



ANNUAL REPORT 2018

EUROPEAN FEDERATION OF GEOLOGISTS



Content

1 EFG in brief	3
2 Strategic Plan 2018-2022	4
2 Message from the President	5
3 Message from the Executive Director	6
4 Organisational structure	8
5 EFG Strategic actions	11
a EFG Members	11
b EFG Network	19
c Professional Expertise	21
d EFG Projects	25
e EFG Communication	33
f Panels of Experts	35
6 Financial report	39
7 Sponsorship	46

This report has been edited by the European Federation of Geologists (EFG).
© Copyright 2019 The European Federation of Geologists.
Cover photo: Chukwuebuka Ukwu
© EAGE/EFG 2018.
Picture credits: pp. 3, 5, 6, 8, 11, 39, 46
© EAGE/EFG 2018.

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission. No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence, or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein.

European Federation of Geologists
C/O Geological Survey of Belgium
Rue Jenner 13
B-1000 Brussels
www.eurogeologists.eu

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's members are National Professional Organisations, National Professional Registers or National Associations (NAs) whose principal aims are the advancement and promotion of the profession of geology and the professional interests of geologists.

Purpose

The European Federation of Geologists (EFG) is a not-for-profit organisation instituted to ensure competent and ethical practice among geoscientists in Europe while representing the profession across the continent.

Vision

EFG aims to be recognised as an independent, trustworthy and reliable international organisation that contributes to the protection of the environment, public safety and the responsible use of natural resources

Values

Professional geologists contribute to public safety, sustainable development, the responsible use of natural resources, wealth creation and the effective prediction, prevention and mitigation of natural hazards through cooperation with other experts and effective communication with the public.

Mission

To promote excellence in the application of geoscience across Europe, to represent the professional European associations of geoscientists and to create public awareness of geoscience's importance to society.

At its May 2018 Council meeting in Çesme (Turkey) the delegates of the European Federation of Geologists have unanimously approved the Federation's new Strategic Plan "Towards a sustainable future" for the period 2018–2022. The strategy has been officially published in December 2018 and you can discover the six strategic action plans on the following page: EFG Members, EFG Network, Professional Expertise, EFG Projects, EFG Communication, and Panels of Experts. These strategic actions also structure the present Annual Report for 2018.



EFG'S SIX THEMATIC ACTIONS: EFG MEMBERS, EFG NETWORK, PROFESSIONAL EXPERTISE,
EFG PROJECTS, EFG COMMUNICATION, PANELS OF EXPERTS

EFG Strategic Plan 2018-2022

Towards a sustainable future



1. EFG Members

Developing and maintaining a strong EFG Member network

- To network for sharing knowledge, good practices and experience
- To disseminate policymaker agendas to National Associations (NAs)
- To facilitate information flow between Members and policymakers
- To represent geologists



3. Professional expertise

Promotion of geoscience professional excellence

- To promote the EurGeol title and uphold the status of professional titles
- To support the development and expansion of the Competent Person concept
- To promote Continuing Professional Development, supporting geoscientific education and high-quality training
- To promote professional specialisation and public access to registers of geoscience experts
- To support early career geoscientists
- To ensure monitoring of and strict disciplinary control over professional practice



2. EFG Network

Participation in the global community and maintaining international networks

- To participate in initiatives contributing to European policies on geosciences issues
- To enhance cooperation with international geoscience organisations
- To promote the global mobility of professional geologists



4. EFG Projects

Participation in EU and international funded projects

- To participate in funded projects to expand the network and EFG's capacity to influence policymakers
- To diversify income streams



6. Panels of Experts

Provision of independent, reliable information on geoscientific issues

- To provide information to policymakers that is authoritative and objective
- To become the European organisation of reference on the professional practice of geoscience



5. EFG Communication

Accessible communication of geosciences and outreach

- To create public awareness of the importance of geoscience to society by promoting public outreach and understanding of geosciences
- To communicate transparently to National Associations and other audiences

2 MESSAGE FROM THE PRESIDENT: TIME FLIES

The world around is changing faster than ever before. Population growth, climate change and new technologies are designing a new roadmap, full of crossroads, that will keep society and politics under stress in the years to come.

Geoscientists are fully aware that the world changes. But can we, as a professional group, prepare to an unpredictable future? And can the EFG continue to *promote excellence in the application of geoscience across Europe, to represent the professional European associations of geoscientists and to create public awareness of the importance of geoscience to society?*

The answer to the first question is, in my opinion, no. We all agree that geoscience will be paramount to cope with the challenges ahead because we'll always need food, fresh water, energy and raw materials (and to adapt to climate change). But some variations will have a substantial impact in the geoscience's domain. Just think on the advances being made in remote sensing, artificial intelligence and robotics. In the near future (by 2030, according to some technology experts) satellites will scan the subsurface of the planet, 3D semantic maps¹ will be available on Google, specialised data processing and geological interpretation will be made by Artificial Intelligence algorithms (that would beat the most experienced and knowledgeable geologists), and robots that can tirelessly perform all types of tasks will become common in risky activities. These changes will have a significant impact on geoscience jobs, qualifications and skills, and I'm afraid that it is impossible to prepare for all the possible implications of future scenarios.

But my answer to the second question is yes. The EFG strategy update made in 2018 reinforced the EFG resilience and capacity to advance and achieve its mission. The strategy review took into consideration the past performance in the EFG's strategical domains and future societal challenges. As a result, the EFG's vision, values and mission were clarified, and three main strategic aims were defined: 1) promoting excellence in the application of geoscience; 2) enhancing the cooperation between National Associations of geoscientists; and 3) creating public awareness of the importance of geoscience to society. These are aims that will remain pertinent, whatever the consequences of future scenarios, and therefore I'm confident that EFG's relevance will grow in the coming years².

.....
¹ Digital 3D maps that continue to learn about the physical world and refine its predictions of what objects exist through huge amounts of data.

² It must be highlighted that EFG's financial health, human resourcing and not-for-profit status are reinforced by the implementation of the updated 2018-2022 strategy.

The world is changing and time flies. I have reached the end of my third term as President of the EFG. I still recall my first election, and the generous support and guidance offered to me by Ruth Allington, Eva Hartai and Isabel Fernandez immediately after my installation. Back then, I had many plans on how to improve the EFG benefits to its members and EurGeols. Now, as I write my last message to you, I'm impressed by how fast my window of opportunity to help the EFG membership has flown by.



A handwritten signature in dark ink, appearing to read 'Vitor Correia'.

Vítor Correia
EFG President

NOTE: I have been afforded the privilege of serving as President of EFG for six years, together with a team of enthusiastic and talented colleagues in the EFG Board and Office. I want to thank all my fellow Board members I've worked with*, who put in so much effort and enthusiasm to the running of EFG and the discharge of their duties, on an entirely voluntary basis. Special thanks also to the EFG staff** whose professionalism, energy, enthusiasm, commitment and joy are immeasurable.

(*) Bob Hoogendoorn (NL), Domenico Calcaterra (IT), Eva Hartai (HU), Gabriele Ponzoni (IT), Léonard Luzieux (CH), Marco Komac (SI), Michael Neumann (DE), Nieves Sanchez (ES), Ruth Allington (GB) and Tamás Hámor (HU).

(**) Isabel Fernandez, Anita Stein and Pierangelo Bianco.

3 MESSAGE FROM THE EXECUTIVE DIRECTOR

EFG's Strategic Plan 2018-2022 "Towards a Sustainable Future" was the driver for the 2018 activity and the present annual report is based on the implementation of the thematic grouping of the six action plans approved by Council.

1. EFG Members

EFG's family of members continues to increase. During the last spring Council meeting in Cesme, the EFG Council unanimously welcomed the Romanian National Association of Professionals in Geology and Mining (ANPGM) as a new member. Today, EFG represents 26 European countries.

The core aim of the EFG Members' strategic action is to create and maintain a strong network of members. Sharing knowledge, good practices and experiences are some of the expected outcomes. To achieve this objective, EFG publishes a series of interviews with the NAs, "One Day in Europe", in the monthly newsletter *GeoNews*.

2018 was the first year of the geoscientist employment survey that EFG aims to produce every year. It aims to analyse the labour market for geologists in Europe, provide geologists with a better overview of labour opportunities, allow professional associations to offer better job-hunting related services to members, and to provide evidence for professional associations to pursue a dialogue with universities and education authorities towards improving the training of geologists.

2. EFG Network

Horizon 2020 (H2020) is the EU's current research and innovation framework programme, running from 2014-2020, and has a significant impact on the geoscience community. Now it is the time to prepare for the next EU framework program, Horizon Europe (2021-2027), to ensure the participation of our community in the world's most important innovation and research program.

With this aim, EFG, in collaboration with the European Geosciences Union (EGU), decided to evaluate the impact of H2020 in the geoscience community. During spring 2018, the Horizon 2020 Geoscience Survey was disseminated through the communication tools of both organisations. Survey participants were involved in 102 different H2020 projects, from climate change to sustainable mining, flood and drought management. Respondents were very positive about the collaboration that H2020 had achieved, linking different scientific disciplines across multiple sectors and European countries.

To present the outcome of this survey, as well as the geoscience community's expectations for the next framework programme, EGU and EFG organised a joint dinner debate in September 2018, where a large number of European policymakers and geologists interchanged opinions and visions for our future. During the *Horizon Geoscience: overcoming societal challenges, creating change dinner debate*, the participants assessed how greater collaboration can help Europe overcome some of its biggest societal challenges.



These actions are part of the EFG Network's objective to participate in initiatives contributing to European policy on geosciences issues. It was one of the most influential and relevant events ever linking top EU policy makers with the geoscientific community. Given the high level of policy makers present, we are convinced that geosciences will be taken into consideration in future European and national framework programmes.

Another EFG core aim is to enhance cooperation with international geoscience organisations. In this context, EFG organised EuroWorkshops in Germany and Turkey, and participated in the Resources for Future Generations Conference (RFG) in Vancouver and as co-organiser of the UNFC workshop during the EU Raw Materials Week in Brussels.

3. Professional Expertise

The main aim of the Professional Expertise action is to promote the EurGeol title and uphold the status of professional titles. With this aim, a couple of years ago EFG introduced the EurGeol tool, which includes a public directory of all registered European Geologists who are in good standing with the Federation. Throughout 2018, the EFG Office has been working actively on modernising the tool, creating a new EurGeol App. EurGeols can easily update their CPD via their mobile phones. A news feed provides special offers and information for EurGeols. Finally, a chat function is increasing networking among EurGeols.

2018 was the first year of the EFG international mentoring programme. The programme aims to support post-Bachelor students and young professionals with less than 4 years of professional experience. In 2018, 20 mentees benefitted from targeted advice from their mentors and evaluation of the program from

both mentees and mentors has been very positive, encouraging us to continue with the programme. In addition, EFG's Geoscience for Society Challenges offered a chance for one of the mentoring teams to meet face-to-face in Brussels on the occasion of the Horizon Geoscience Dinner Debate.

4. Projects

The EFG strategic aims for the Projects are to participate in funded projects to expand the network and our visibility and capacity to help and assist policymakers and to diversify EFG's income streams. In 2018, EFG was involved in 11 European projects within the Horizon 2020 program. Therefore, we can conclude that in 2018 EFG has been very successful in meeting these aims.

