00        |
| <b>Total</b> | <b>617</b>                             | <b>30.016,06</b>    | <b>0,00</b>       | <b>30.016,06</b>    | <b>0,00</b> |
| <b>619</b>   | <b>EVENTS-MEETINGS</b>                 |                     |                   |                     |             |
| 619000       | Council Meeting                        | 2.861,86            | 0,00              | 2.861,86            | 0,00        |
| 619020       | Events EU                              | 1.163,13            | 0,00              | 1.163,13            | 0,00        |
| <b>Total</b> | <b>619</b>                             | <b>4.024,99</b>     | <b>0,00</b>       | <b>4.024,99</b>     | <b>0,00</b> |
| <b>Total</b> | <b>61</b>                              | <b>58.867,96</b>    | <b>0,00</b>       | <b>58.867,96</b>    | <b>0,00</b> |

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|--------------------|--|-------------------|-------------------|-------------------|-------------------|
|                    |  |                   |                   | Debit             | Credit            |
| <b>62</b>          | <b>Remunerations, social security costs and pensions</b> |                   |                   |                   |                   |
| 620200             | Management staff - part-time                             | 90.967,36         | 0,00              | 90.967,36         | 0,00              |
| 621000             | Social security costs - employer                         | 17.264,89         | 1.343,25          | 15.921,64         | 0,00              |
| 623000             | Other personnel costs                                    | 5.731,01          | 35,24             | 5.695,77          | 0,00              |
| 623100             | Meal cost  | 4.448,46          | 650,45            | 3.798,01          | 0,00              |
| <b>Total 62</b>    |  | <b>118.411,72</b> | <b>2.028,94</b>   | <b>116.382,78</b> | <b>0,00</b>       |
| <b>65</b>          | <b>Financial charges</b>                                 |                   |                   |                   |                   |
| 650000             | Interests, commissions - fees related debts              | 9,68              | 0,00              | 9,68              | 0,00              |
| 650010             | PAYPAL COST  | 94,10             | 0,00              | 94,10             | 0,00              |
| 654000             | Exchange differences                                     | 0,00              | 0,00              | 0,00              | 0,00              |
| 657000             | Acquisition & sales of securities costs                  | 1,30              | 0,00              | 1,30              | 0,00              |
| 658000             | Bank & payments charges                                  | 235,91            | 2,75              | 233,16            | 0,00              |
| <b>Total 65</b>    |  | <b>340,99</b>     | <b>2,75</b>       | <b>338,24</b>     | <b>0,00</b>       |
| <b>69</b>          | <b>Appropriation account</b>                             |                   |                   |                   |                   |
| 693000             | Profit to be carried forward                             | 8.815,86          | 0,00              | 8.815,86          | 0,00              |
| <b>Total 69</b>    |  | <b>8.815,86</b>   | <b>0,00</b>       | <b>8.815,86</b>   | <b>0,00</b>       |
| <b>70</b>          | <b>Turnover</b>  |                   |                   |                   |                   |
| <b>700</b>         | <b>Membership</b>  |                   |                   |                   |                   |
| 700000             | MEMBERSHIP   | 409,00            | 64.656,50         | 0,00              | 64.247,50         |
| 700010             | EUROGEOL RENEWAL   | 0,00              | 5.921,00          | 0,00              | 5.921,00          |
| 700011             | EUROGEOL NEW   | 0,00              | 1.702,45          | 0,00              | 1.702,45          |
| 700020             | NLB  | 0,00              | 18.940,00         | 0,00              | 18.940,00         |
| <b>Total 700</b>   |  | <b>409,00</b>     | <b>91.219,95</b>  | <b>0,00</b>       | <b>90.810,95</b>  |
| <b>701</b>         | <b>PROJECTS</b>  |                   |                   |                   |                   |
| <b>70110</b>       | <b>INTRAW</b>  |                   |                   |                   |                   |
| 701101             | Intraw EFG   | 118.990,69        | 927.987,04        | 0,00              | 808.996,35        |
| <b>Total 70110</b> |  | <b>118.990,69</b> | <b>927.987,04</b> | <b>0,00</b>       | <b>808.996,35</b> |
| <b>70111</b>       | <b>KINDRA</b>  |                   |                   |                   |                   |
| 701111             | Kindra EFG   | 51.727,11         | 197.571,88        | 0,00              | 145.844,77        |
| <b>Total 70111</b> |  | <b>51.727,11</b>  | <b>197.571,88</b> | <b>0,00</b>       | <b>145.844,77</b> |
| <b>70112</b>       | <b>MINATURA</b>  |                   |                   |                   |                   |
| 701121             | Minatura EFG   | 22.294,42         | 37.539,75         | 0,00              | 15.245,33         |
| <b>Total 70112</b> |  | <b>22.294,42</b>  | <b>37.539,75</b>  | <b>0,00</b>       | <b>15.245,33</b>  |
| <b>70113</b>       | <b>VAMOS</b>   |                   |                   |                   |                   |
| 701131             | Vamos EFG  | 8.371,21          | 16.548,37         | 0,00              | 8.177,16          |
| <b>Total 70113</b> |  | <b>8.371,21</b>   | <b>16.548,37</b>  | <b>0,00</b>       | <b>8.177,16</b>   |
| <b>70114</b>       | <b>CHPM 2030</b>   |                   |                   |                   |                   |
| 701141             | Chpm 2030 Feg  | 78.548,89         | 193.343,75        | 0,00              | 114.794,86        |
| <b>Total 70114</b> |  | <b>78.548,89</b>  | <b>193.343,75</b> | <b>0,00</b>       | <b>114.794,86</b> |
| <b>70115</b>       | <b>UNEXMIN</b>   |                   |                   |                   |                   |
| 701151             | Unexmin Feg  | 34.781,24         | 88.237,08         | 0,00              | 53.455,84         |
| <b>Total 70115</b> |  | <b>34.781,24</b>  | <b>88.237,08</b>  | <b>0,00</b>       | <b>53.455,84</b>  |
| <b>70116</b>       | <b>MICA</b>  |                   |                   |                   |                   |
| 701161             | Mica Feg   | 6.288,77          | 23.062,50         | 0,00              | 16.773,73         |
| <b>Total 70116</b> |  | <b>6.288,77</b>   | <b>23.062,50</b>  | <b>0,00</b>       | <b>16.773,73</b>  |

