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# European Council of Civil Engineers

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## Two years of work

by ECCE President Prof. Fernando Branco



After two years, this will be the last ECCE e-Journal to be issued under the present Executive Committee, so it is the moment to make a summary of this ECCE period.

During these years, Europe faced the continuation of an economic crisis that was particularly felt in the Construction Sector and among our Civil Engineers members. It was a period of discussion of how Construction should evolve and ECCE clearly defined the direction with its motto to pass the crisis: "The 3Is - Investment, Innovation and Internationalization". This position allowed ECCE for the first time to have a seat in the "High level Tripartite Strategic Forum" where the investments and the innovation of the Construction in Europe were discussed, leading to proposals submitted directly to EU Commission.

Besides this important position in Brussels, ECCE also participated in meetings with associated European organizations developing the discussion of the main issues from education, to the application of EU Directives (Mobility, Procurement, etc.). Strengthening its

position in Brussels, and after the success of the 1st Engineers Day in 2011, ECCE is now co-organizing in Brussels the 2nd Engineers Day, next 20th of November, with the participation of EU experts.

At international level, cooperation agreements were signed with ASCE, KSCE and JSCE and recently ECCE was involved in the cooperation with the Arab Countries through the creation of the Association of the Mediterranean Countries.

Internally, to make ECCE more attractive to our members, we began the publication of the ECCE Newsletter, now the e-Journal, with the description of our activities, information about what is going on in Brussels and publishing member countries activities and their major civil works. The e-Journal is sent to a multitude of members and is already a success. Also the ECCE website was renovated and all activities are there permanently displayed. A new ECCE book on "Pedestrian Bridges" is also expected for next October, representing an important editorial effort for our members.

The internal discussion of the major European Civil Engineering problems was implemented with a new agenda format, associating one International Conference to each ECCE General Assembly. We discussed in Lisbon the "Changes in Civil Engineering", the "Water Shortage" in Cyprus, the "Seismic Design and Rehabilitation" in Tbilisi and the "Innovation in Bridges" will be dealt with in our next meeting in Warsaw. The work of the Standing Committees is the basis of

ECCE international positions and their coordination was also reorganized to optimize their results.

All these activities were illustrated in several contacts with European Engineering Associations, still outside ECCE, trying to bring them to our cluster, and showing the importance of having a strong network of European Civil Engineer Associations.

Two years passed and a new ExBo will soon take care of ECCE. Some ideas were not able to become finalized during this period, like the "ECCE Civil Engineering Card" or the UNESCO "International Day of Civil Engineering". Nevertheless, passing the testimony, I am sure that the new members will go on trying to achieve a bigger ECCE, always in the first line of representing the European Civil Engineers.

Fernando Branco

# 2nd European Engineers' Day: "Mobile Engineers build an Innovative Europe"

20 November 2014, Sofitel Brussels Europe, 1 Place Jourdan, Brussels

On 14th June 2014, the Meeting of the Organizing Committee of the 2nd European Engineers' Day was held in Vienna, hosted by ECEC – Arch+Ing. In this Meeting ECCE was represented by ECCE President, ECCE Vice President/ President Elect Mr. Włodzimierz Szymczak and ECCE Past President Mr. Vassilis Economopoulos. During this Meeting all the matters regarding the 2nd European Engineers' Day were finalised. The scope of the event and the preliminary agenda were agreed as well as the common online registration through FEANI website.



Participants in the meeting of the 2nd EED Organizing Committee in Vienna

## Scope of the event

Engineers' impact is visible in every aspect of human life: through increasingly more sophisticated inventions, techniques and equipment they enhance and irrevocably change

society. Professional Engineers design and operate large projects and make society a better place to live: their solutions are always designed with economic, safety and functionality considerations in mind. Sustainability of the environment and aging infrastructures, deployment of innovative renewable sources of energy, increased quality of life, economic growth: they all await and expect engineering solutions. Therefore, in this globalized world, internationalization and cross-border recognition of engineering qualifications are important and vital to forge a better future for society.

