3rd FIG YSEM
16 May 2015  Sofia, Bulgaria

‘European Young Surveyors
together for
tomorrow’s challenges’

University of Architecture, Civil Engineering and Geodesy
Sofia, Bulgaria

Website
http://www.fig.net/fig2015/ys_home.htm

Supported by:
Venue

University of Architecture, Civil Engineering and Geodesy
Sofia, Bulgaria

Address: Bulgaria, Sofia 1046, 1 Hristo Smirnenski Blvd.

How to can reach UACEG:

- **Metro** M1 - Metrostation "Vassil Levski" Stadium
- **Busses** № 72, 76, 94, 204, 604 - "Vassil Levski" Stadium station
- **Trams** № 10, 12, 18 - UACEG station

**Buildings in beige:** Buildings of the university

**Meeting Room:** red circle

**Coffee Break and Lunch:** blue circle

GPS Coordinates: 42°40′59″N 23°19′53″E
Welcome Addresses

Eva – Maria Hunger and Paula Dijkstra FIG-YSN

Dear European Young Surveyors,

How exciting is this!!! It is our 3rd (!!!) edition of the FIG Young Surveyors European Network Meeting. Time is running and by looking back it is amazing what we have accomplished - so far. We are well recognized and represented in European leading associations. CLGE just opened recently a representative role on their Executive Board for one of you. Also for the first time we got invited to present at a EuroGeographics Workshop. So I would say this is an exciting time and we are doing great. This edition of the FIG Young Surveyors Meeting is mainly organised by Young Surveyors we got to know in our previous events. So we are inviting all of you to actively participate and contribute to this meeting. We hope that the meeting is useful to all of you and will be an important step in your young career. I we hope you enjoy the meeting, you have fun and you gain insight on why it is important to be active in shaping our future.

We are looking forward to meet you!!!

Chryssy Potsiou FIG President

Colleagues and Friends,

As an academic I spend most of my life with young people and during my 30 years in this activity I have learnt to respect, trust and cooperate closely with young surveyors.

My message today is that FIG and its member Associations should work closely with the Young Surveyors Network. Together we should think ahead, predict future changes, foresee the requirements of the next generation of the public, and structure the way ahead. It is within the FIG goals to develop a prosperous and sustainable profession which will translate the post 2015 sustainable development agenda into action. There is much to be done and our working together will ensure a great and promising professional future for surveyors. However, it is obvious that in the globalization era, a globalization of science is also taking place. There may be tough competition from neighboring disciplines. This is a challenge to be met by both this generation and the next generation of surveyors. We need to concentrate on thorough development of our skills; surveyors should maintain in depth research and ever-better education. And most importantly, we must cooperate with other professionals. Through cooperation with other professionals surveyors will increase their skills in providing solution functionality, reliably and affordably (e.g., fit-for-purpose processes) for a complex and rapidly changing world - a dynamic world that will not wait.
**Maurice Barbieri** CLGE President

Dear young colleagues,

Our profession is continually changing. Technology is moving faster and faster and this becomes very important since it represents one of the challenges for the surveyors of the 21st Century.

We need new blood and the new surveyors represent our future. In some countries our offices need young qualified people and the engagement of our members in new fields of activity increases this tendency.

In the last years, CLGE has invested in the future by building bridges to you. We strongly believe in this and are convinced that the existence of a European Network of Young Surveyors, integrated in CLGE and FIG will be a benefit for all and quicken the realisation of our strategic goals. More concretely, we have integrated your representative in our Ex Board. We have engaged our association for the future with our Student’s Contest. This year, we have created a new category for the challenge in collaboration with GSA, the European GNSS Agency.

We launched some new projects like Blueparking and Marine Cadastre, where the new surveyors have to play an important role, the two projects being related to new technologies.

We encourage all our member associations to support this Sofia event. We hope that many of our members will support you in Bulgaria and we can ensure you that the CLGE will continue to engage itself within the Young Surveyors European Network and FIG.

We wish you a pleasant and successful 3rd FIG Young Surveyors European Network meeting in Sofia!

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**Angel Yanakiev** Chairman of the Chamber of Graduated Surveyors

Dear Colleagues and Friends,

It is with extreme pleasure that I welcome you in the ancient city of Sofia for the 3rd FIG Young Surveyors European Network.

