

## The European Accredited Geological Study Programmes Project (EURO-AGES).

by Dr Isabel M.Fernandez Fuentes<sup>1</sup>, EurGeol. and Adela Aparicio<sup>2</sup>  
<sup>1</sup>EFG Office Director, <sup>2</sup> EFG Office

### Abstract:

The project aims at developing Europe-wide applicable quality standards and criteria for the assessment of higher education programmes in geology in the context of the Bologna Process. In the next two years, framework standards will be developed and tested for their validity and applicability through discussion with stakeholders and related networks. The project aims at reaching the largest possible consensus among the relevant stakeholders. It aims to; support improvement of the quality of higher education in geology; facilitate mutual recognition by programme validation and certification; facilitate recognition of accredited degrees in geology higher education in accordance with the EU directives and other agreements; support academic as well as professional mobility of geology graduates and establish a relationship with the qualification profile required by the EurGeol title.

Dans le cadre du processus de Bologne, le projet vise à élaborer des standards et des critères de qualité applicables au niveau européen pour l'évaluation des programmes de l'enseignement universitaire en géologie. Dans les deux prochaines années, la validité et l'applicabilité des normes-cadres seront développées et testées à travers les discussions entre toutes les personnes concernées et les réseaux professionnels. Le projet vise à atteindre le plus large possible consensus parmi les personnes concernées. Il vise à soutenir l'amélioration de la qualité de l'enseignement supérieur dans le domaine des sciences géologiques; faciliter la reconnaissance mutuelle par la validation et la certification des programmes; faciliter la reconnaissance des diplômes délivrés dans l'enseignement supérieur universitaire en géologie conformément aux directives de l'UE et à d'autres accords y liés; soutenir le personnel académique aussi bien pour améliorer la mobilité professionnelle des diplômés en géologie et établir le lien avec le profil de qualification requis pour l'obtention du titre de Géologue Européen, EurGeol.

En el contexto del proceso de Bolonia, el proyecto trata de desarrollar en toda Europa normas de calidad y criterios para la evaluación de los programas de educación superior de geología. Durante los próximos dos años, la validez y aplicación de las normas-marco serán desarrolladas y probadas a través de la discusión con las partes interesadas y las redes implicadas. El proyecto desea llegar al mayor consenso posible entre las personal ¿?? interesadas. Los objetivos del proyecto son apoyar la mejora de la calidad de la educación superior en la geología, facilitar el reconocimiento mutuo por el programa de validación y certificación, facilitar el reconocimiento de los títulos acreditados en geología de educación superior de acuerdo con las directivas de la UE y otros acuerdos, apoyo

académico, así como la movilidad profesional de los graduados en geología, y establecer la relación existente con el nivel de cualificación requerido para obtener el título de Geólogo Europeo, Eur-Geol.

EURO-AGES is an EU-funded project. The EFG, in collaboration with ASIIN Consult (accreditation agency specialized in accrediting degree programmes in the fields of engineering, informatics/computer science, the natural sciences and mathematics, Germany), ICOG (Official Spanish Association of Professional geologists), MFT (Hungarian Geological Society) and SN (Swedish Natural Scientists Association) has made a successful application to the European Commission, Lifelong Learning Programme (DG Education and Culture) for a grant to run a pilot project on European Qualifications Framework (EQF).

The European Qualifications Framework, EQF, is a common European reference framework which links countries' qualifications systems together, acting as a translation device to make qualifications more readable. It has two principal aims: to promote citizens' mobility between countries and to facilitate their lifelong learning. The EQF was formally adopted by the European Council on 14 February 2008, following its adoption in October 2007 by the European Parliament ([http://ec.europa.eu/education/policies/educ/eqf/index\\_en.html](http://ec.europa.eu/education/policies/educ/eqf/index_en.html)).

Shifting the focus to learning outcomes:

- Supports a better match between the needs of the labour market (for knowledge, skills and competences) and education and training provisions
- Facilitates the validation of non-formal and informal learning
- Facilitates the transfer and use of qualifications across different countries and education and training systems

The EQF foresees that Member States relate their national qualifications systems to the EQF by 2010 and that their qualifications contain a reference to the EQF by 2012.