The European Engineers' Federations ECEC, FEANI, ECCE, together with EFCA, ENAAE, CLGE and CLAIU wish to extend the public knowledge and appreciation of the engineering profession, their education and professional concerns and the capacity to solve the arising problems in a changing world, on this unique event. Public understanding of the engineering profession and its underlying science are important to support the calls for funding, as well as to enhance the prospect for successful adoption of innovative technical

solutions. Meeting many of today's challenges associated to present society and environmental changes will also require unprecedented levels of public funding. As they have done throughout history, engineers will have to integrate their methods and solutions with the goals and desires of all society's members in Europe.

The "2nd European Engineers' Day" on 20 November 2014 will analyze those challenges and offer opinions and presentations of expert speakers. The European Engineers' Day will offer a forum for critical dialogue and participation and will focus amongst others on how engineers are educated and engaged in continuing professional development to better prepare them for the challenges ahead in building the coming new world. Students, researchers, entrepreneurs, scientists and policy decision makers are invited to take part in this unique event.

## REGISTRATION

For registrations please follow the link [here](#) through FEANI website.

## ACCOMMODATION

For accommodation options please visit the [ECCE webpage](#)



From left to right: Mr. Remec, Mr. Szymczak, Ms. Hammerschlag, Mr. Branco, Mr. Thürriedl, Mr. Economopoulos, Mr. Brandi

## Preliminary Agenda of the 2nd European Engineers' Day "Mobile Engineers build an innovative Europe"

20 November 2014

Sofitel Brussels Europe, 1 Place Jourdan, Brussels

9.00 – 10.00 Registration

10.00 – 10.30 Welcome Greetings by the Presidents of ECEC, FEANI and ECCE

10.30 – 10.45 Welcome Speech by a Representative of the EU Institutions  
Morning session "Mobility and Regulation"

10:45 – 11:00 Representative of EU Commission DG Markt

11:00 – 11:15 The public interest in professional regulation, MEP RA Dr. Andreas Schwab (GE)

11:15 – 11:30 The status of the engineer in society and the importance of mobility, Mr Alan Stilwell CEng MICE (UK)

11:30 – 11:45 Engineering Challenges for a future Europe, Prof. Dr. Fernando Branco (PT)

12.00 Round Table

13.00 – 14.00 Lunch + Networking

Afternoon Session "Delivering Client Value"

14:15 – 14:30 Representative of EU Commission DG Markt

14:30 – 14:45 Accreditation of Continued Engineering Education, Prof. Dr. José Vieira (PT)

14:45 – 15:00 The Relationship between price and quality of engineering services, Prof. Dr. Hans Lechner (AT)

15:00 – 15:15 Internationalization of Engineering Activities, CivEng NTUA Vassilis Economopoulos (GR)

15.30 Round Table

16.30 Conclusions by the Presidents of ECEC, FEANI and ECCE

17.00 End

## 1st Conference of the Mediterranean Engineers Cooperation

The 1st Conference of the Mediterranean Engineers Cooperation was held with a great success on 8-10 May 2014, in Lecce (Salento, Italy) organized by the Consiglio Nazionale degli Ingegneri (CNI) with the collaboration of the Regional Council of the "Order of Engineers of Puglia" and the "Order of Engineers of Lecce" under the patronage of WFEO (World Federation of Engineer's Organizations).



Group photo of the Conference

The creator of the whole concept and the general coordinator of this important initiative, having also the follow up of it, is our colleague Eng. Nicola Monda (CNI Council Responsible on International Affairs).

The goal of the Conference was to facilitate the cooperation between the wider sector of engineers to promote the development and preservation of the Mediterranean area, as well as their professional activities into this part of the world.

The indicative topics on which the EAMC Cooperation focused are:

- Facilitation of the Engineers' Mobility in Mediterranean Area

- Exchanging Information on national engineering education and professional systems, contributions to International surveys and reports including the UNESCO Global Engineering Assessment project
- Establishment of Technical Committees on thematic topics of interest to the Mediterranean Area in collaboration with FAE and WFEO
- Sharing and transferring innovative technologies in particular those related to safe water and sanitation, water-recycling systems, waste treatment and energy efficiency
- Safeguard of the cultural and social heritage, promotion, restoration and renovation of the built environment, Climate change adaptation of infrastructure

On the topic concerning the cultural, historical, architectural and engineering heritage in Mediterranean Area a Round Table took place with the coordination of our ECCE ExBo Member Prof. Massimo Mariani who is an expert on this topic.