Significant human resources have been mobilised in the management and execution of EFG projects in 2018 (10 ongoing projects and 1 new project). Among the ongoing projects, 5 projects were completed. Consequently, we had the opportunity to close the financial outcomes with a very positive balance for EFG.

In addition, we have strengthened the bonds with our members by involving them as Linked Third Parties (LTPs), thus ensuring broad European coverage. From the 11 projects in which EFG is involved, 7 projects include direct participation of the NAs as "Linked Third Parties". The NAs offer an important added value to European projects, diffusing the results across the entire community of European geologists. They also collect national geological information for mapping resources, activities and knowledge.

5. Communication

Within the action on Communication, the EFG strategic aim is to create public awareness of the importance of geoscience to society by promoting public outreach and understanding of geosciences, and to communicate transparently to National Associations and other audiences. Thanks to the excellent work of the EFG communication team led by Anita Stein, we significantly raised awareness and visibility of EFG among other geoscientific organisations, the public and policy makers.

EFG communication tools continue to increase in quality and frequency, from daily news in the social media to weekly updates in *EFGGeoWeek*, the monthly edition of *GeoNews*, and the biannual journal. In addition, high-quality videos have been produced to present our new mentoring initiative and promote EFG projects.

The Photo Contest organised with EAGE since 2012 continues to be popular, with 167 photos submitted and over 4,600 public votes in 2018.

6. Panels of Experts

The EFG Panels of Experts (PEs) aim to provide information to policymakers that is authoritative and objective and to make EFG a European organisation of reference on the professional practice of geoscience.

EFG invited all PE coordinators to participate in the Horizon Geoscience Dinner Debate. Their participation was crucial as they acted as debate leaders of different tables, driving the dynamics established during the dinner. The next day, a meeting was organised between the EFG Board and all the coordinators. The meeting was a highly appreciated opportunity to bring together the experiences and different views on the future activities of the PEs.

In conclusion, 2018 was a year of consolidation of EFG in Brussels. In 2018, EFG was formally registered in Belgium as an international non for-profit organisation. We wish to express our gratitude to the Belgium Geological Survey, which has hosted EFG and facilitated its office since December 2001.

This is also a good opportunity to reflect on the evolution of EFG over the last 17 years:

- We have passed from a turnover of less than € 50,000 in 2001 to € 990,320 last year.
- Consequently, EFG staff has grown from one part-time employee in 2001 to a total of 9 staff members today (four full-time staff members and five part-time consultants).
- The number of members has grown from 18 to 26 countries, representing almost 45,000 geologists across Europe.
- EFG has been successful in 16 European projects up to now.
- EFG has actively represented European geologists in a large range of international events and ensured a significant increase in our presence and recognition through the organisation of over 20 events.
- 10 Expert Panels of geologists from throughout Europe have been created over the last 15 years and today they are all active and responsible for the success of EFG.

However, when analysing the trajectory of EFG over the last 17 years, it is clear that EFG is much more than numbers. In my memory, I can see the faces of those who have been members of the EFG Board, Council, and Office, people who have guided EFG to become the organisation it is today.

Working with Vitor Correia, Ruth Allington, Manuel Regueiro, Istvan Berczi, Christer Åkerman and Gareth Jones as presidents of EFG, and with all members of the EFG Board, has been a honour for me, and sharing my professional life with all my colleagues in the EFG Executive Office has been an unrepeatable luxury, thanks to Anita and Pierangelo and all of the professionals that have passed through the EFG Office in Brussels as Project Officers, administrators and interns, and are all part of this nice EFG family.

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 spring Council meeting in Çesme, elections were held for the positions of Secretary General and Vice-President.

There were two candidates for the Secretary General position: Gabriele Ponzoni from the Italian association (CNG) and Carlos García Royo from the Spanish association (ICOG). Both presented their candidacy to the National Associations delegates who voted for their preferred candidate. Gabriele Ponzoni was reelected Secretary General.

For the Vice-President position, Michael Neumann from the German Association (BDG) was the only candidate and he was unanimously elected for another term.

The term of office of EFG's current President, Vítor Correia, will end in May 2019. Therefore a President-elect was appointed during the autumn Council meeting in November 2018. The President-elect will follow closely the Board's and especially the President's activities in the coming months in order to allow for a smooth transition. Only one candidate had presented his application: Marko Komac, from the Slovenian Geological Society, who is currently also EFG's External Relations Officer. Marko comes up with an extensive experience in several international organisations and his active involvement in the EFG Board since 2017 prepares him perfectly for the upcoming tasks as an EFG President.



Vítor Correia, Portugal
President

According to the new strategic plan, as the President of EFG, you are coordinating the activities in the field of National Associations. What will be your focus of action in 2019?

« The EFG exists because of its members, and maintaining a robust EFG Member network is one of the main drivers of EFG strategy. A novelty introduced recently is the designation of a “key account” from the Board to follow up the needs of each Full Member. In this context, each Board member has established a direct contact with the National Associations (NAs)

he/she follows (each of us tracks around five National Associations), to facilitate communication and promote dialogues. The results are mixed. Some NAs took the opportunity to reinforce linkages, and invited the “key account” to participate in their relevant events (with costs covered by EFG). But there are NAs that were unresponsive. We know that in some cases this happened because of internal issues (like elections and changing Boards), and we plan to insist.

The outcome, from the EFG perspective, is very positive. Having the opportunity to meet with several colleagues from a NA (aside from the national delegate to EFG) gave us a better understanding of the diverse array of priorities and challenges of the NAs. It also gave us the opportunity to provide information on EFG capabilities.

I'm reaching the end of my term, and this task will be handed to the President elected. I'm sure Marko Komac will preserve this line of action, because it contributes to create a more cohesive Federation with shared objectives and a strong sense of mutual support. »

Michael Neumann, Germany
Vice-President



As EFG's Vice-President, you are coordinating the activities in the field of Professional Expertise. What has been your focus of action in 2018 and what are your plans for 2019?

« My focus in 2018 was on revising EFG's CPD program and the introduction of the new senior title for EuroGeologists, the Qualified Expert, including the review of the necessary Regulations. Together with these activities, contacts were maintained with the UNFC and PERC. The CPD program and the revision of the Regulation regarding the professional experience of

the EuroGeologists were accomplished. Besides these activities, I have supported the Mentoring Program and the EFG training programs for Eurogeologists, the Endorsed Training Courses and the EuroWorkshops.

In 2019, my main focus will concentrate on the revision of the Qualified Expert and continuing to maintain the contacts to UNFC and PERC. »



Gabriele Ponzoni, Italy
Secretary General

As EFG's Secretary General, you are coordinating the activities in the field of the Panels of Experts. What has been your focus of action in 2018 and what are your plans for 2019?

« The role of the Panels of Experts (PEs) must become ever more marked. After an initial period of organisation and coordination, we are encouraging all groups to produce articles and contributions for EFG's media channels (journal, social media, etc). I believe that the greatest effort for 2019 will be to focus on involving and sensitising the PEs to become increasingly active and visible in accordance with the new strategic plan. With the combined effort of all the groups we can prepare a great media operation on the professional geologist and his areas of expertise. »

Marko Komac, Slovenia
External Relations Officer



As EFG's External Relations Officer, you are coordinating the activities in the field of the EFG Network. What has been your focus of action in 2018 and what are your plans for 2019?

« My focus in 2018 was several-fold - enlarging the members from the European countries, linking with sister organisations in Europe and overseas, and linking with global organisations. Considering the first Romania has joined and unfortunately Demark has left EFG, while Austria and Estonia have decided to apply for the EFG membership. As per the linking activities, EFG has strengthened its links with GSC, AIPG, MGEI, AGI and EGU as sister organisations and with YES and CCOP as global/regional organisations. The future work will be focused towards the same activities with an emphasis on European organisations. »



Bob Hoogendoorn, The Netherlands
Treasurer

What has been your focus of action in 2018 and what are your plans for 2019?

« The most important achievements for 2018 for me, were that we, the office, the Vice-President and I, improved our reporting on the Human Resources of the EFG. This has been an important step in the continuous development of the EFG. In addition, Isabel, Pierangelo and I worked hard to provide more details on the projects to the Council. Both actions were received well by the Council. The implementation of the strategic plan has been an important drive for 2018 and 2019. This year is all about transition, since I will step down coming May as Treasurer after 3 terms. Preparing to step down is hard work. How to summarise the work that has been done, the risk management, the financial management, the project management in such a way that it is accessible and clear while there is still room for the next Treasurer to adjust this to his or her standards. It was very good that Marko, president elect, has been present to help with this transition. This will ensure the continuity of the EFG.

Last months I have had some time to look back at my tenure as Treasurer. Considering what was achieved in the last 6 years by the EFG, its members, the EurGeols, the office and the Board, I feel very proud to have been part of this team. »

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 2018, the meetings were held in Çesme, Turkey, on 19 and 20 May, and in Brussels, Belgium, on 17 and 18 November.



EFG COUNCIL DELEGATES IN BRUSSELS IN NOVEMBER 2019.

5 STRATEGIC ACTIONS

EFG MEMBERS

DEVELOPING AND MAINTAINING A STRONG EFG MEMBER NETWORK

STRATEGIC AIMS

- To network for sharing knowledge, good practices and experience;
- To disseminate policymaker agendas to National Associations (NAs);
- To facilitate information flow between Members and policymakers;
- To represent geologists.



IN BRIEF

- 26 national professional associations representing over 45,000 individual members across Europe;
- New member (05-2018): Romanian National Association of Professionals in Geology and Mining;
- Close links with associated sister organisations from overseas: among others AIG (Australia), CCPG (Canada), GSSA (South Africa) and AIPG (USA).

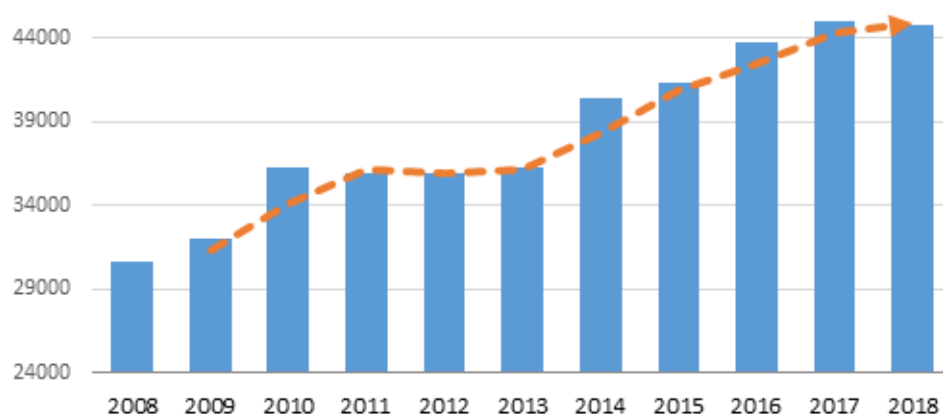
MEMBER STATISTICS

The following map displays the distribution of EFG's membership by country. In 2018, EFG represented through its national member associations a total of 43,575 geologists.

The graph on the following page shows the evolution of EFG's membership since 2008.



DISTRIBUTION OF EFG'S MEMBERSHIP.