A call for proposals for a pilot project on this topic was launched in May 2008, with an August deadline to present the project. EFG Office informed the EFG Council about this proposal in the Athens Council Meeting. Following this action EFG Office prepared a proposal for project in collaboration with ASIIN Consult.

One of the EFG objectives with the project is to promote best practice standards and mobility by the award of the professional title of European Geologist (EurGeol.) to geologists who have reached a high level of training and experience.

The EFG Office invited EFG Bologna Working Group members to participate as partners on this project. We received a letter of interest from: ICOG, Spain; MFT, Hungary and SN, Sweden. In August 2008, EFG, with its four partners presented the **EURO-AGES**, which was accepted and which started in February 2009. The duration is two years.

EURO-AGES aims at developing a qualification framework for geology based on learning outcomes rather than input factors on the European level, thereby increasing transparency of Earth Sciences qualifications and ultimately facilitating academic and professional mobility across Europe while at the same time stimulating students and graduates in the field of geology as well as professional geologists to pursue Life Long Learning. The project will also allow a structured exchange of best practices, expertise and country characteristics of professional practices in geology in the different European countries. It will, moreover, provide important reference points for quality assurance and related recognition issues focused on learning outcomes as well as adding value to the implementation of the 2005 Directive on recognition of qualifications.

At the same time, this pan-European set of outcome descriptors for the EQF level 7 (“Bachelor/1st cycle”), and 8 (“Master/2nd cycle”) will serve as a reference framework for programme development by individual higher education institutions, for the establishment of national sectoral qualifications frameworks in geology and for the development of a sectoral qualification framework for geology encompassing all levels of the EQF. The persistent lack of comparable subject-specific tools for assessing and enhancing the quality of geology degree programmes on a national or transnational level in the past has proven to be a potential obstacle to the mobility of geologists and geology students and graduates.

In response to this need – and in line with previous efforts undertaken by EU-supported projects such as “EUR-ACE – Accreditation of European Engineering Programmes”, “Eurobachelor and –master for Chemistry Education” and the “Euro-Informatics project” – we propose a joint project carried by and involving the major stakeholders in the field of higher education in geology in order to develop a Europe-wide applicable qualifications framework for geology degree programmes and procedural guidelines for the assessment of geology degree programmes.

The project will be developed in five stages:

Phase 1, survey on the already existing learning outcome descriptors on the First Cycle and Second Cycle Level and sectoral qualification frameworks for geology in Europe. A publication of the *Status Quo* will be the result as a starting point for the discussion and further refinement in later stages of the project.

In Phase 2 this learning outcome will be mirrored by the experiences of the members in the 22 member organizations of the EFG, taking into account the feedback of the alumni and also the holders of the EurGeol. Title. To put it differently: at this point the practitioners and the employment side come into play by giving their opinions and advice on the suitability of the existing systems and the viability of the learning outcomes in place. By the same token, the current exigencies and requirements for the EurGeol. register will be fed into the analysis.

Phase 3 be a dissemination phase, in the course of which the members of the consortium will present and discuss these preliminary results with a wide array of stakeholders, such as the higher education community, the deans of geology as well as many member organizations of the project partners.

In Phase 4 there will be as a milestone an interim workshop by the project partners, in which all of this feedback will be assembled, discussed and evaluated. At the end of this process there will be a new set of refined learning outcomes, which will serve as the basis for future activities. In a number of trial accreditations these learning outcomes will also serve as points of reference for the evaluation and accreditation of geology modules and programmes.

In Phase 5 a set of recommendations will be elaborated with the following goals:

- As reference points for the conceptualization, development and improvement of Geology programmes in Europe (not in the sense of defining a precise curriculum, but by elaborating an agreed set of skills graduates need to be successful in the labour market).
- To define minimum standards in the discipline, against which geology programmes are evaluated/accredited in internal and external qualification procedures
- as a reference point for the EurGeol. register of the European Federation of Geologists.

Throughout the project there will continuous monitoring of the work and its results. An International Advisory Board will be established, which will regularly be invited to the meeting of the project board, and will also comment on the progress reports. The results of this project will not only be documented by an interim and a final report and the other aforementioned publications, but also by the establishment of a dedicated website where the progress of the project will be document for a wider European public.