The initiative occurred in Lecce is clearly future oriented, and will be helpful to promote the development of a common language for engineering matter itself. It also wants to demonstrate how cooperation policies in a wide range of sectors like economics, finance as well as in the social and cultural field, between the countries of this precious

area, full of potentialities and opportunities, may represent a comprehensive resource for both Italy and Europe itself.

The European Council of Civil Engineers (ECCE) was represented by Mr. Vassilis Economopoulos, ECCE Past President and Chairman of the Standing Committee on Associate Membership who had a greeting speech in the ceremony of signing the EAMC Statement of Intent. He participated also in the Round Table of Engineering Profession and Mobility in Mediterranean Countries, he presented ECCE and its targets and priorities at the General Meeting of the Presidents of the Regional Departments of CNI and he also participated in the meeting of the Organizing Committee for the preparation of the 2nd European Engineers' Day.

The Engineering Associations of Mediterranean Countries (EAMC) - Chambers and Engineering Organizations invited by CNI to sign the Intention Statement of Cooperation were from: Albania, Algeria, Cyprus, Egypt, Greece, Italy, Lebanon, Libya, Malta, Morocco, Palestine, Portugal, Slovenia, Syria, Tunisia and Spain. The whole initiative was held under the auspices of WFEO (President Eng. Marwan Abdelhamid) and in Cooperation with the Federation of Arab Engineers (President Prof. Adil Ibrahim Al-Haditi).

For more information about the Conference visit the following [link](#).

## 59th ECCE General Meeting & International Conference "Seismic design & rehabilitation of buildings"

The 59th ECCE General Meeting was held on 31st May 2014, in Tbilisi, Georgia hosted by the Georgian Society of Civil Engineers (GSCE) combined with the International Conference "Seismic design & rehabilitation of buildings" organized by ECCE, GSCE and World Council of Civil Engineers (WCCE). The International Conference was held on 29th - 30th May 2014, at the Georgian Technical University. Both events were fruitful and suc-

cessfully organized. A [Declaration](#) was signed at the end of the Conference by the Presidents of the three organizations.

Main materials from the 59th ECCE General Meeting can be found at the following links:

- [59th ECCE GAM General Presentation](#)
- [ECCE brief activity report Nov 2013 - May 2014](#)



Group photo of the 59th ECCE General Meeting

Main materials from the International Conference "Seismic design & rehabilitation of buildings" can be found at the following links:

- [Opening of the Conference by ECCE President](#)
- ["Antiseismic policy of Greece" by Linda Pelli](#)
- ["Seismic Risk Mitigation Studies: The Portuguese Experience" by Alfredo Campos Costa](#)
- ["Seismic behaviour of buildings" by Peter Fajfar](#)
- ["The EUROCODE 8: Applications to Buildings and Bridges" by Joao Azevedo](#)
- ["Changes in seismic response due to ground surface subsidence in Mexico City" by Raul Aguilar Becerril](#)
- ["An overview for practicing engineers: Seismic rehab of RC structures" by Tugrul Tankut](#)
- ["Simulation of seismic action for Tbilisi city with local seismological particularities and site effects" by Paata Rekvava and Ketevan Mdivani](#)
- ["Rikoti tunnel operational problems and seismic stability" by M. Kalabegishvili, I. Gudjabadze, Z. Lebanidze](#)



## Know your EU: Directorate – General Internal Market & Services

The Internal Market and Services Directorate General (**DG MARKT**) is one of the Directorates General and specialized services which make up the European Commission.

Its main role is to coordinate the Commission's policy on the **European Single Market** and to seek the removal of unjustified obstacles to trade, in particular in the field of services and financial markets.

The Internal Market and Services DG is based in Brussels and has a staff of approximately 500, working under the political authority of Commissioner [Michel Barnier](#) and managed by Director General [Jonathan Faull](#).

### Mission

The DG's mission is to develop and maintain a dynamic and open European single market that enables citizens to meet the challenges of globalization. The aim is to provide a regulatory environment that enhances competitiveness, stimulates innovation, and promotes financial stability. DG MARKT also aims to improve the range and quality of products and services available at competitive prices throughout the Single Market in order to deliver higher living standards, better job opportunities, and a prosperous economic future for all citizens.