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

Delegates: Robrecht Schmitz, Yves Vanbrabant & Nuno da Silva



Bulgarian Geological Society (BGD)

www.bgd.bg

Delegates: Eugenia Tarassova, Lubomir Metodiev & Eleonora Balkansa



Croatian Geological Society (CGS)

www.geologija.hr

Delegates: Miklin Željko, Lilit Cota, Davor Pavelić, Zoran Kovač, Morana Hernitz Kučenjak & Igor Vlahović



Czech Association of Economic Geologists

www.calg.cz

Delegates: Jiri Jiranek, Mirko Vanecek, Miroslav Raus & Zdenka Petakova



Geological Society of Denmark (DGF)

<https://2dgf.dk/>

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



Union of Professionals in Natural, Environmental and Forestry Sciences (LOIMU)

www.loimu.fi/

Delegates: Mikko Salo, Pekka Ihalainen & Aleksu Salo



French Geological Society (SGF)

www.sgfr.org

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



Professional Association of German Geoscientists (BDG)

www.geoberuf.de

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



Association of Greek Geologists (AGG)

www.geologist.gr

Delegates: Xenofon Stavropoulos, Pavlos Tyrologou, Trantafillos Kaklis & Maria Tzima



Hungarian Geological Society (MFT)

www.foldtan.hu

Delegates: Tamás Budai, Eva Hartai & János Szanyi



Institute of Geologists of Ireland (IGI)

www.igi.ie

Delegates: Catherine Buckley, Marie Fleming, Jon Hunt & Eoin Wyse



Italian National Council of Geologists (CNG)

www.cngeologi.it

Delegates: Vincenzo Giovine & Gabriele Ponzoni



Royal Geological and Mining Society of the Netherlands

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



ASSOCIAÇÃO PORTUGUESA DE GEÓLOGOS

Portuguese Association of Geologists (APG)

www.apgeologos.pt

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



ASOCIAȚIA NAȚIONALĂ
A PROFESIONIȘTILOR
DIN GEOLOGIE ȘI MINERIT

National Association of Professionals in Geology and Mining (ANPGM)

<http://progeomin.ro>

Delegates: Sorin Halga, Dan Onescu & Persi Onescu



Russian National Association for Subsoil Use Auditing (NAEN)

www.naen.ru

Delegates: Alexandr Ezhov, Giravov Shakhbulat & Anton Chupilko



ЕСОЭН
евразийский союз экспертов
по недропользованию

EurAsian Union of Experts in Subsoil in Subsurface Management (EUES)

Delegates: Vera Bratkova, Nikita Efimov & Egor Kolesnikov



Serbian Geological Society (SGD)

www.sgd.rs

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



Slovenian Geological Society (SGD)

<https://sites.google.com/a/geo.ntf.uni-lj.si/sgd/english>

Delegates: Matevž Novak, Uros Herlec, Marko Komac, Branka Bračič Železnik & Timotej Verbovšek



Official Spanish Association of Professional Geologists (ICOG)

www.icog.es

Delegates: Manuel Regueiro, Nieves Sanchez, Cristina Sapalski Rosello, Carlos Garcia Royo & Ramon Perez



Geosection (Swedish Association of Scientists, NA)

www.naturvetarna.se

Delegates: Pia Hansson & Elin Hulth



Swiss Association of Geologists (CHGEOL)

www.chgeol.ch

Delegates: Laurent Scheurer, Marianne Niggli & Alessandro Menegatti



Turkish Association of Economic Geologists (MJD)

<http://mjd.org.tr/tr.aspx>

Delegates: Ahmet Senturk & Arda Arcasoy



Ukrainian Association of Geologists (UAG)

www.geolog.org.ua/en

Delegates: Pavlo Zagorodnyuk, Bezvynnyi Volodymyr & Hanna Liventseva



serving science & profession

Geological Society of London (GSL)

www.geolsoc.org.uk

Delegates: Nick Rogers, Richard Hughes, Florence Bullough & Chris Eccles



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

Following up on the series of interviews launched in 2016 by EFG within its newsletter GeoNews, and called « One Day in Europe », EFG takes you into the life of its National Associations (NAs) and allows you to discover the challenges faced by other European geoscientists. You can find here below a short description of the objectives, main activities and accomplishments as reported by our National Associations during EFG's last Council Meeting held in Brussels in November 2018.

OVERALL OBJECTIVES

The main objectives of all EFG members can be summarised in the following two main lines: the professional representation of geologists along with the promotion of geosciences in all its various disciplines.

INTERACTION WITH OTHER ORGANISATIONS AND PROJECTS

The NAs maintain good relationships amongst members, neighbouring countries, and international associations.

NAs, through the EFG platform, also take part directly and indirectly in EU funded projects and promote the participation of members as independent experts for the evaluation of EU projects.

RELATION OF NAS GOALS TO THE OVERALL EFG STRATEGY

Amongst EFG's members, especially MFT (Hungary), BDG (Germany), CAEG (Czech Republic), AGG (Greece), and CNG (Italy) have an important cooperation in several EU funded projects such as INTRAW, KINDRA, CHPM2030, UNEXMIN, INFACIT etc. The NAs reports underline that being part of EFG also allows them to be part of the system of European funded projects that are at the basis of the future development of the European Union.

Moreover, the cooperation with colleagues from other European countries strengthens the links and the exchange of best practices and new ideas among the geoscientists' community.

CHIEF ACCOMPLISHMENTS 2018 AND PLANS FOR 2019

New members have joined the EFG family: the Romanian National Association (ANPGM) was accepted as a full member of the European Federation of Geologists in 2018 and is currently taking part in the INFACIT project. Austria and Estonia have applied to become full members.

National Associations have demonstrated an increasingly fruitful activity in various fields, for instance:

- Direct participation of NAs as third parties in European projects such as INTRAW, KINDRA, CHPM2030, UNEXMIN, INFACIT etc.;
- Dissemination;
- Vocational training;
- Active role in legislative procedures relevant for geoscientists in their own country;
- International symposia and promotion of high-level conferences and meetings.

All NAs demonstrated a great cooperation among geological associations of neighbouring countries, which strengthens the relations and creates a bond with EFG.

The dissemination of information on EFG via the NAs has come to a good growth in 2018. The constant development of newsletters and dissemination material contributes to this accomplishment.

A significant role is also played by NAs in the promotion of the EurGeol title, in supporting geology for the protection of the environment and also in encouraging the use of geology in the infrastructure projects and exploration industry.

An increasing number of young geologists are looking for jobs outside their own country or even outside Europe. For that reason, for instance, the Spanish Association (ICOG) decided to appoint delegates in countries where geologists can find a job (Angola, Brazil, Canada, Chile, Emirates, UK...). All of them are European Geologists. These delegates promote the title and help geologists in looking for jobs in those countries. In addition, information about the European title is regularly sent to all members of the ICOG in order to encourage interest in the title.

Following the line of encouraging young geologists, GSL (UK) along with Carl Zeiss Microscopy Ltd, has launched a new scholarship for Earth Science PhD and MSc students. The scholarship (worth up to £8000), is intended to be used for innovative microscopy in Earth Science related projects.

Big symposia and conferences have also been held in 2018: an important event was for instance the 26th edition of the Earth Sciences Meeting organised since 1973 by the Société Géologique de France (SGF), the “*Réunion des Sciences de la Terre*” (Earth Sciences Meeting) and is a national congress covering all geosciences items. An important point was the presence of many young students from Masters to PhD, which allowed them to meet geology professionals.

APG (Portugal) has organised in collaboration with the Polytechnic Institute of Guarda and the EFG the 4th EuroWorkshop “*Lithium Resources in Portugal*”, held in Guarda from 20 to 22 September.

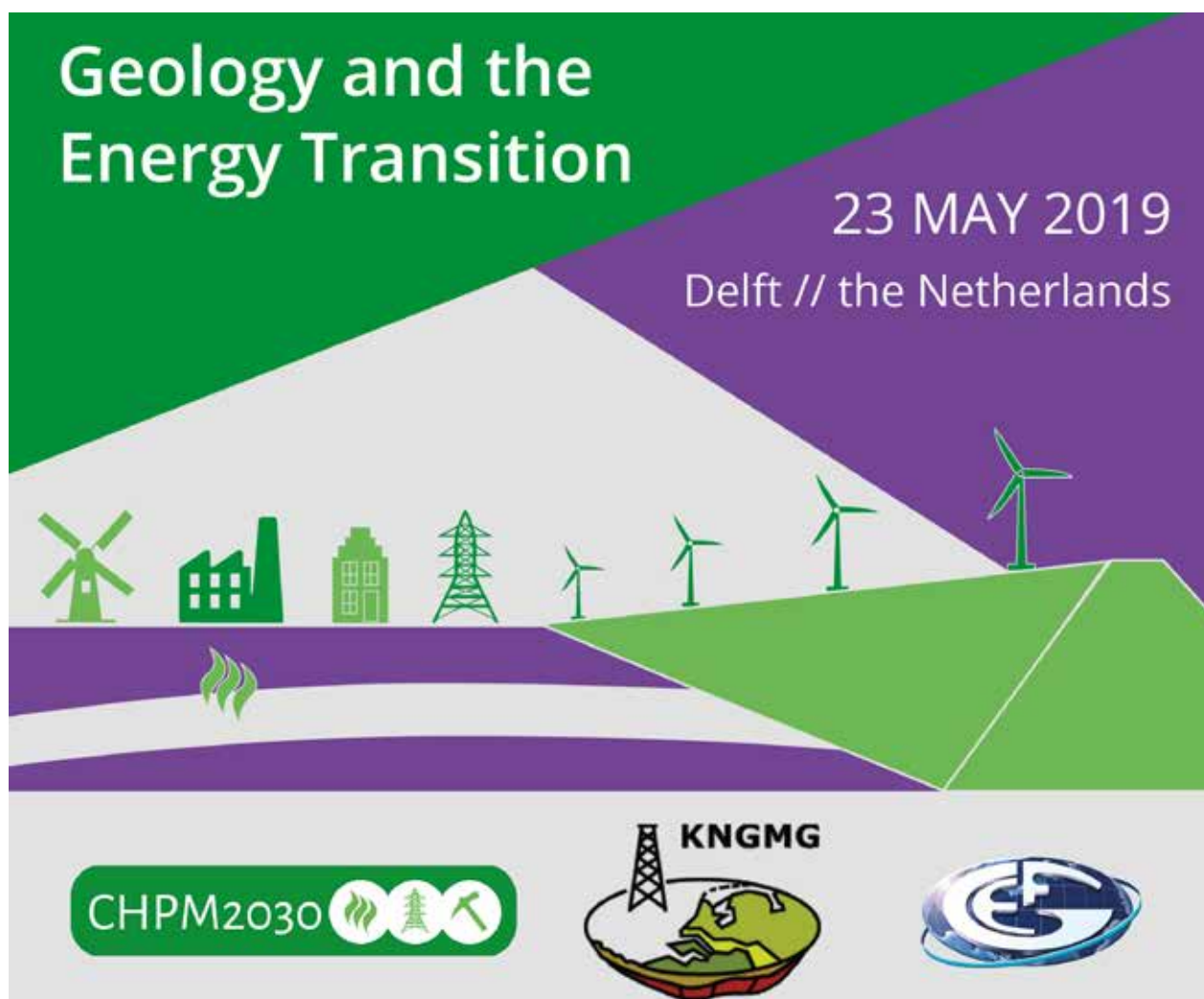
With BDG (Germany), already the 4th *Meggen Raw Material Days* were held from 12 to 14 September in Meggen, Germany. During the first seminar day with the topic “*Application of the United Nations Framework Classification for Comprehensive Resource Management*” and the following two conference days.