The motto of the upcoming FIG working week, which I hope all of you will visit is “From the wisdom of the ages to the challenges of the modern times”. Such a transition has always been a fruitful source of opportunities for young professionals.

Opportunities to benefit from the wisdom of the ages in order to be ready to respond to the challenges of the modern times. Opportunities to interact with fellow young by age and by hearth surveyors in order to exchange ideas and experience with fellow surveyors.

I wish you to benefit from these opportunities to the fullest possible extent in the upcoming days.

I believe that the lovely spring in the ancient city of Sofia, which has been a crossroad of several civilizations will help you to spend a wonderful and fruitful time here and get back to your home countries with new ideas to help you develop in your profession as well as with a lot of new friends.

Welcome to Bulgaria!
Welcome to the third FIG Young Surveyors European meeting (YSEM).

The FIG Foundation is an independent body under the International Federation of Surveyors (FIG).

The FIG Foundation has been established for the purpose of raising funds to finance educational and capacity building projects and scholarships with the goal of helping to build a sustainable future. One of our seven initiatives in our goal to help build a sustainable future is "To support by seed funding conferences, meetings of young surveyors and similar events".

The FIG Foundation has supported the FIG Young Surveyors Network since its beginnings as an FIG Commission 1 Working Group in 2006. The Foundation has enthusiastically supported meetings and conferences of young surveyors on six continents.

From the first FIG YSEM in Lisbon to the second YSEM in Berlin the FIG Foundation Board of Directors has been happy to support young European surveyors. Therefore, we hope that our support of this important meeting will help identify those young surveyors who will become our future leaders.

I wish you all a successful meeting and look forward to meeting each of you in Sofia.
# Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Theme: &quot;European Young Surveyors together for tomorrow's challenges&quot;</th>
<th>Chair</th>
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<tbody>
<tr>
<td><strong>16 June</strong></td>
<td><strong>08:30 - 09:00</strong> Registration</td>
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<tr>
<td><strong>09:00 - 09:45</strong></td>
<td><strong>Opening Ceremony and Photo Session</strong></td>
<td>Eva-Maria Unger</td>
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<td>A short welcome by the representatives of the organisations as well as an opportunity to get your photo taken.</td>
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<td></td>
<td>• Chryssy Potsiou, FIG President</td>
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<td>• Eva-Maria Unger and Paula Dijkstra, FIG Young Surveyors Network</td>
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<td>• Maurice Barbieri, CLGE President</td>
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<td>• Angel Anakiev, Chairman of the Chamber of Engineers in Surveying in Bulgaria</td>
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<td>• Borislav Marinov, Dean of The University of Sofia</td>
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<td>• John Hohol, FIG Foundation President</td>
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<td><strong>09:45 - 10:15</strong></td>
<td><strong>Astronomy - “Getting Inspired”</strong></td>
<td>Paula Dijkstra</td>
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<td>To get our minds thinking freely, we are starting the meeting with an inspiring presentation from the field of astronomy. When you look out into space (often using the most high tech equipment) you’re actually look out into the past. We use this information to make predictions about the future.</td>
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<td>The cosmological model and navigating by using the stars as your surveying markers. You might be surprised how the field of astronomy relates to the world of surveying!</td>
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<td>Cosmology: From the Wisdom of the Ages to the Challenges of the Modern World by Vladimir Bozhilov</td>
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<td><strong>10:45 - 11:00</strong></td>
<td><strong>Speed Dating + Coffee Break</strong></td>
<td>Daniele Brancato</td>
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<td>Let’s get to know the members of the network!</td>
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<td>Is this your first time at a Young Surveyors Network meeting? Well then, don’t be shy, and just get to know each other. This is a great opportunity to make new friends from different backgrounds. Are you a veteran of the Young Surveyors world? Well then, no excuses, share your experience from previous events with the younger ones. Exercising your social skills is important for your professional and personal life, so we propose this exercise where you ‘speed date’ each other.</td>
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<td>Here are some example questions to help you break the ice, but remember... be original :)</td>
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<td>• Find three things you have in common.</td>
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<td>• What do you hope to gain from the meeting?</td>
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<td>• Knowing what you know now, would you choose the profession if you were to choose again?</td>
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<td>• Where do you see yourself in the future?</td>
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<td>• Do you have a surveyor role model?</td>
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<td>• What has been the most fun/embarrassing moment in your career so far?</td>
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<td>• What do you know about Bulgaria?</td>
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### Keynotes - Past, Present and Future!