In this context, the Internal Market and Services Directorate-general is directly responsible for proposing and – once laws are adopted by the European Parliament and

Council – controlling the implementing of a European legal framework in the following specific areas: regulated professions, services, company law and corporate governance, public procurement, intellectual and industrial property and postal services. In the area of financial services, it aims at establishing the legal framework for the integration of the Union's capital markets and the creation of a single market for financial services.

The first role of the Directorate-general is therefore to bring forward proposals for legislation aiming to remove barriers, thus simplifying life for consumers and for businesses, stimulating competition, reducing prices and widening choice. This involves not only making it easier for goods and services to circulate, but also making it easier for EU citizens to work and to live in other EU countries.

The second responsibility of the Directorate-General is to ensure that the opportunities offered by the Single Market are fully exploited. It does so by controlling the full and timely respect of Community law in co-operation with the Member States and by monitoring closely how EU law is being applied in practice.

The third task for the Directorate-general is to inform citizens and businesses about the rights they have within the Single Market and of the benefits available to them.

More details on our mission, activities and priorities can be found in the DG Internal Market and Ser-

vices' [Management Plan for 2014](#).

### Impact assessments and evaluations

The European Commission and DG Internal Market and Services in particular are committed to increasing the role impact assessment and evaluation play in improving law-making in the EU and making administration more efficient. The existing system for evaluation of expenditure programmes has gradually been extended to cover non-spending areas, such as legislative and regulatory activities and policies. The *Better Regulation* package adopted by the Commission in June 2002 complemented these ambitions by establishing impact assessment as a tool to improve the quality and coherence of the policy development process.

Evaluation and impact assessment are organized in a decentralized way in the Commission. Directorates General and Services are responsible for implementing the respective functions and activities. Yet, Commission-wide networks have been set up to co-ordinate activities on Commission level. They are organized by central units in DG Budget and in the Secretariat General for evaluation and impact assessment, respectively.

### Work programme

The multi-annual evaluation programme contains information on evaluations and impact assessments planned for the years ahead.

While the work programme for the

current year is rather definitive, it should be noted that the programme for future years is more of an indicative nature, as new proposals might emerge or some of those currently scheduled might be postponed or even dropped.

- [Multi-annual evaluation programme 2012 – 2014](#)

### Departments

The DG MARKT is divided in eight departments which are the following:

- Directorate A – Resources and Communication
- Directorate B – Governance of the Single Market
- Directorate C – Public Procurement
- Directorate D – Intellectual Property
- Directorate E – Services
- Directorate F – Capital and Companies
- Directorate G – Financial Markets
- Directorate H – Financial institu-

tions

For more information about each department, please visit this [link](#).

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### Expert Groups

#### Role and mission of expert groups

Expert groups are consultative bodies that advise the Commission on the preparation of legislative proposals and policy initiatives, the implementation of legislation, programmes and existing Union policies, and the preparation of delegated acts. The Commission and its services remain fully independent with regard to taking into account the views expressed by expert groups. Over the years, there have been a number of expert groups working in the areas covered by DG Internal Market and Services (DG MARKT). These groups, like all other groups created by other Directorates General of the Commission, are published in the Register of Commission expert groups and other similar entities.

More on expert groups can be found [here](#).

(Source: [DG Internal Market and Services](#))

## NEWS FROM EU & OTHER ASSOCIATIONS

### European Elections



From 22 to 25 May 2014, elections to the European Parliament were held in the European Union.

It was the 8th parliamentary election since the first direct elections in 1979, and the first in which the pan-European political parties fielded candidates for president of the Commission. The candidates, sometimes referred to by the German term Spitzenkandidaten ('top candidates'), were Jean-Claude Juncker for the European People's Party, Martin Schulz for the Party of European Socialists, Guy Verhofstadt for the Alliance of Liberals and Democrats for Europe, Ska

Keller and José Bové jointly for the European Green Party and Alexis Tsipras for the Party of the European Left. The Alliance of European Conservatives and Reformists and the European Alliance for Freedom declined to nominate candidates.

While the European People's Party lost ground to the Progressive Alliance of Socialists and Democrats, it remained the largest faction in the new parliament, implying that Juncker may assume the presidency provided that he is elected by a qualified majority of the European Council as well as a simple majority in the new parliament. Additionally, far-left, eurosceptic, and nationalist parties gained ground at the expense of federalist groups.

A full list of the newly elected MEPs can be found [here](#).