KNGMG (the Netherlands) will co-organise and host the EFG Council Meeting in Delft, the Netherlands, in May 2019, along with the EuroWorkshop “*Geology and the energy transition*” with the partnership of the CHPM2030 project.

The trends and challenges for NAs in close cooperation with EFG for the year 2019 is undoubtedly trying to strengthen the relationship with industrial partners, making the geology professions attractive to young people, organising educational programmes for the public, raising the scientific level of conferences and informing the society and policy makers about the importance of geological issues for society.

The cooperation among EFG and NAs will certainly result in the application for new projects within the Horizon 2020 Framework Programme and also the forthcoming Framework Programme.

The dissemination of information, education and training activities for its members remain crucial as well as the possibility of creating database and continuing its transnational activities with intense contacts and worldwide missions in the EU and outside the EU.




GEOSCIENCTISTS 2018 EMPLOYMENT SURVEY

A survey conducted by the
European Federation of Geologists (EFG)



About the respondents


740
participants

72% 
28% 

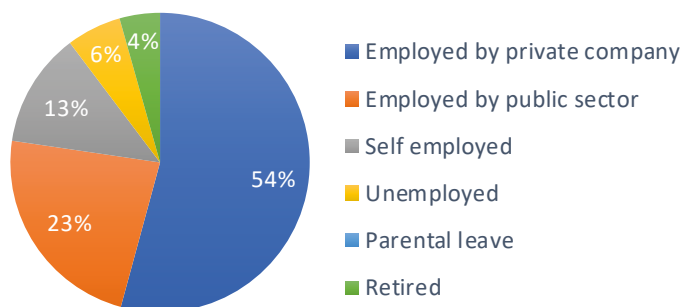

41%
EurGeol title
holders

Academic qualifications

- The majority of the participants has a **Master's degree** (60%) and a high number also has a **PhD** (29%).

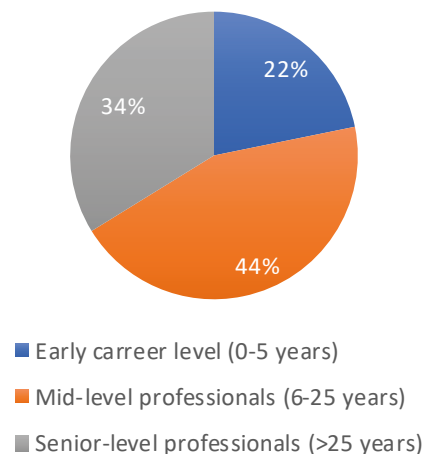
Current work conditions

- The majority of the participants is working in the **private sector**. They are either employed by private companies (54%) or self-employed (13%).
- 5,6% of the participants are unemployed**. This approximates the unemployment rate for the European Union in September 2018 (6,7%).
- 29 % of the unemployed participants are working in other countries than their countries of origin. This could indicate that unemployment partially stimulates professional mobility of geologists.



Professional experience

- A high number of experienced professionals:** 34% of the participants have more than 25 years of professional experience and 19% of the participants have 16 to 25 years of professional experience.
- A big number of career beginners:** 22% of the participants have 0 to 5 years of professional experience.
- The positions held reflect the professional experience:** 29% of the participants are in junior positions, 28% in manager positions and 43% in senior positions.

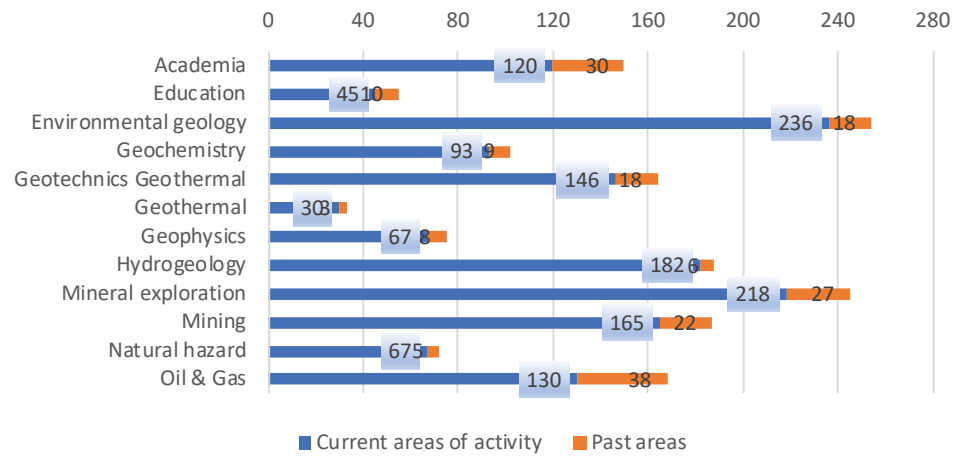


Survey objectives

- Analyse the labour market for geologists in Europe: In which industries do professional geologists work? Are their activities related to their training? Do they exploit job opportunities in other European countries? Which are the prospects for the future?
- Provide geologists with a better overview of labour opportunities in Europe, helping them to construct their studies and careers,
- Allow professional associations to offer better services to members, helping them to find jobs,
- Provide evidence for professional associations to pursue the policy dialogue with universities and education authorities improving the training of geologists.

Areas of activity

- The majority of the participants (52%) currently works in the **minerals sector** (29% in the exploration field and 22% in the mining sector), followed by environmental geology (32%), hydrogeology (25%), geotechnics (20%), oil and gas (18%) and academia (16%).
- 20% of the participants have changed their area of activity in the last 5 years.**
- The majority has previously worked in the oil and gas sector, academia or the mineral exploration and mining sector.



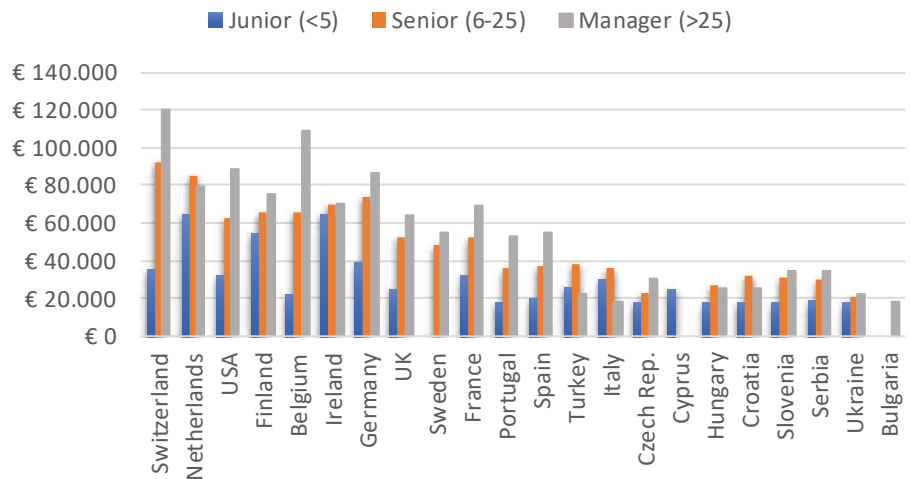
Salaries

Salaries and job positions across Europe:

- 70% of the participants in junior positions earn less than 40.000€ per year.
- The gender gap seems to be more relevant in junior than in senior or manager positions.

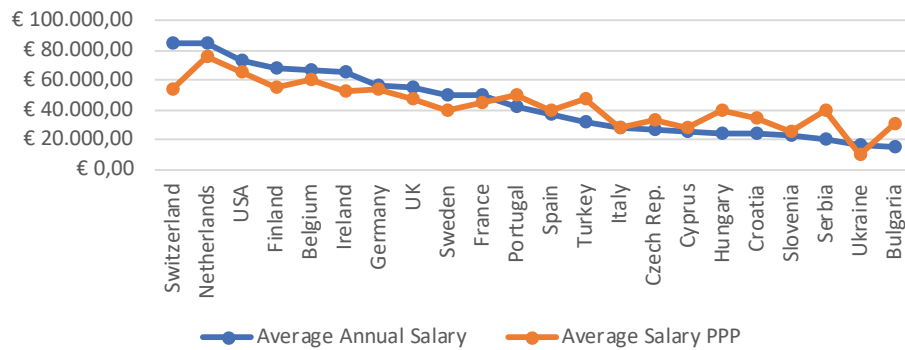
Salaries and employment status across Europe:

- Less than 8% of the public sector employees earn more than 80.000 € per year and around 21% of the private companies' employees and self-employed earn more than 80.000€ per year.



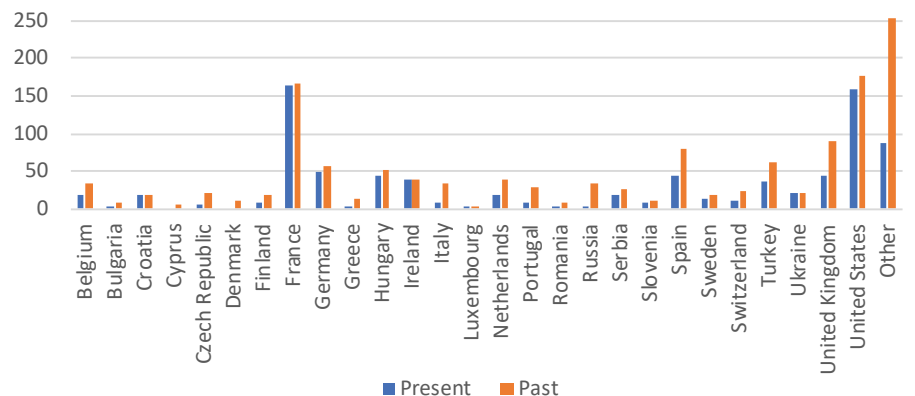
Average annual gross salaries:

- The average gross salaries in the participating countries have been put in relation to the Purchasing Power Parity (PPP), an approach that measures different countries' currencies through a "basket of goods" approach.
- The average salaries of countries in which more data is available are the closest to the PPP salaries axis.
- In the geology profession, strong salary discrepancies exist across Europe.



Professional mobility

- An important number of participants works in countries **outside Europe** (12%). This underlines the global scope of the geologists' profession.
- The number of persons having worked in the past in countries outside Europe (37%) is higher than in current times. This could lead to the conclusion that nowadays more work is available for geologists in Europe than before.



EFG NETWORK

PARTICIPATION IN THE GLOBAL COMMUNITY AND MAINTAINING INTERNATIONAL NETWORKS

STRATEGIC AIMS

- To participate in initiatives contributing to European policies on geosciences issues;
- To enhance cooperation with international geoscience organisations;
- To promote the global mobility of professional geologists.