Basic surveyance has occurred since humans build the first large structures, back to 2500 BC. From those years surveying is the science of determining the three-dimensional position of points and its accuracy. The basic principles of surveying have changed little over the years, but the tools used by surveyors evolved. Photogrammetry, space technology and the internet of things rapidly changed the speed of mapping, the amount of information as well as the related products and services. Moreover, the use, the meaning, the scope and the role of the maps change rapidly between the years. “Timing” is introduced as the crucial factor in our science, as we are living in an era of constant and rapid change. Today, GIS tools, UAVs, with cameras, point clouds, 3D city models and satellite and radar data are the key components of our profession. The rapid improvement in information technology affects a lot the character of our job and determines our opportunities. Surveyors should be prepared to cooperate with other professions, adapt quickly to new technologies and deal efficiently with large amount of information!

How do you see our profession in 10 years from now?

1. **The History of Geodesy Told through Maps** by Rahmi Nurhan Çelik
2. **Past Surveying Glory Shines Upon a Bright Future** by John Brock
3. **Little orca’s 5000 mile odyssey** by John Hohol

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### Session no. 1 - Wisdom Through Trial and Error.

Now that you’ve been introduced and inspired during the speed dating session, let’s hear an update about what is going on in our network as well as our sister networks.

1. **What is going on in the Geodesy Profession and CLGE?** by Maurice Barbieri
2. **What is going on in the FIG Young Surveyors Network?** by Paula Dijkstra
3. **What is going on in the FIG African Young Surveyors Network?** by Taiwo Israel

### Session no. 2 - Challenges of the Modern World, the Innovations That Will Assist Us and International Possibilities in Geodesy, Spatial Planning and Land Management.

Geodesy is the science of the earth. It has been used throughout the ages to explain, measure and represent changes in our world, telling exactly where we can be found on our planet and within the universe that surrounds us. It contributed to this new dawn of mankind where we find ourself today, by bringing civilization together through exploration and by positioning devices around our planet to easily communicate with each other.

Today, Geodesy is not only about positioning and mapping. In this era of information we live in, we have to use our skills as surveyors, to deal with complex situations like urban and regional planning or creating smart environments and infrastructures. Nowadays, all of this can only be achieved by cooperation. We learn from mistakes and from each other by building networks that can connect surveyors around the world, giving new opportunities and meaning to the work of the modern surveyor. This sessions starts with an international perspective on the profession and ends with a technical note.

1. **The UN Habitat Programme** by Cyprian Selebalo
2. **Land Consolidation: How Geodesy Can Help the World** by Nyncke Emmens
3. **International Job Opportunities: Working as a Freelancer Surveyor** by Artemis Valanis

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### 3rd FIG Young Surveyors European Meeting

**Sofia, Bulgaria 2015**

#### 15:00 - 15:30

**Coffee break**

4. **A Word on Photogrammetry** by prof. Borislav Marinov
5. **Managing unlimited 3D Scan data: Is That Possible?** by Dr. -Eng. Khaled el Nabbout

#### 4. A Word on Photogrammetry by prof. Borislav Marinov

5. Managing unlimited 3D Scan data: Is That Possible? by Dr. -Eng. Khaled el Nabbout

#### Session no. 3 - Speakers corner

*Lets inspire each other through presentations from fellow young surveyors. The stage is open to anyone who has something to present - may it be a project you’ve been working on, a thought you want to share or a question you want to ask. Discussion is actively encouraged. Let’s debate ‘The Challenges of the Modern world’!*  

| 16:30 - 17:30 |  
|----------------|-----------------|
| **1.** Digital Urban change mapping for Port Harcourt City by Godwill Pepple  
| **2.** What is your timeline? by Nur Zurairah Abdul Halim  
| **3.** Ensuring the Surveyor of Tomorrow by Asparuh Kamburov  
| **4.** Upcoming FIG YSE Meetings:  
| • 4th FIG YSEM Netherlands by Paula Dijkstra  
| • 5th FIG YSEM Finland by Thumas  
| • 6th FIG YSEM Turkey  

#### 17:30 - 18:00

**Closing Ceremony**

- **Ferah Köksal and Daniele Brancato**

#### 18:00 - 21:00

**Dinner: Young Surveyors Get Together**

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**Dear Friends and Colleagues,**

after a long meeting and working day at the 3rd FIG Young Surveyors European Meeting we need some relaxing, fun time and food.