### European Council, 26-27 June

EU leaders met in Brussels, where they signed Association Agreements with Georgia, the Republic of Moldova and Ukraine and designated Jean-Claude Juncker as next Commission President.

"Let me begin by expressing on my own behalf and on behalf of the European Commission my congratulations to Jean-Claude Juncker on his nomination by the European Council as President-designate. I have known Jean-Claude Juncker for more than 20 years. We have been working in very many capacities together and I really believe that he is a committed European and a political leader with exceptional experience. Myself and the Commission will do everything possible in the coming months to assure a smooth transition between this Commission and the next one."

For the full article please visit the link [here](#).

### Martin Schulz re-elected president of the European Parliament



German Socialist Martin Schulz was elected to another 2½ year term as president of the European Parliament during the body's first session.

"This Parliament is the heart of democracy at the EU level. The European Parliament will always be on the side of the people, working to improve the daily lives of hundreds of millions Europeans. The European Parliament will work in a dignified and fair manner based on respect and non-discrimination. On behalf of this Parliament, I will work with even greater vigour, transparency and visibility in all that I do for Europe."

Martin Schulz, The President of the European Parliament

### Jean-Claude Juncker President of the European Commission



Jean-Claude Juncker has been elected President of the European

Commission by a strong majority of 422 votes in the European Parliament plenary session.

After being proposed as candidate for Commission President by the European Council on 27 June 2014, Jean-Claude Juncker needed a majority of 376 votes in the European Parliament.

Speaking ahead of the vote, he presented his political guidelines for the next European Commission as set out in a document entitled [A new start for Europe: My agenda for Jobs, Growth, Fairness and Democratic Change](#).

[Read the key quotes from Jean-Claude Juncker's presentation](#)

[Download a summary](#)

### Italy takes over Council Presi-

### dency from July

On 1 July 2014, Italy took over the six month rotating Presidency of the Council of the European Union. The Italian Prime Minister, Matteo Renzi, set out plans for the Italian presidency in his opening speech at the European Parliament on 4th July.

Growth and employment, strengthening citizens' rights and a stronger role for Europe in the world will be Italy's priorities during its 6-month presidency of the EU.

The Italian presidency coincides with the first 6 months of a new European Parliament - elected in May - and the start of a new trio of presidencies, with Latvia and Luxembourg to follow Italy. The 3 governments have drawn up the work programme for the EU Council's next 18 months.

More information can be found [here](#).

### CE Marking for construction products



The [CE mark](#) is a claim that a particular construction product can be legally

placed on the market of member states of the European Economic Area (EEA) and is based on the principal that the product specification, and therefore, the product is "fit for purpose".

Under the Construction Products Regulation (CPR), which has superseded the Construction Products Directive (CPD), as the main legal instrument affecting the European construction industry, there exists a legal obligation for manufacturers to provide proof of their products "fitness for purpose".

The European Commission has issued a short [video clip](#) showcasing CE marking for construction products. This video is now available in [French](#), [German](#) and [Italian](#) in addition to [English](#). You can also find the English version with subtitles in [Greek](#), [Spanish](#), [Dutch](#), [Polish](#), [Romanian](#) and [Lithuanian](#).

For more information about this video, please send an email to [cemarking@iservice-europa.eu](mailto:cemarking@iservice-europa.eu).

You can also find more information on competitiveness in the construction industry by visiting this [link](#).

### "Sustainable Buildings" initiative

The European Commission on 1st July 2014 adopted the [Communica-](#)

[tion "Resource efficiency opportunities in the building sector"](#) based on an [Impact assessment roadmap](#). The general objective of this initiative is to reduce the environmental impact of buildings by improving the overall resource efficiency and, as a consequence, improve the related competitiveness of construction businesses.



This would be achieved by the following specific objectives:

- Raise awareness of and demand for better environmental performing buildings, among private consumers, developers and public purchasers;
- Improve knowledge and information regarding resource use and related environmental impacts in relation to buildings in order to support decision making among designers, architects, developers, construction companies, construction product manufacturers, investors, consumers etc;
- Remove the barriers created by different sets of requirements concerning the environmental performance of buildings;
- Improve material efficiency, including the prevention and management of construction and demolition waste;
- Support more intensive use of buildings in order to reduce the need for further built environment (e.g., use empty buildings instead of building new, use buildings for more than one purpose when suitable, build flexible buildings to be adapted to new functions or changing needs when appropriate).