COOPERATION AGREEMENTS

- Affiliate member of the International Union of Geosciences (IUGS)
- Founding member of:
 - IUGS Task Group on Global Geoscience Professionalism (TGGGP)
 - Pan-European Reserves and Resources Reporting Committee (PERC)
 - GEOTRAINET aisbl
 - International Raw Materials Observatory
- Memoranda of Understanding (MoU) with:
 - American Geosciences Institute (AGI)
 - European Association of Geoscientists and Engineers (EAGE)
 - Geological Society of Africa (GSAf)
 - Indonesian Society of Economic Geologists
 - International Association for Promoting Geoethics (IAPG)
 - International Association for Geoethics (IAGETH)
 - United Nations Framework Classification for Resources (UNECE)
 - Young Earth Scientists (YES)
- Associated partner of ERA-MIN



EVENT ORGANISATION

- 05-2018: EuroWorkshop: *Epithermal Gold Deposits of Western Anatolia*, Turkey
- 06-2018: active involvement in the *Resources for Future Generations Conference* (RFG), Vancouver, Canada

EFG PRESIDENT ELECT MARKO KOMAC AT RFG, VANCOUVER, JUNE 2018



- 09-2018: Dinner debate “*Horizon Geoscience – Overcoming societal challenges, creating change*”, Brussels, Belgium
- 11-2018: active involvement in the *EU Raw Materials Week* and co-organisation of an UNFC workshop, Brussels, Belgium



EFG/EGU DINNER DEBATE "HORIZON GEOSCIENCE",
BRUSSELS, SEPTEMBER 2018

OTHER MAJOR EVENTS WITH EFG PARTICIPATION

GeoTHERM Conference and Board meeting of Geotrainer
1 March 2018 | Offenburg, Germany

Workshop Governance for Raw Material Technologies
16 April 2018 | Leipzig, Germany

Plenary meeting of the Expert Group in Resources Classification
23-27 April 2018 | Geneva, Switzerland

PERC Annual General Meeting
9 May 2018 | Bardon Hill, UK

EU cluster event on Social License to Operate
5 June 2018 | Brussels, Belgium

MINEX 2018 Conference
12 June 2018 | Skopje, Republic of North Macedonia

RFG2018 Conference
17-22 June 2018 | Vancouver, Canada

Pilot event of the World Forum of Raw Materials
27 June 2018 | Nancy, France

Belt and Road Forum for Young Scientists organised by YES
29-30 August 2018 | Chengdu, China

AIPG meeting & AIPG Annual Conference
8-11 September 2018 | Denver, USA

BDG Meggen Raw Material Days
13 September 2018 | Lennestadt, Meggen

Lithium resources conference (Euroworkshop) organised by APG
21 September 2018 | Guarda, Portugal

5th Slovenian Geological Congress
3 October 2018 | Velenje, Slovenia

FINEX 2018 Conference
17 October 2018 | London, UK

26e Réunion des Sciences de la Terre organised by SGF
24 October 2018 | Lille, France

EU Raw Materials Week
12-16 November 2018 | Brussels, Belgium



FROM LEFT TO RIGHT: EFG REPRESENTATIVES AT THE UNECE MEETING, GENEVA; EXECUTIVE DIRECTOR ISABEL FERNANDEZ AT RFG, VANCOUVER; PRESIDENT VITOR CORREIA AT THE BELT AND ROAD FORUM FOR YOUNG SCIENTISTS, CHENGDU

PROFESSIONAL EXPERTISE

PROMOTION OF GEOSCIENCE PROFESSIONAL EXCELLENCE

STRATEGIC AIMS

1. To promote the EurGeol title and uphold the status of professional titles;
2. To support the development and expansion of the Competent Person concept;
3. To support Continuing Professional Development, supporting geoscientific education and high quality training;
4. To promote professional specialisation and public access to registers of geoscience experts;
5. To support early career geoscientists;
6. To ensure monitoring of and strict disciplinary control over professional practice.



EURGEOL TITLE

Enhancing the mobility of geoscience professionals and the recognition of professional expertise in Europe and abroad

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).

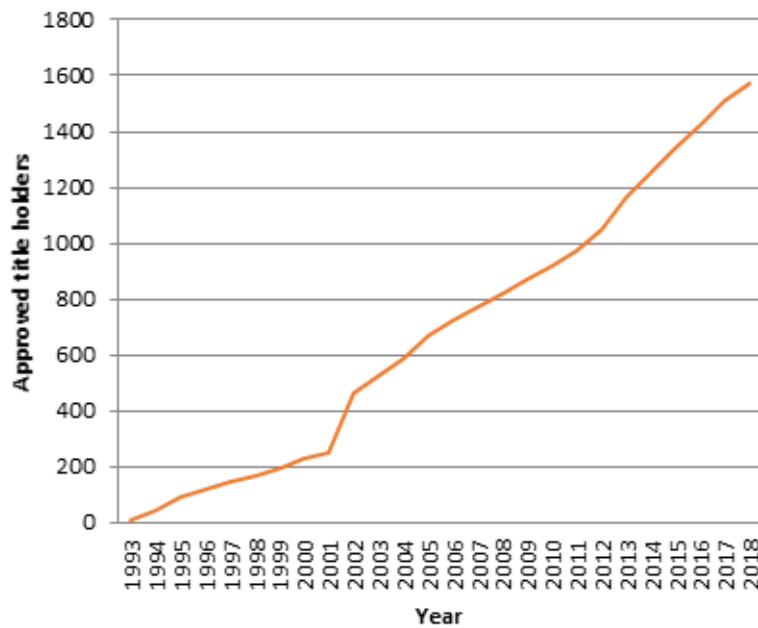
List of NVCs:

- 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
- Romania: ANPGM
- Russia: NAEN
- Serbia: SGS
- Slovenia: SGS
- Sweden: NA
- Turkey: MJD
- Ukraine: UAG

As the following graph shows, the European Geologist title continued to gain popularity in the past few years. In total, nearly 1572 titles have been awarded and 1045 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.

More information: www.eurogeologists.eu/eurgeol-title





EURGEOL TITLE EVOLUTION.

SOURCE: EFG OFFICE. DATA PROVIDED THROUGH NATIONAL ASSOCIATION REPORTS.

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.

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 Geoscientists Canada. 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.

Welcome to the EurGeol App

EurGeol Directory

Title number

Name

Surname

Country

Licensed body

Speciality

Search

EurGeol App at a glance



>> An increased user-friendliness and many additional functions:

> Easily **accessible** on all electronic devices: PC, mobile phone, tablet, etc.



Login

> Electronic CV can be updated using data from **LinkedIn** profile



Update my CV

Copy CV from LinkedIn

> **Messaging function** increasing networking between external stakeholders and EurGeols, but also among the EurGeol community



My messages

> New **title applications** can be filled in electronically

Login

Candidates

Application Procedure

Application Form

> **News feed** with special offers and information for all EurGeols



News & information

Category: 2018-01-01

The first EurGeol Network "Geology and the Energy Transition" will take place on 23 May 2019 in Delft, the Netherlands.

EurGeol Network offer special rates for all EurGeols and as a recognition to your personal CPD record.



News & information

Category: 2018-01-01

The current EurGeol Network will stop working on 31 December 2018. Please make sure to complete your 2018 CPD record before then.

On 30 January 2019 the brand new EurGeol app will go live. It will offer an increased user-friendliness and many new



News & information

Category: 2018-01-01

The next EFG European Training Course on "ROCKING A MINING INDUSTRY'S WORST NIGHTMARE: Managing risks where people & infrastructure meet in Mineral Exploration" is scheduled for 23 November 2018 in London. There are special rates for all EurGeols. More

information



News & information

Category: 2018-01-01

On 10 and 11 January 2019, the EFG European Training Course "Exploration Geoscience & Social Change" will be held in Edinburgh, Scotland. There are special rates for all EurGeols. More

information

> EurGeols can easily monitor their renewal status and update their **CPD** directly via their mobile phones (including the scan of QR codes for certain CPD training courses)

12

Points obtained in 2017 / Points missing for completion of your CPD

2

Professional Practice - 1.5

10

Other activity types - 1.5

Watch out for the launch of the EurGeol App in January 2019!

European Federation of Geologists
www.eurogeologists.eu

INTERNATIONAL MENTORING PROGRAMME

Creating an international network linking up experienced professionals with the next generation of geoscientists

In November 2017, EFG has launched its international mentoring programme. This new initiative supports post-Bachelor students and young professionals with less than 4 years of professional experience and aims at creating an international informal network of geoscientists capable of providing guidance and support to other geoscientists.

Over a fixed period of 9 months, the mentees receive advice and targeted support from experienced professionals, according to their individual goals.

Examples include:

- feedback and support during the job application process;

- building up a network, transfer of contacts;
- development of a career strategy;
- introduction to informal knowledge and business networks;
- shadowing (participation in the professional life of the mentor)



The programme's first season started in April 2018 and 20 mentees have benefited from targeted advice from their mentors until the end of the cooperation period in December 2018.

More information: <https://eurogeologists.eu/mentoring>

ENDORSED TRAINING PROGRAMME

Supporting Continuing Professional Development (CPD)

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.

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.

More information: www.eurogeologists.eu/endorsed-training

DOES YOUR COMPANY ORGANISE
TRAINING COURSES?



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

EFG Projects

PARTICIPATION IN EU AND INTERNATIONAL FUNDED PROJECTS

STRATEGIC AIMS

- To participate in funded projects to expand the network and our capacity to help and assist policymakers;
- To diversify income streams.



IN BRIEF

- In 2018, EFG has been involved in 11 European projects within the Horizon 2020 program, H2020.
- We strengthen the bonds with our members by involving them as Linked Third Parties (LTPs),

ensuring thus a broad European coverage of the projects.

More information: www.eurogeologists.eu/efg-projects

INTRAW

642130 - INTRAW

International cooperation on Raw materials

START DATE: 1 February 2015

DURATION: 36 MONTHS



INTRAW, which started in February 2015, aimed 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.

EFG role and current status:

- The European Federation of Geologists (EFG) was the coordinator of a consortium of 15 partners from different countries including Australia, the United States and South Africa. Most of EFG's members were also part of the consortium as Linked Third Parties.

- The International Raw Materials Observatory has been launched by the project consortium during the European Commission's Raw Materials Week (6–10 November 2017). The Observatory is an independent, apolitical, international not-for-profit organisation, set up to support international cooperation on mineral raw materials. The launch of the Observatory provides a glimpse of the services the Observatory will be offering to its members, namely foresight dialogues with key influencers and match-making services for organisations active along the minerals materials value chain. Two major events were scheduled during the Raw Materials Week: the official launch of the Observatory during the EU-Advanced Mining Countries conference on 7 November 2017 and an open roundtable on the challenges of international cooperation on 8 November 2017. The project being officially closed since 31 January 2018, the Observatory is its main outcome.

More information: 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 KINDRA project sought to take stock of our current knowledge of hydrogeology through an inventory of research results, activities, projects and programmes.

EFG role and current status:

- The European Federation of Geologists (EFG) was the leader on the data collection and processing to carry out an 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 has been implemented with the help of the national members of EFG. EFG was also involved in the dissemination activity.
- The project concluded with a final conference organised in Brussels on 27 February 2018. During the conference, the consortium presented the major outcomes of KINDRA and gathered feedback for the afterlife of the EU funded period.

More information: 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 was 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 and current status:

- EFG was involved in the establishment of the project's Council of Stakeholders and led the Work Package on Dissemination.
- The consortium and the Advisory Board met in Brussels, on 10 January 2018, to discuss final steps to conclude the project successfully by the end of January 2018. Since the project beginning, 32 workshops have been organised at national level, involving more than 500 stakeholders. During these workshops, the project partners presented the MDoPI concept developed by the consortium to a broad range of stakeholders and obtained feedback on the methodology that will allow to identify Mineral Deposits of Public Importance. Taking stock of these inputs collected at national level, the consortium will shortly publish its joint visions for the future of MDoPI safeguarding in Europe.