We want to be with our friends, supporters and colleagues to network, collaborate, have fun and laugh together.

We are happy to invite you to join our ‘Young Surveyors Get Together’ Dinner at a typical Bulgarian restaurant named ‘Cheverneto’ in the city center of Sofia. We will enjoy some traditional and delicious Bulgarian food and drinks.

Saturday 16th May 2015, 6 PM - 10 PM

For planning please let us know if you are able to join our dinner and write an e-mail to: fig.youngsurveyors@gmail.com

WE are very much looking forward to meet and welcome you there  

*Young Surveyors European Network*
Sofia is Bulgaria’s capital and its largest city. Founded thousands of years ago, today the city continues to develop as the country’s cultural and economic center. At present, the city has a population of 1,250,000. Sofia is located in the western part of the country, on the Sofia Plain and on the lower slopes of Mount Vitosha. The city’s average altitude is 550 meters above sea level, the climate is moderate and continental, characterized by cold winters and relatively cool summers. The average temperature in January is 1 degree below zero Centigrade, and the average July temperature is 20 degrees Centigrade. The city is located at a strategic crossroads. The route from Western Europe to Istanbul passes through Sofia via Beograd and Skopje, then through Plovdiv to Turkey. Sofia also connects The Near East and The Middle East, lying between the banks of The Danube and the shores of The White Sea on the one hand, and between The Black Sea and The Adriatic on the other.

Sofia preserves many valuable monuments to its long and storied past. Visitors exploring the city’s streets can see remnants of The Eastern Gate from the days when Sofia was Serdika and Sredets, dating from the 2nd-4th centuries CE. These remains are exhibited in the underpass connecting the Presidential Palace and The Ministerial Council, surrounded by shops selling traditional Bulgarian souvenirs and rosewater.

The Saint Sofia Basilica, founded during the reign of Justinian (reign 527-565), is one of the oldest churches in the capital. It was the city’s major church during the Middle Ages, and under the Ottomans it was used as a mosque. Very close to Saint Sofia is The Memorial Church Saint Alexander Nevsky, now one of the city’s most recognizable symbols. This church was built in 1912, and was designed by the Russian architect Alexander Pomerantsev. Its bell tower rises to a height of 53 meters, and houses 53 bells, the heaviest weighing 10 tons. One of the most popular tourist destinations in Sofia, the church can hold roughly 5,000 people, and on important Christian holidays it is filled with believers. In the church’s crypt, there is an exhibit of Orthodox Christian art. Directly across from the church is The National Gallery of Art, which often exhibits works by world-famous artists.

The oldest church in Sofia is the Saint George Rotunda. It is thought that the church was built in the 6th century, during the reign of Constantine the Great. In the rotunda’s immediate proximity, in the underpass leading to the Serdika metro station, is The Saint.

During the months of May and June, The Palace of Culture will welcome performers participating in the festival “Sofia Music Weeks.” The capital’s many theaters and galleries offer a wide range of interesting exhibits and shows.
About

FIG

The International Federation of Surveyors (FIG) is an international, non-government organization whose purpose is to support international collaboration for the progress of surveying in all fields and applications.

FIG is the premier international organization representing the interests of surveyors worldwide. It is a federation of the national member associations and covers the whole range of professional fields within the global surveying community. It provides an international forum for discussion and development aiming to promote professional practice and standards.

FIG was founded in 1878 in Paris and was known as the Fédération Internationale des Géomètres. This has become anglicized to the International Federation of Surveyors. It is a UN-recognized non-government organization (NGO), representing more than 120 countries throughout the world, and its aim is to ensure that the disciplines of surveying and all who practice them meet the needs of the markets and communities that they serve.