To this end, the Communication focuses on two main areas:

- Influence decision-making (by different actors) along the life-cycle of a building by providing relevant and comparable information regarding environmental performance, through the development of an assessment framework with core indicators
- Increase the use of recycled materials in the construction of buildings, by fostering a better functioning market for recycled construction and demolition waste

For further information on this subject please visit the link [here](#).

### 'Repairing' EU transport network 'crucial' to economic growth

The successor of EU transport commissioner, Siim Kallas, who has declared his retirement, is going to find their new office under significant renovation. At the end of 2013, the European commission announced the most substantial overhaul in its transport policy since its inception, by replacing the existing pattern of fragmented infrastructure projects with a grid of nine major transport corridors, the backbone of the trans-European transportation network known as TEN-T. The corridors, such as the 'Baltic-Adriatic corridor' (connects Polish coast and Italy) or the 'Atlantic corridor' providing links between France and Spain, span across the EU in order to connect its most important airports, cities, ports and industry hubs. Each of the corridors

comprises of at least three means of transport and is planned to provide the best conditions for combining road, rail, water and air transport. The corridors will consume a majority of the €26bn funding for transport within 'connecting Europe'. This shows a shift of the EU's transport policy to a more streamlined way of investing. For the full article please visit the [link](#).

### Ongoing tender for a service contract relating to: "Competitiveness of EU construction sector - Observatory"

COSME is the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (SMEs) running from 2014 to 2020 with a planned budget of €2.3bn.

COSME will support SMEs in better access to finance; access to markets; supporting entrepreneurs; and more favourable conditions for business creation and growth.

Tender No. EASME/COSME/2014/001 for a service contract relating to: "Competitiveness of EU construction sector - Observatory"

Open procedure

**Closing date: 18.08.2014**

**Specifications No EASME/COSME/2014/001**

More information [here](#) and all calls related to COSME [here](#).

# ECCE STANDING COMMITTEES

## ENVIRONMENT & SUSTAINABILITY

### ECCE and European Water

#### Initiatives - Questions - Actions

#### Background

The European Council of Civil Engineers (ECCE) is now an adult European player, lobbying and acting on the European civil engineering platform. To achieve this position much water has to flow the Rhine/Thames/Duero/Po/Mtkwari etc. downwards.

Obviously this well-known idiom can be used also for the most recent topic, which has been touched by the Standing Committee Environment and Sustainability: Water!

Based on the very successful 2nd ECCE conference "Water Management in Europe", which has been held in Cyprus together with the 58th ECCE General Assembly on the 25th October 2013, one of the speakers was George Demetriou, Cyprus, about "Water Loss Management" the SC E&S has started an action plan on collecting relevant water data from all ECCE members.

### 2<sup>nd</sup> ECCE CONFERENCE WATER MANAGEMENT IN EUROPE 25<sup>th</sup> October 2013 – Cyprus Hilton Hotel Nicosia, Cyprus



All participating delegates in the meeting agreed upon it. Since the "water field" of this conference was much too wide spread, it was agreed to stress the work on the following three topics, which seemed to be of most importance:

- Monitoring and assessment of surface and ground water;
- Managing water resources;

- Water loss management

Thus, a questionnaire was sent to all ECCE members, asking for more general data – and at least only for giving public website addresses – in English -, dealing with the respective water subject.

#### Co-operation possibilities

This is insofar astonishing as ECCE's daughter World Council of Civil Engineers (WCCE) is very successful and worldwide known as an active UN water partner and involved in the work of the International Decade for Action "Water for life 2005 – 2015". WCCE became this strong partner very much due to the fact that its president and the respective Standing Committee "Water" deals professionally with this topic.

ECCE is a European association, but by this also a strong world player, especially as many of its members are strong in a number of relevant water topics and actions. This has been clearly shown in the recent Cyprus water conference. This can be realized also by participation and announcements in water related international conferences. The latest one was published by Vassilis Economopoulos who informed about the initiative and "Cooperation between the Engineering Associations of Mediterranean Countries (EAMC) under the auspices of World Federation of Engineering Organizations (WFEO), which has been supported strongly by our Italian ECCE member CNI and has been visited also by our ECCE president professor Fernando Branco.