More information: 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 and current status:

- EFG supports the project through stakeholder engagement and dissemination activities.
- The project has delivered an Innovative Mining System Prototype. In this context, EFG supported the selection of mining sites for field tests and the planning of field activities. For the future, the project has produced a feasibility, viability and market up-take. EFG contributed to the evaluation of the economic feasibility studies and to the Exploitation Plan for the VAMOS technology.

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 and current status:

- EFG supports the activities relating to the CHPM2030 methodology framework definition (WP1), particularly European data integration and evaluation: during the first months of the project, EFG's Linked Third Parties (LTP) collected publicly available data at a 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.
- EFG also supported activities relating to road

mapping and preparation for Pilots (WP6). EFG's Linked Third Parties assessed the geological data on suitable ore-bearing formations and geothermal projects collected in WP1, in relation with the potential application of the CHPM technology. This work combines 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.
- The 42-months project is now entering its final stage. Many important tasks have already been completed and the project team is now working on the last elements to conclude the project successfully:
 - System integration: The contemporary power plant design will be adapted to the expected temperature, between 120 and 190 degrees Celsius, and extreme salinity conditions that will occur under the CHPM2030 scheme.
 - Integrated sustainability assessments: To ensure that the CHPM technology is safe for the environment and for society, the project is setting up a framework to assess environmental and socio-economic impacts, and is carrying out baseline economics for energy and mineral raw materials.
 - Roadmapping and preparation of pilots: To pave the way for the long-term future of the CHPM technology, the project team is analysing study areas in the UK, Romania, Sweden and Portugal, where the technology could be applied, and is using different foresight tools for the horizon 2030 – 2050.
- Preliminary outcomes and results will be presented to the public at the CHPM2030 final conference which will be held on 23 May 2019 in Delft, the Netherlands, in the framework of the EuroWorkshop "Geology and the Energy Transition".

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.

EFG role and current status:

- 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 and EFG's Third Parties disseminate the project results at national level in web portals, newsletters, conferences, workshops, educational activities, exhibitions or by any other relevant means.
- As Work Package leader of WP5 (Stakeholder identification and engagement), EFG has recently focused on working on and coordinating the Task 5.1 Stakeholder identification and engagement and Task 5.4 Inventory of flooded mines.
- Task 5.1 started at the beginning of the project and lasts until its end. Stakeholder identification and communication is essential to ensure the proper execution and success of the UNEXMIN project. The process will enable to maximise support as the project progresses. Therefore EFG has decided to review the stakeholder dataset that has been continuously created in collaboration with the Partners since the beginning of the project, in order to reorganise and complete it. EFG has also prepared a stakeholders' engagement campaign.
- Part of the UNEXMIN project was to create an inventory of flooded mines in Europe that will facilitate an online open-access user interface for browsing the database.
- The pressure hull of the second UX-1 robot – UX-1b – has been produced, mechanical parts put together and pressure tested, in Finland, as part of TUT's work. It is now on its way to Porto, Portugal, where the technical teams (INESC TEC, UPM, UNIM) will assembly all the components and test the new robot in a pool where both hardware and software will be proved. The aim is to have two operational robots – UX-1a and UX-1b – ready for the field missions at the Urgeiriça uranium mine, in Portugal. UX-1b, the second robot from the multi-robotic platform created within the UNEXMIN project, will be similar to its first counterpart, but with some other specificities. Mainly, differences on the scientific payload will be seen between the two robots. This will guarantee that different sensors are carried while reducing the size, weight and power demands for individual robots to do the exploration and mapping of the flooded mine environment.
- The Urgeiriça trials will happen during March and April 2019, 9–10 days in each month. Between the two sets of missions, the robots will be fine-tuned and tested in INESC-TEC's testing pool in Porto. Here, the autonomy, control, movement and data collection and analysis of the robots will be extensively studied in order to get the most out of the robotic system.

More information: 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 has brought 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.

The main objectives of MICA were:

- 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 and current status:

- EFG has supported the Work Package on communication, outreach and linkages. EFG, in collaboration with EuroGeoSurveys, was involved in:
 - Development of the Communication Strategy
 - Engagement with Geosciences data providers
 - Engagement with Professionals
 - Public outreach
- The final event of the Mineral Intelligence Capacity Analysis (MICA) project was held on 23 January 2018 in Brussels with more than 40 attendees of the MICA consortium.

More information: 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) aimed at developing and setting 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 was the largest collaborative effort for raw materials strategy cooperation on a global level so far. The FORAM Consortium was 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 was 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 and current status:

- EFG led Work Package 3 on "Strategic Planning", which will set the stage for the World Forum on Raw Materials (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 economic changes.

- EFG has contributed to the global mapping of existing initiatives, actions and stakeholders on mineral raw materials, and contributed to setting up and organising the Stakeholders Panel and leading several meetings and consultations with relevant stakeholders on international cooperation.
- In WP3 Strategic Planning, EFG as the leader of the WP, defined the strategic vision of the Forum (D3.2), its strategic plan (D3.3) and the corresponding

analytical dashboard, taking into consideration a scenario contingency plan (D3.4).

- Regarding WP4 Roadmap, Pilot & Recommendations, EFG contributed to the organisation of the pilot event of the World Forum (D4.2) and to the synthesis report with the final recommendations to the EU (D4.3).
- A news article on the pilot event was produced and shared both on the EFG and on the FORAM website.
- The project closed on 31 October 2018.

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

INFACT

776487 - INFACT

Innovative, non-invasive and fully acceptable exploration technologies

START DATE: 01.11.2017

DURATION: 36 MONTHS

INFACT

Exploration discovery of raw material resources requires innovations that either change the geological targets of exploration, the physical places that are reached, or the manner in which they are explored. Despite its rich history of mining and residual mineral wealth, current conditions within the EU present a number of social, political, legislative, cost, technical and physical obstacles to raw material exploration: obstacles to be overcome by innovation, dialogue and reform.

The Innovative, Non-invasive and Fully Acceptable Exploration Technologies (INFACT) project unites stakeholders of Europe's future raw materials security in its consortium and activities. Via effective engagement of civil society, state, research and industry, the project will focus on each of these obstacles. It will co-develop improved systems and innovative technologies that are more acceptable to society and invigorate and equip the exploration industry, unlocking unrealised potential in new and mature areas.

The project will develop innovative geophysical and remote sensing technologies (less-invasive than classical exploration methods) that promise to penetrate new depths, reach new sensitivities and resolve new parameters.

The project will also set the EU as a leader on the world stage by establishing permanent infrastructure to drive innovation in the next generation of exploration tools: tools that are cost-effective, designed for EU conditions and its raw materials strategy, and high-performing in terms of environmental impact, social acceptability, and technical performance.

INFACT is comprised of the following main components:

- Development and test of innovative, non-invasive exploration technologies.
- Foundation of 3 test sites for exploration technology in the south, centre and north of Europe.
- Stakeholder engagement, education and policy reform.

These actions combine to reach each of the main areas in which the EU has the power to influence change in its raw materials security.

EFG role and current status:

- EFG leads the work package on dissemination and impact creation and several of the Federation's National Associations are actively involved in the project as Linked Third Parties.
- In spring 2019, 3 main geophysical measurements are planned at INFACT's Spanish reference site at the Rio Tinto and Las Cruces Mines:
 - Passive seismic survey in Las Cruces (in collaboration with the EU project PACIFIC)
 - Drone-based magnetometer and hyperspectral surveys in Las Cruces and Rio Tinto (performed by HIF HZDR)
 - Helicopter-based airborne electromagnetic survey in Las Cruces and Rio Tinto (performed by Geotech and the subcontracting helicopter company Koopmann)
- All those measurements will take place between mid-March and late April. The INFACT partners involved in stakeholder engagement activities are currently consulting with surrounding municipalities on their festivities in that period, particularly around Easter ("Semana Santa" in Spanish) which is celebrated all over Andalusia between 15 and 21 April. Partners are also in contact with environmental authorities to ensure the lowest possible impact of the project activities on the local wildlife.

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

MINLAND

776679 - MINLAND

START DATE: 01.12.2017

DURATION: 24 MONTHS



Access to mineral resources in Europe is one of the pillars of the Raw Materials Initiative (RMI). Yet, competing societal interests, such as expanding cities, infrastructure development, agriculture and nature conservation, have had negative effect on the available area for exploration and mining of mineral resources. Consequently, the supply of mineral raw materials within the EU is at risk. Therefore, the integration of mineral resources policies into land-use planning at different scales and levels is a key factor for achieving the goals of the RMI.

The MinLand project is designed for addressing this challenge: to facilitate minerals and land-use policy making and to strengthen a transparent land use practice. MinLand is composed around the acknowledgement that the call requires a broad and competent consortium with strong links to related projects and activities, a

comprehensive and structured data repository, an efficient work flow and strong and broad stakeholder involvement.

EFG role and current status:

- EFG supports the activities for valorisation and valuation of geological and societal data and civil society impacts. It is also involved in the network and clustering activities and in the communication, dissemination and exploitation of the project.
- EFG is supporting communication activities by sharing relevant information about the project through its website, newsletters and social media accounts. Information about the MINLAND Delphi survey on “Future stakeholder needs and interests in mineral safeguarding and land use” (bit.ly/2yJPbJQ) has been shared broadly within the EFG network.
- EFG is also producing a series of factsheets on the case studies analysed and studied within WP3. These factsheets will present a selection of relevant case studies in a visually attractive way.
- In WP4 Land use practices, valorisation and valuation of geological and societal data and civil society impacts, EFG is contributing to the investigation of mineral policies and its requirements regarding land use in the EU Member states.

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

INTERMIN

776642 - INTERMIN

INTERNATIONAL NETWORK OF RAW MATERIALS TRAINING CENTRES

START DATE: 01.02.2018

DURATION: 36 MONTHS



INTERMIN will create a feasible, long-lasting international network of technical and vocational training centres for mineral raw materials professionals. Specific objectives:

- Develop common metrics and reference points for quality assurance and recognition of training;
- Develop a comprehensive competency model for employment across the primary and secondary raw materials sectors;

- Introduce an international qualification framework for technical and vocational training programmes;
- Create a conceptual framework for the development of joint educational training programmes based on present and future requirements by employers;
- Create and launch a joint international training programme by a merger of competences and scope of existing training programmes.

EFG role and current status:

- EFG is cooperating with the project partners in six work packages, and acting as the leader in WP3 (Towards enhanced training programmes (Response)). The INTERMIN project aims at mapping, connecting and enhancing the existing European training and education initiatives in the raw material sector. Therefore, the INTERMIN consortium aims at creating a self-sustainable international network of specialised training centres for professionals from the raw materials sector, and BDG (Berufsverband Deutscher Geowissenschaftler e.V.) will participate in the INTERMIN project as a third party of EFG. The Polish Association of Minerals Asset Valuers

(PAMAV) is also involved in the project as an EFG Linked Third Party.

- EFG is supporting the communication activities, sharing relevant information about the project through its website, newsletters and social media accounts.
- In WP1 International mapping of training programmes on raw materials and resources EFG has contributed to the definition of a skills catalogue used by the raw materials sector (D1.1). The

INTERMIN survey on mineral raw materials training programmes (D1.2) (<http://intermin.limequery.com/324595?lang=en>) has been shared broadly within the EFG network.

- Regarding WP2 Raw materials sector skills, gaps and emerging knowledge needs, EFG is contributing to the assessment of employers' needs and to the definition of skills gaps (D2.1).