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| Reference             | Wording   | Debit               | Credit              | Balances            |                     |
|-----------------------|---|---------------------|---------------------|---------------------|---------------------|
|                       |   |                     |                     | Debit               | Credit              |
| <b>70119</b>          | <b>TGGGP</b>  |                     |                     |                     |                     |
| 701190                | TGGGP   | 0,00                | 6.236,88            | 0,00                | 6.236,88            |
| <b>Total 70119</b>    |   | <b>0,00</b>         | <b>6.236,88</b>     | <b>0,00</b>         | <b>6.236,88</b>     |
| <b>70120</b>          | <b>FORAM</b>  |                     |                     |                     |                     |
| 701201                | FORAM Efg   | 98.466,22           | 102.656,25          | 0,00                | 4.190,03            |
| <b>Total 70120</b>    |   | <b>98.466,22</b>    | <b>102.656,25</b>   | <b>0,00</b>         | <b>4.190,03</b>     |
| <b>Total 701</b>      |   | <b>419.468,55</b>   | <b>1.593.183,50</b> | <b>0,00</b>         | <b>1.173.714,95</b> |
| <b>Total 70</b>       |   | <b>419.877,55</b>   | <b>1.684.403,45</b> | <b>0,00</b>         | <b>1.264.525,90</b> |
| <b>71</b>             | <b>Increase/decrease in stocks &amp; work in progress</b> |                     |                     |                     |                     |
| <b>712</b>            | <b>MAGAZINE</b>   |                     |                     |                     |                     |
| 712000                | Sales   | 0,00                | 795,00              | 0,00                | 795,00              |
| 712001                | Sponsoring  | 0,00                | 3.500,00            | 0,00                | 3.500,00            |
| <b>Total 712</b>      |   | <b>0,00</b>         | <b>4.295,00</b>     | <b>0,00</b>         | <b>4.295,00</b>     |
| <b>719</b>            | <b>EVENTS-MEETINGS/PAF</b>                                |                     |                     |                     |                     |
| 719000                | Contribution to costs                                     | 3.500,00            | 3.860,00            | 0,00                | 360,00              |
| <b>Total 719</b>      |   | <b>3.500,00</b>     | <b>3.860,00</b>     | <b>0,00</b>         | <b>360,00</b>       |
| <b>Total 71</b>       |   | <b>3.500,00</b>     | <b>8.155,00</b>     | <b>0,00</b>         | <b>4.655,00</b>     |
| <b>74</b>             | <b>Other operating incomes</b>                            |                     |                     |                     |                     |
| 740100                | PERC  | 0,00                | 964,50              | 0,00                | 964,50              |
| 740200                | Other income  | 0,00                | 100,00              | 0,00                | 100,00              |
| 749999                | Salary project  | 0,00                | 84.648,87           | 0,00                | 84.648,87           |
| <b>Total 74</b>       |   | <b>0,00</b>         | <b>85.713,37</b>    | <b>0,00</b>         | <b>85.713,37</b>    |
| <b>75</b>             | <b>Financial income</b>                                   |                     |                     |                     |                     |
| 754000                | Realized exchange gains                                   | 0,00                | 0,00                | 0,00                | 0,00                |
| 759000                | Miscellaneous financial incomes                           | 0,00                | 88,00               | 0,00                | 88,00               |
| <b>Total 75</b>       |   | <b>0,00</b>         | <b>88,00</b>        | <b>0,00</b>         | <b>88,00</b>        |
| <b>Total accounts</b> |   | <b>5.762.104,63</b> | <b>5.762.104,63</b> | <b>2.125.381,72</b> | <b>2.125.381,72</b> |

