



After the great success of the 1st FIG Young Surveyors' Conference held in Rome in May 2012, where more than 120 young surveyors, representing more than 40 countries, got involved, the European Young Surveyors' want to take the next step! It's an ideal time to build on this previous success by having a special European Young Surveyors' meeting.

The FIG Young Surveyors' Network was keen to organise a meeting and get all these young professionals together again and continue the momentum started in Rome. We are, therefore, proud, happy and excited to announce our 1st FIG Young Surveyors' European Meeting in Lisbon from 17th – 18th October 2013.

And we can't wait to start working together for the future of the surveying profession in Europe.

By Eva-Maria Unger

## .... the FIG Young Surveyors' Network is moving forward and is establishing a European Young Surveyors' Network supported by CLGE!!!



Eva-Maria Unger, Paula Dijkstra and Bram Van Londerzele, from the YSN, with John Hohol, President FIG Foundation and Jean-Yves Pirlot CLGE President (© Quentin Van der Vennet, www.quentinvdv.com).

The idea for this gathering was born some time ago and CLGE President Jean-Yves Pirlot was one of the main driving forces in establishing a European Young Surveyors' Network.

The first time we started talking about creating a network was at the International Topographic Course for Young Surveyors in Madrid, organised by CNGe (Italy). The idea became a reality during the day of the European Surveyor at the CLGE Office in Brussels earlier this year.

The main goal of the FIG Young Surveyors' Network has always been to establish regional networks. With more global awareness and with Europe being the first region supported by two organisations, CLGE and FIG, I would say the idea is fast becoming a reality and we are moving forward at an encouraging rate.

**European Young Surveyors Together For Tomorrow's Challenges** is the theme

of the meeting which will cover various topics, which will be announced in the programme on the homepage of the event: <http://figysn.ordemengenheiros.pt/pt/>

All young surveyors attending are encouraged to participate in one of two ways:

Firstly, by submitting and presenting a meeting paper and secondly by contributing to the many discussions, including the final session where we will collectively formulate the outcomes of the meeting and publish them, so as to make them more accessible for everybody.

For the meeting presentations, topics of focus include starting your own business, the current challenges and future needs of young surveyors, new technology applications and perspectives across Europe. Sessions will vary from presentations to discussions and break-

out workshops, with keynote speakers, including FIG president CheeHai Teo, CLGE president Jean-Yves Pirlot and FIG Foundation president John Hohol. We will try to give all European Young Surveyors the opportunity to present a technical paper, as well as opportunities to chair break-out sessions, or contribute to panel discussions.

The three main goals of the meeting can be summarised as followed:

- To provide a voice for young surveyors in Europe
- To offer a more informal and relaxed platform for young surveyors to present and discuss
- To promote and increase participation in the leading surveying associations (CLGE and FIG)

This meeting is imperative for European young surveyors - they are *our future* – and this will be the kick-off event of the EUROPEAN

#### YOUNG SURVEYORS' NETWORK!

I will attend the meeting myself, and look forward to the development of a strong network of European Young Surveyors, who are willing and able to contribute to a resilient European surveying profession. *European Young Surveyors together for tomorrow's challenges!*

## Did you say, 'Seabed'?

**In a Green book published on 28th August 2012, the European Commission proposed the creation of a digital seabed map of European waters by 2020, by collecting all existing data into one coherent database accessible to everyone. According to Maria Damanaki, Commissioner for Maritime Affairs and Fisheries, the oceans and seas that surround Europe offer new opportunities for growth and jobs representing roughly €200 million a year. To reach this potential, there is a need to know more about what is happening under the sea, hence the project of a digital seabed map. To this end, the Commission launched a public consultation to assess how this could be achieved.**

By Nicolas Smith

The European Commission already has a draft in its mind as it explains that the new seamless multi-resolution digital seabed map of European waters should be of the highest resolution possible, covering topography, geology, habitats and ecosystems. It should be accompanied by access to real time observations and information of the physical, chemical and biological state of the water column, by associated data on the impact of human activities, and by oceanographic forecasts. All this should be easily accessible, interoperable and free from restrictions on use. It should be supported by a sustainable process which will progressively improve its fitness for purpose and help Member States maximise the potential of their marine observation, sampling and surveying programmes. Encouragingly, the European Commission was willing to listen to European experts on these issues, including land surveyors.

During its General Assembly, which took place in Hannover in October 2012, CLGE members unanimously decided to create a work-

ing group to answer this public consultation. The working group was made up of 6 countries: Belgium, Bulgaria, France, Lithuania, Spain and the United Kingdom. Many issues were tackled such as securing the marine data of member states, the publication and licensing of data by private companies or the exceptions that should limit the policy of making marine data freely available and interoperable. Additionally, the working group strongly recommended that the coastline should be included in the project, as this is necessary to study the behaviour of our seas and coasts, so that the EU and the Member States can best adapt to climate change.

This public consultation is part of the global strategy entitled Marine Knowledge 2020, which will bring together marine data from different sources. The purpose of this is to help industry, public authorities and researchers to find the data they need and to make more effective use of it to develop new products and services and improve our understanding of how the seas behave.

CLGE's contribution to the public consultation

is accessible on CLGE's website and also on the website of the EU Commission's Directorate-General for Maritime Affairs and Fisheries.