More information: <http://interminproject.org/>

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 5th 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

EFG Linked Third Parties (LTPs) participation in Horizon 2020 funded projects

Project	Start date	End date	Number of LTPs
INTRAW	01.02.2015	31.01.2018	24
KINDRA	01.01.2015	31.03.2018	20
MINATURA	01.02.2015	31.01.2018	
VAMOS	01.02.2015	31.07.2018	
MICA	01.12.2015	31.01.2018	
CHPM2030	01.01.2016	31.06.2019	24
UNEXMIN	01.02.2016	31.10.2019	24
FORAM	01.11.2016	31.10.2018	2
INFAC	01.11.2017	31.10.2020	15
MINLAND	01.12.2017	31.10.2019	
INTERMIN	01.02.2018	31.01.2020	2

Benefits for EFG's National Associations:

- Economic support
- Cooperation with other EFG members in European projects
- Participation in specialised meetings and workshops
- Prestige

COMMUNICATION

ACCESSIBLE COMMUNICATION OF GEOSCIENCES AND OUTREACH

STRATEGIC AIMS

- To create public awareness of the importance of geoscience to society by promoting public outreach and understanding of geosciences
- To communicate transparently to National Associations and other audiences



WEBSITE

Since the redesign of the EFG website in 2017, its interactivity has been considerably increased thanks to a twitter feed at the bottom of the

homepage. All news can also be directly shared via the social media Twitter, Facebook and LinkedIn. The EFG website is available at www.eurogeologists.eu.

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.

- EGJ 45: **Environmentally sustainable mining in Europe** - View online: https://issuu.com/efgoffice/docs/egj45_final
- EGJ46: **Oil and gas exploration in Europe – innovation and new technologies** - View online: <https://issuu.com/efgoffice/docs/egj46>



NEWSLETTERS

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

The weekly publication *EFGGeoWeek* compiles news items relevant to European geoscientists in an interactive format since the content is directly sharable via the social media. The headlines feature each week one article published in the European Geologist journal and the latest news from the EFG website and the projects in which EFG is involved.

More information: <http://efgeoweb.eurogeologists.eu/#/>



INSTANT SOCIAL MEDIA COMMUNICATION

- Facebook: +1993 likes
- Twitter: +990 followers
- LinkedIn: +4216 connections
- Instagram: +114 followers



VIDEOS

The production of short promotional videos has been identified as one of the priorities for the enhancement of EFG's communication. EFG has produced project videos for the INTRAW, MICA, MINATURA2020 and CHPM2030 projects.



PHOTO CONTEST

It has been an exciting run for the 2018 edition of the EAGE/EFG Photo Contest 'Geoscientists at Work', with 167 photos submitted and over 4,600 votes. The 12 finalists represent a range of countries and fields of activity, with highlights on young professionals and female geoscientists. The winning photo was taken by Ahmad Gholami in the Shahrud Desert, Semnan Province, Iran.

More information: <https://prod.eage.org/en/photo-contest>



SECOND PRIZE:
"EVAPORITE ROCKS" BY
DIEGO ALBERTO CORDOVA SANCHEZ



WINNER OF THE 2018 CONTEST:
"CLASS IN THE DESERT" BY AHMAD GHOLAMI



THIRD PRIZE:
"JOINTED COLUMNS AND KINK BANKS IN VOLCANIC
ASH LAYER" BY JIMMY JIAO

PANELS OF EXPERTS

PROVISION OF INDEPENDENT, RELIABLE INFORMATION ON GEOSCIENTIFIC ISSUES



STRATEGIC AIMS

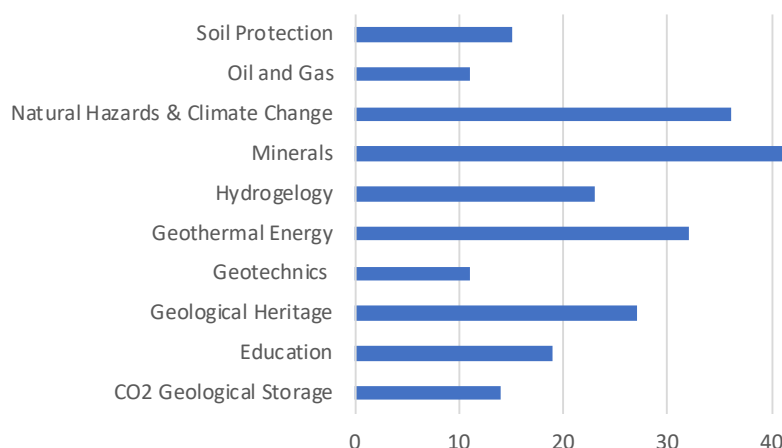
- To provide information to policymakers that is authoritative and objective;
- To become the European organisation of reference on the professional practice of geoscience.

IN BRIEF

- EFG's Panels of Experts (PE): a platform encouraging the collaboration among professionals from different European countries working in the same field of geosciences.
- Providing high quality advice and information to the European institutions, international NGO's and global professional associations
- Emphasising the importance of geology to society.
- 10 Panels: CO₂ Geological Storage, Education, Geoheritage, Geotechnics, Geothermal Energy, Hydrogeology, Natural Hazards, Minerals, Oil & Gas, Soil Protection



EXPERTS BY COUNTRY.



NUMBER OF EXPERTS BY PANEL.

THE PANELS IN NUMBERS

As the map above shows, EFG's Panels of Experts platform currently involves a total of 223 experts from 22 European countries.

The graph on the left details the number of experts by panel, the Panel on Minerals and on Natural Hazards counting currently the highest number of experts.

The missions of the different Panels of Experts are listed on the following pages. More information on the Panels may also be found on the EFG website www.eurogeologists.eu in the section "Panels of Experts".

PE ON CO₂ GEOLOGICAL STORAGE



COORDINATOR

Kris Piessens / Belgium /
kris.piessens@naturalsciences.be

MISSION

The mission of the PE on CO₂ 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 CO₂ storage. The success of CCS will largely depend on how reliably CO₂ can and will be stored, justifying the dedicated mission of the PE CO₂ Geological Storage: emphasizing the role of professional geologists and the importance of the geological perspective in the overall concept of carbon capture and storage.

PE ON GEOLOGICAL HERITAGE



COORDINATOR

Mónica Sousa / Portugal /
msousa@apegeologos.pt

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.

PE ON EDUCATION



COORDINATOR

Eva Hartai / Hungary / foldshe@uni-miskolc.hu

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.

PE ON GEOTECHNICS



COORDINATOR

Gabriele Ponzoni / Italy /
gabriele.ponzoni@cngeologi.it

MISSION

The PE on Geotechnics contributes to the development of European Policies of interest to geologists and geological issues regarding the European policy on geotechnics. The aim of the Panel is the promotion and contribution to the mutual exchange of geotechnical experiences among geologists worldwide. The panel has identified as sensitive problems in the geotechnics sector: Legislative problems deriving from different regulations in individual countries; Problems inherent to the legislative interpretation of the role of the professional geologist in the design; Problems of interference of other professions in the field of professional geologist; Technological innovation in the geotechnics sector.

PE ON GEOTHERMAL ENERGY**COORDINATOR**

Janos Szanyi / Hungary / szanyi@iif.u-szeged.hu

**MISSION**

The EFG Panels of Experts on Geothermal Energy contributes to the development of European Policies of interest to geologists and geological issues and facilitates the public acceptance of Geothermal Energy. The panel has identified as sensitive problems in geothermal energy sector:

- Technological innovation
- Predictable and coherent legislation training and promoting
- Socioeconomic aspects

PE ON HYDROGEOLOGY**COORDINATOR**

Marco Petitta / Italy / marco.petitta@uniroma1.it

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.

PE ON NATURAL HAZARDS AND CLIMATE CHANGE**COORDINATOR**

Pavlos Tyrologou / Greece / pavlos.tyrologou@gmail.com

MISSION

The Panel of Experts on Natural Hazards and Climate Change has been established in March 2003, in relation to EC initiatives on Civil Protection, DG Environment.

The Panel has as primary purposes to promote the importance of geology as a defence mechanism by:

- Supporting EFG on its initiatives as these stated in the Strategic Plan 2018 - 2022.
- Communicating the importance of the geological expertise on Disaster Risk Reduction.
- Disseminating geological knowledge to increase resilience against natural disasters and climate change.
- Understanding and offer expertise on issues related to climate change and fragility.
- Offering ad-hoc advise services when this requested by the EFG or the European Commission.
- Participating on public dialogue and promoting geoscience as a scientific tool for the society's benefit at every political level.

Ultimate mission is to make available geological knowledge in the decision making process to increase the quality of life and reduce the poverty as these are defined on the Sustainable Development Goals of the United Nations.

PE ON MINERALS AND THEIR SUSTAINABLE USE



COORDINATOR

Markku Iljina / Finland / markku.iljina@geoconsulting.fi

MISSION

Sustain and enhance EFG's professional voice in minerals related international collaboration. Main areas of participation:

- To act as EFG's body of experts in minerals related themes.
- Participation in the Raw Material Supply Group, European Commission experts group under the responsibility of the Direction General for Enterprise and Industry.
- Support the adoption of The Pan-European Reserves and Resources Code (PERC) by the major professional geological association in Europe and its recognition internationally as a CRIRSCO template for an international standard/code.
- Participation in the United Nations Framework Classification for Fossil Energy and Mineral Resources ("UNFC") adopted by the UN in June 2004 and updated in 2009.

PE ON OIL & GAS

COORDINATOR

Olaf Klärner / Germany / ok@klarenco.com

MISSION

The oil and gas industry plays a significant role in the supply of the world's energy demand in the 21st 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.

PE ON SOIL PROTECTION

COORDINATOR

Maria Jose Rubial Fernandez / Spain / mariajose.rubial@azentua.com

MISSION

Soil is, among other definitions, the end product of the combined influence of geological processes, climate and organisms (flora, fauna and human) on parent geology over time. Soil is increasingly recognized as a vital and finite asset, playing a fundamental role in supporting the availability and quality of human basic resources such as food and water, which encompasses social and economic welfare. Soil is the basis of our forests and crops, which provide a variety of fibres, fuels, genetic resources, medicinal products and energy. It also provides regulating services such as pollution control, rainwater distribution and erosion control, and is capable of acting both as a source and sink of carbon. In terms of perception of likelihood and impact, soil degradation is among the most pressing environmental challenges facing us, together with other environmental risks such as biodiversity loss and man-made environmental disasters. Soil degradation is also connected to societal risks like food crisis and large-scale involuntary migration. Protection and management of this resource are embedded at the heart of the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015.

It is the panel mission to observe this so surprisingly huge range of topics and provide added value by linking technical and scientific knowledge with communication and outreach for coherence in European policymaking on soil protection.



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 2018

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 2018 for which profit and loss accounts shows a profit of € 26.165,70 and a total balance of € 865.149,21.

The impact of project on the result is € 126.576,21 consequence of € 990.320,83 of turnover and € 863.744,62 of costs. There are deferred incomes on project of € 630.298,16 and a provision of € 50.000,00 for future charges related to the Strategic Plan. The total of cash in hand and in bank is € 839.605,38.