# 7 SPONSORSHIP

EFG broadly disseminates geology-related information among geologists, geoscientific organisations and the private sector, which is an important employer for its professional members, but also to the general public.

By means of its communication tools, EFG reaches approximately 50,000 European geologists as well as the international geology community. For each of these tools EFG proposes different advertisement possibilities. For the individual prices of these different options please refer to the table on the right side.

In addition, EFG proposes an advantageous annual advertisement-package of 3,500€ including the subscription of your company's logo to the EFG homepage, the GeoNews and in the European Geologist Journal (full page colour ad).

The benefits for your company are:

- Increasing visibility of your company profile with a direct link to your website via the different communication tools of EFG.
- Broad distribution of your company news in the newsfeed of our homepage and in the GeoNews.
- Promotion of your events, publications or new products relevant to our geologists' community.
- Ads of your job offers relevant to our members in the job section of our webpage.

Since 2013, EFG proposes to its member organisations a reduction of their annual membership fee if they support EFG by introducing new sponsors or advertisers. Companies that sponsor EFG and its National Associations through this advertisement system contribute to the enhancement of the EurGeol professional title. Professional titles have become important in demonstrating the suitability of a professional to provide geological services. The professional title provides a quality mark to demonstrate to clients, regulators and the public that the individual is competent to provide geological advice, and allows employers to offer competitive commercial services. According to the EFG regulation, sponsorships can benefit directly to EFG's National Associations when they are concluded via the latter.

| Media                      | Ad description   | 1 issue | 2 issues | Package |
|----------------------------|--|---------|----------|---------|
| EUROPEAN GEOLOGIST JOURNAL | Full page colour   | 820€    | 1320€    | X       |
|                            | Half page colour   | 420€    | 670€     |         |
|                            | Quarter page colour  | 220€    | 350€     |         |
|                            | Full page b&w  | 420€    | 670€     |         |
|                            | Half page b&w  | 220€    | 350€     |         |
|                            | Quarter page b&w   | 120€    | 200€     |         |
|                            | Business card size   | 90€     | 150€     |         |
|                            | Preferential location  | +25%    |          |         |
|                            | Outside back cover colour  | 1200€   | 1900€    |         |
|                            | Second page colour   | 1000€   | 1600€    |         |
|                            | Second last page   | 1000€   | 1600€    |         |
| GEONEWS                    | Ad at the bottom of the newsletter and regular newsfeed                          | 1500€   |          | X       |
| EFG HOMEPAGE               | Advertisement column on the right hand side of the homepage and regular newsfeed | 1500€   |          | X       |
| UNIVERSITY AD              | Ad for training opportunities in the job area of the homepage                    | 500€    |          |         |
| PACKAGE                    | Full page colour ad in 2 issues of EGJ, GeoNews and Homepage.                    |         |          | 3500€   |

EFG THANKS ITS CURRENT SPONSOR ROCKWARE ([WWW.ROCKWARE.COM](http://WWW.ROCKWARE.COM)) FOR ITS SUPPORT.





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