In addition to this public consultation, the 13th March 2013 saw the European Commission publish a new proposal for a directive establishing a common European framework for maritime spatial planning and integrated coastal management in EU Member States. According to the proposal, the Member States will be required to map human and economic activities (such as offshore wind energy, submarine cable and pipeline routes, shipping, fishing) in maritime spatial plans in order to make more efficient use of seas and develop coastal management strategies.

All these elements indicate that the EU seems to have a keen interest in marine and coastal issues, which could lead to interesting mapping projects in the future!



# Surveyors as trained in Cyprus

**On 30th May and 1st June, the CLGE Executive Board met in Cyprus for its traditional summer meeting. It was the occasion to visit a young but very dynamic university, training bachelors in surveying in conjunction with other Engineering degrees. A master's degree course is under preparation.**

*Dimitrios Skarlatos,  
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**Surveying Engineering and Geomatics @ Department of Civil Engineering and Geomatics (CEG)@Cyprus University of Technology (CUT).**

The Cyprus University of Technology (CUT) is the new public university of Cyprus, which was officially founded in December 2003 and welcomed its first students in September 2007. It aspires to develop itself into a modern, pioneering university able to offer education and high level research in leading branches of science and technology, which have high impact on the economic, technical, and scientific sectors.



*Fieldworks under the Mediterranean sun ...*

The six faculties of the university are located near the sea in the city centre of Limassol. The main pillar of the university is the faculty of Engineering and Technology, hosting three Departments; Department of Electrical Engineering, Computer Engineering and Informatics, Department of Mechanical Engineering and Materials Science and Engineering, Department of Civil Engineering and Geomatics.

The Department of Civil Engineering and Geomatics offers two undergraduate courses, one being a four year course on Surveying Engineering & Geomatics Engineering, with approximately 15-20 students per year. The Department has already planned a detailed program of studies for a M.Sc. in Geomatics, which has been accepted by the senate and the board of the university.

The first surveying and geomatic engineers graduated in June 2013. The BEng in Surveying Engineering and Geomatics is fully accredited by the Cyprus Technical Chamber of Engineers and the local Association of Surveying Engineers, who is a member of CGLE and EGOS. Students follow an intensive 261 ECTS on 58 courses (52 teaching modules, 2 industrial training, 2 summer field exercises and final year project). Taught modules include professional skills (4 courses), mathematics and physics (4), geodesy (5), cartography (4), remote sensing (3), photogrammetry (3), programming (2), databases, cadaster, monument surveying etc. The strong theoretical background is supported by practical and field experience, with students participating in summer field exercises at the end of the 2nd and 3rd year, as well as training within public organisations or private companies. Field exercises and training take place in June and July each year. Students also have the opportunity to participate in an Erasmus IP project (HERICT) with 8 European Universities during the summer field exercises of the 3rd year. During the last year each student works on an individual thesis with 15 ECTS.

Three of the labs in the department are dedicated to geomatics, namely the Geodesy Lab, the Remote Sensing and Geo-Environment Lab and the Photogrammetric Vision Lab. All labs are equipped with a variety of high end systems covering a wide range of educational and research activities. A brief list of equipment includes: 1 laser scanner, 1 optical scanner, 1 GPS/INS POS, 1 fixed wing UAV, 2 hexacopter UAVs, 13 total stations, 25 levels, 4 field spectroradiometers, 2 sun photometers, 8 dual frequency GPS and a fixed station, 1 atmospheric Lidar, 1 CIMEL sun-photometer (member

of Aeronet NASA network) 10 single frequency GPS with post-processing and 30 ArcMap, 30 AutoCAD Map, 25 Erdas Imagine with LPS, 1 Erdas Apollo server, 25 ENVI eCognition, 10 Z/I SSK stations with full automation, 99 Microsurvey StarNet, 99 Microsurvey PointCloudCAD, 6 Leica Geo Office, etc.

The Geomatics branch of the Department is active in research as well. Research grants totalling 3.5 million euros (for CUT) have been attracted from EU (e.g. LIFE+, FP7, MED. FP6, EUREKA etc.), national and industrial funds. The research activity programmes include research into catastrophic shifts in drylands and their prevention, air pollution monitoring from space in Cyprus using RS, RS and hydraulic modelling for flood risk assessment at large scale, value driven procurement in building and real estate, study of the urban heat island effect in Cyprus, estimation of evapotranspiration in irrigated crops using RS & wireless sensors, underwater 3D modelling in ancient shipwrecks, videometry from mobile platforms, Parthenon's Frieze 3D modelling & digital unification, UAV mapping, monitoring of field with UAVs and near infrared cameras, ROV underwater fish net inspection, etc. Among the PhD students in the department, seven are focusing on Geomatics and three have already received their PhD.

The Civil Engineering & Geomatics Department of the Cyprus University of Technology aims to develop high level courses leading to undergraduate and post-graduate degrees with qualifications fitted to a fast changing society with divergent needs. Students work within a dynamic and inspiring environment which will challenge them and enable them to develop the wide range of skills they need to make a positive and significant difference to infrastructure and quality of life.

[www.cut.ac.cy/ceg/?language=2](http://www.cut.ac.cy/ceg/?language=2)