The liabilities show reserves for € 136.068,11.
Deferred income for € 680.298,16 and debts payable within one year of € 48.782,94.
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 organisation and of its internal control dispositions. The director has replied with clarity to my request for explanations and information, I have assessed the major evaluation and estimation accounting rules used by the association. 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 2018 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, 18th March 2019

JP VERSTRAETEN

Chartered Accountant IEC (Institut des Experts Comptables)



001 EUROPEAN FEDERATION OF GEOLOGISTS
Detailed Balance Sheet

Date 4/04/2019
Time 12:21:00
Currency EUR
Page 1

Popsy 3.1.975

Wording

Codes

Fin. year 2018

ASSETS

FIXED ASSETS

20/28 1.760,10

III Tangible assets

22/27 **1.760,10**

C. Furniture and vehicles

24 1.760,10

240010 IT material

2.950,01

240019 Depreciation IT Material

-1.189,91

CURRENT ASSETS

29/58 862.365,11

VII Amounts receivable within one year

40/41 **22.759,73**

A. Trade debtors

40 22.759,73

400000 Customers

22.759,73

404010 credit note to be received

0,00

IX Cash at hand and in bank

54/58 **839.605,38**

550001 BNP MAIN

723.550,49

550002 BNP OFFICE

312,94

550010 KBC

116.244,06

550100 Visa

-345,26

580000 Internal transfers of funds

0,00

580001 Visa

-156,85

ASSETS NOT IN BNB SCHEME

499000 Suspense accounts

1.024,00

ASSETS

865.149,21



001 EUROPEAN FEDERATION OF GEOLOGISTS
Detailed Balance Sheet

Date 4/04/2019
Time 12:21:00
Currency EUR
Page 2

Popsy 3.1.975

Wording

Codes

Fin. year 2018

LIABILITIES

CAPITAL AND RESERVES

10/15 136.068,11

V Accumulated profits

140 **136.068,11**

140000	Accumulated profits	77.414,00
140015	Result 2015	6.099,02
140016	Result 2016	8.815,86
140017	Result 2017	17.573,53
140018	Result 2018	26.165,70

CREDITORS

17/49 729.081,10

IX Amounts payable within one year

42/48 **48.782,94**

C. Trade debts

44 20.490,84

1. Suppliers

440/4 20.490,84

440000	Suppliers	13.582,31
444000	Invoices to be received	6.908,53
444100	Regul Salary	0,00

E. Taxes, remuneration and social security

45 25.950,04

1. Taxes

450/3 25.950,04

451100	VAT to pay intracommunity	25.950,04
453000	Advance deduction - professional	0,00

2. Remuneration and social security

454/9 0,00

454000	Social security contribution	0,00
455000	Remunerations	0,00

F. Other amounts payable

47/48 2.342,06

489000	Other various debts	2.342,06
--------	---------------------	----------

X Accrued charges and deferred income

492/3 **680.298,16**

493020	Incomes to be deferred Strategic Plan 2018 - 2022	50.000,00
493101	Incomes to be deferred INTRAW	0,00
493111	Incomes to be deferred KINDRA	0,00
493121	Incomes to be deferred MINATURA	0,00
493131	Deferred income VAMOS	6.053,78
493141	Deferred income CHPM 2030	139.188,89
493151	Deferred income UNEXMIN	12.175,91
493161	Income to be deferred MICA	0,00
493201	Deferred income FORAM	0,00
493301	Deferred income Infact	366.966,06
493401	Deferred Income INTERIM	101.780,48
493501	Deferred Income MINLAND	4.133,04

LIABILITIES

865.149,21



001 EUROPEAN FEDERATION OF GEOLOGISTS	Date	4/04/2019
Detailed Balance Sheet	Time	12:21:00
	Currency	EUR
Popsy 3.1.975	Page	3

Wording Codes Fin. year 2018

OPERATING RESULTS

I Operating income	70/74	1.291.109,35
A. Turnover	70	1.092.145,26
700000 MEMBERSHIP		68.031,97
700010 EUROGEOL RENEWAL		8.583,51
700011 EUROGEOL NEW		2.380,95
700020 NLB		22.828,00
701101 Intraw EFG		364.186,06
701109 Intraw Third parties		2.379,61
701111 Kindra EFG		76.591,79
701121 Minatura EFG		25.165,89
701131 Vamos EFG		748,26
701141 Chpm 2030 Feg		142.992,33
701151 Unexmin Feg		59.587,28
701161 Mica Feg		12.007,57
701191		0,00
701201 Foram Efg		76.701,24
701301 Infact efg		204.629,01
701401 Intermin efg		14.483,58
701501 Minland Efg		10.848,21
B. Variat. in finished goods, work & contracts in progres	71	5.057,80
712000 Sales		357,80
712001 Sponsoring		3.500,00
719000 Contribution to costs		1.200,00
719001 Sponsoring		0,00
D. Other operating income	74	193.906,29
740100 PERC		662,46
740200 Other income		50,00
743900 Advance deduction - professional		1.503,33
749998 External Salary Project		43.987,50
749999 Salary project		147.703,00
II Operating charges	60/64	1.264.080,93
A. Raw materials, consumables and goods for resale	60	877.163,77
1. Purchases	600/8	877.163,77
600000 Promotion Travel		344,90
600010 EurGeols costs		124,25
600011 EurGeols services		12.950,00
601101 Intraw Conference		5.719,51
601102 Intraw Inhouse consulting		22.508,71
601103 Intraw Travel		1.083,27
601104 Intraw Other		3.628,86
601105 Intraw salary cost		11.255,29
601108 Intraw Partners		224.372,56
601109 Intraw Third parties		27.284,49
601111 Kindra Conference		4.028,95
601112 Kindra Inhouse consulting		0,00
601113 Kindra Travel		0,00
601114 Kindra Other		38,59
601115 Kindra salary cost		7.748,02
601119 Kindra Third parties		23.269,28
601121 Conference		233,65
601122 Minatura Inhouse consulting		7.763,29
601123 Minatura Travel		1.561,55
601124 Minatura Other		403,97



001 EUROPEAN FEDERATION OF GEOLOGISTS
Detailed Balance SheetDate 4/04/2019
Time 12:21:00
Currency EUR
Page 4

Popsy 3.1.975

Wording	Codes	Fin. year 2018
601125	Minatura salary cost	12.079,89
601132	Vamos Inhouse consulting	479,46
601135	Vamos salary cost	268,80
601141	Chpm 2030 Conference	837,42
601142	Chpm 2030 Inhouse Consulting	11.755,11
601143	Chpm 2030 Voyages	9.806,41
601144	Chpm 2030 Divers	1.179,95
601145	Chpm salary cost	60.166,17
601146	CHPM depreciation	356,03
601149	Chpm 2030 Third	58.891,24
601152	Unexmin Inhouse Consulting	8.175,51
601153	Unexmin Travel	5.505,98
601154	Unexmin Miscellaneous	32,80
601155	Unexmin salary cost	19.213,07
601156	Unexmin depreciation	356,03
601159	Unexmin Third	26.303,89
601162	Mica Inhouse Consulting	560,00
601163	Mica Travel	0,00
601164	Mica Miscellaneous	120,00
601165	Mica salary cost	4.440,70
601193	Tgggp Travel	1.746,05
601194	Tgggp Others	413,25
601202	Foram in-house consulting	42.008,69
601203	Foram travels	17.657,36
601205	Foram salary cost	10.530,02
601301	Infact Conference	588,30
601302	Infact Inhouse Consulting	56.755,36
601303	Infact Travel	22.833,95
601304	Infact miscellaneous	37.363,40
601305	Infact salary cost	53.167,98
601306	Infact depreciation	170,02
601309	Infact third parties	33.750,00
601401	Intermin conference	31,50
601402	Intermin inhouse consulting	7.029,98
601403	Intermin travel	1.650,72
601405	Intermin salary cost	5.670,21
601406		101,17
601502	Minland inhouse consulting	2.219,98
601503	Minland travel	1.470,50
601504	Minland miscellaneous	7,38
601505	Minland salary cost	7.150,35
B. Services and other goods	61	110.827,27
610000	Rental	7.109,84
610003	Office supplies	118,23
610004	Office equipment	341,06
611000	Office supplies	282,67
611001	Computer equipments - IT	1.545,13
611012	Internet	124,00
611013	Post	39,70
611014	Documentation	0,00
611015	Printings (business card,...)	159,30
612000	Printing	1.337,19
612010	Layout	2.180,00
612020	Post	180,20
613000	Website	714,81
613020	Gifts	472,83
614000	Restaurant	0,00



001 EUROPEAN FEDERATION OF GEOLOGISTS
Detailed Balance Sheet

Date 4/04/2019
Time 12:21:00
Currency EUR
Page 5

Popsy 3.1.975

Wording	Codes	Fin. year 2018
614001 Light meals		269,10
614002 Office Management		105,00
615000 Accountancy		4.358,75
615001 Payroll and social contribution office		2.609,47
615010 Lawyers costs		6.489,94
615100 Professional Cotisations		30,00
615200 Membership		100,00
616000 Travel EFG		4.061,57
616001 Travel Board		4.811,81
616002 Travel to EFG Members		591,30
616003 Travel others		798,10
616004 Registration authority		1.331,60
617000 External services Stein Anita		50.913,43
618000 Events		3.093,15
618001 Travels		607,40
619000 Council Meeting		6.857,13
619010 Catering/rooms rental		0,00
619015 Travels		0,00
619020 EFG network events		8.702,67
619100 Posters, printed papers form, catalogues, samples		491,89
619200 Participation in the fairs, exposures, missions		0,00
619400 Gifts and flowers limited		0,00
C. Renumeration, social security costs and pensions	62	226.089,89
620300 Personnel employed - administrative full-time		183.440,74
621000 Social security costs - employer		30.377,67
623000 Other personnel costs		5.473,26
623100 Meal cost		6.798,22
D. Depreciations and other amounts written off	630	0,00
630200 Depreciation of tangible fixed assets		0,00
G. Other operating charges	640/8	50.000,00
640500 Strategic Plan 2018 - 2022		50.000,00
III Operating profit	70/64	27.028,42
Operating loss	64/70	0,00
IV Financial income	75	1,09
C. Other financial income	752/9	1,09
754000 Realized exchange gains		0,00
757000 Differences in payment		1,09
V Financial charges	65	863,81
A. Intrests and other debt charges	650	287,04
650000 Interests, commissions - fees related debts		130,32
650010 PAYPAL COST		156,72
C. Other financial charges	652/9	576,77
654000 Exchange differences		0,00
657000 Bank cost		0,00
658000 Bank & payments charges		576,77
VI Profit on ordinary activities before taxes	70/65	26.165,70
Losses on ordinary activities before taxes	65/70	0,00
IX Profit for the year before taxes	70/66	26.165,70
Losses for the year before taxes	66/70	0,00
X Income taxes	67/77	0,00
XI Profit for the year	70/67	26.165,70
Loss for the year	67/70	0,00



001 EUROPEAN FEDERATION OF GEOLOGISTS
Detailed Balance Sheet

Date 4/04/2019
Time 12:21:00
Currency EUR
Page 6

Popsy 3.1.975

Wording

Codes Fin. year 2018

XIII Profit for the year available for appropriation

70/68 **26.165,70**

Loss for the year available for appropriation

68/70 **0,00**



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
EFGEOWEEK	Ad on the front page of the newsletter	1500€		
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) FOR ITS SUPPORT.



European Federation of Geologists
Rue Jenner 13 - B-1000 Brussels
www.eurogeologists.eu