For more information about FIG, its vision, role and its members have a look at the homepage: www.fig.net

Ten commissions lead FIG’s technical work:

- Commission 1 – Professional Standards and Practice
- Commission 2 – Professional Education
- Commission 3 – Spatial Information Management
- Commission 4 – Hydrography
- Commission 5 – Positioning and Measurement
- Commission 6 – Engineering Surveys
- Commission 7 – Cadastre and Land Management
- Commission 8 – Spatial Planning and Development
- Commission 9 – Valuation and the Management of Real Estate
- Commission 10 – Construction Economics and Management

Each member association appoints a delegate to each of the commissions. Detailed information on the work of the commissions, their work plans, working groups, seminars, newsletters and publications can be found at www.fig.net/com
CLGE

The Comité de Liaison des Géomètres Européens (CLGE) had its Jubilee in 2012. It was founded in the cradle of the Fédération Internationale des Géomètres (FIG, www.fig.net) in 1962 and thus exists over 50 years. During the FIG Congress in Wiesbaden in 1972, CLGE got its current name. Its original objective was to consider the implementation of the Treaty of Rome in relation to the geodetic surveying profession.

CLGE represents and promotes the geodetic surveying profession within Europe through:

- A permanent forum for Geodetic Surveyors working in Europe;
- A commitment to cooperation and partnership within the profession in Europe;
- Exchange of knowledge and expertise between professionals across national and international borders;
- Provision of consultation and advice to member countries, national associations and the European Union;
- Maintenance and enhancement of professional qualifications and standards of service throughout member countries;
- Representation of the profession to European authorities and governments;
- Participation in other relevant organizations within Europe and worldwide.

For more information have a look at CLGE’s Homepage: www.clge.eu/home

FIG YOUNG SURVEYORS

The FIG Young Surveyors Network was established as Commission 1 Working Group 1.2 Young Surveyors at the FIG Congress in Munich in 2006. The reason that this working Group was started in the first place was to bring more young surveyors into the network in FIG and because of the age structure within the surveying community in the western world. Rome wasn’t built in one day and neither was this working group. But since 2006 we have come quite a long way and in 2009 the working group was upgraded to a Young Surveyors Network in Eilat, Israel.

In the creation of the Young Surveyors Network within FIG a lot of experience and input has been gathered throughout the years. We are on the way to create a global network, and we are sure that there are many young surveyors throughout the world who want to take part in this network.

With this meeting we are especially addressing the European Young Surveyors. It is the first of its kind in Europe organised by the FIG Young Surveyors Network and its great aim is to establish a European Branch of the FIG Young Surveyors Network working closely together with CLGE.

For more information about the Network and the current workplan have a look at the homepage: www.fig.net/ys/index.htm
FIG FOUNDATION

The purpose of the Foundation is the funding of educational and capacity building projects and scholarships.

The foundation gives grants and scholarships to projects, for instance to develop curricula for surveying education, training and capacity building, especially in developing countries. And it supports by seed funding conferences, meetings of young surveyors and similar events in cooperation with international agencies such as the United Nations.

For more information about the FIG Foundation and their grants have a look here: www.fig.net/figfoundation
Past Events

1st FIG Young Surveyors European Meeting
Lisbon, Portugal

2st FIG Young Surveyors European Meeting
Berlin, Germany
Organisers & Team

YSN – FIG

Eva-Maria Unger  
[Austria]

Paula Dijkstra  
[The Netherlands]

Local YSN representative

Georgi Zlatanov  
[Bulgaria]

Preparation of the program

Franka Grubisic  
[Croatia]

Ferah Pirlanta  
[Turkey]

Casper_Fibaek  
[Denmark]

Eftychia Kalogianni  
[Greece]
Communication & Social Media

Anna Shnaidman [Israel]
Aliona Scutelnic [Moldova]
Kalogiannakis Michalis [Greece]
Inês Vilas Boas [Portugal]
Martina Idžanović [Croatia]

Logistics & Registration

Sören Leitz [Germany]
Georgios Rigopoulos [Greece]
Xhemail Islami [Macedonia]
Katarina Vardic [Croatia]
Nyncke Emmens [The Netherlands]

Finances & Sponsors

Edgar Barreira [Portugal]