As can be seen one of the objects this initiative targeted is "Sharing and transferring innovative technologies in particular those related to safe water and sanitation, water recycling systems and waste treatment". Of course, the specific targets of our Mediterranean members like Cyprus, Turkey, Greece, Italy, Malta and Spain with respect to water issues may differ from those of the other ECCE members it is clear that there is also knowledge about these issues – and even more experience to come up with such water issues like water management, water distribution, water pollution, floods etc.

So, why not collect the knowledge of all our ECCE members in this very important water field and by this producing a strong synergy effect? And why not speak with one ECCE voice at relevant "water events" in Europe and internationally? Why not co-operate with WCCE, which is an internationally well-known „water player“? The visit of the WCCE president Tomas Sanchez at the ECCE General Assembly in Tbilisi offered a first possibility for ECCE to do so internationally, when he invited ECCE to be one of the five keynote speakers in Zaragoza, Spain, to prepare the next World Water Day, which takes place in South Korea in April next year.

The world water day of this year was held connecting water with energy, as can be seen in the picture on right. This is a combination, which may be an important national market related question in some of our ECCE members. Very actual it is part of a Georgian investment initiative, about which Vassilis Economopoulos has informed us recently, see table 1 below. Even not part of our actual ECCE targets it shows possible actions to be taken when discussing water actions and problems.

ECCE could also contribute actively to water issues in cooperation - or through its members – with the World Water Council (WWC). The pact for water security and its strategy for the period 2013 – 2015 concern also ECCE member nations or at least many of their great cities. So, „today, more than a thousand cities are signatory to the Istanbul Water Consensus which must evolve and take advantage of recent urban specificities to better respond to the expectations of the signatory municipalities“. This is a summarizing statement of the last year's meeting of WWC.

#### European water associations

Many national water associations are members of at least four leading European water associations as follows:

- International Water Association (IWA);
- European Water Association (EWA);
- European Association of National Water Associations (EUREAU);
- Water Supply and Sanitation Technology Platform (WssTP)

The **European Environment Agency** gives an interesting and very actual overview on the specific tasks of these associations and their European influence in the following EEA Technical report | No 5/2014 "Performance of water utilities beyond compliance: sharing knowledge bases to support environmental and resource-efficiency policies and technical improvements".

From this Agency report the following descriptions are given as follows:

1. The **International Water Association** (IWA, [www.iwahq.org](http://www.iwahq.org)) is a "worldwide network for water professionals and companies. It is represented in 130 different countries through its 10 000 individual and 500 corporate members. The IWA network publishes the magazine WATER 21 and a range of journals, books ... and electronic services". The next World Water Congress and Exhibition takes place in

Lisbon on 21 – 26 Sept. 2014.

2. The **European Water Association** (EWA, [www.ewa-online.eu](http://www.ewa-online.eu)) "comprises of 25



European national associations representing professionals and technicians in the field of wastewater and water utilities, as well as academics, consultants and contractors. In total it sums up to about 50 000 indirectly represented professionals. It is an independent non-governmental and non-profit organization that aims to cover the whole water sector (wastewater as well as drinking water and water-related waste. The headquarter of EWA is situated in Hennef, Germany”.

3. The **European Federation of National Associations of Water Services** (EUREAU, [www.eureau.org](http://www.eureau.org)) “represents water and wastewater operators at EU level. It is the ‘voice’ of 70 000 utilities, reflecting the full diversity of European water and sanitation services and representing public, private and mixed operators. EUREAU members collectively provide water services to more than 400 million people in Europe. ... Currently EUREAU covers 24 of 28 EU member countries (all but Estonia, Latvia, Lithuania and Slovenia) and the two EFTA countries Norway and Switzerland and the observer Serbia”.

4. The **European Technology Platform for Water** (WssTP, [www.wsstp.eu](http://www.wsstp.eu)) is initiated by the European Commission in 2004 and “strives to promote coordination and collaboration of research and innovation in the European water sector ... It comprises of 101 members and has a network of more than 700 individuals and 315 contributing organizations across 18 countries”.

WssTP features and roadmap to a resource efficient Europe as part of the EU Energy Efficiency Directive is to be read right: According to the recent flood situation in Croatia, Serbia, Slovenia this “road” became a little bit stony.

As of 2014, WssTP has 16 WGs:

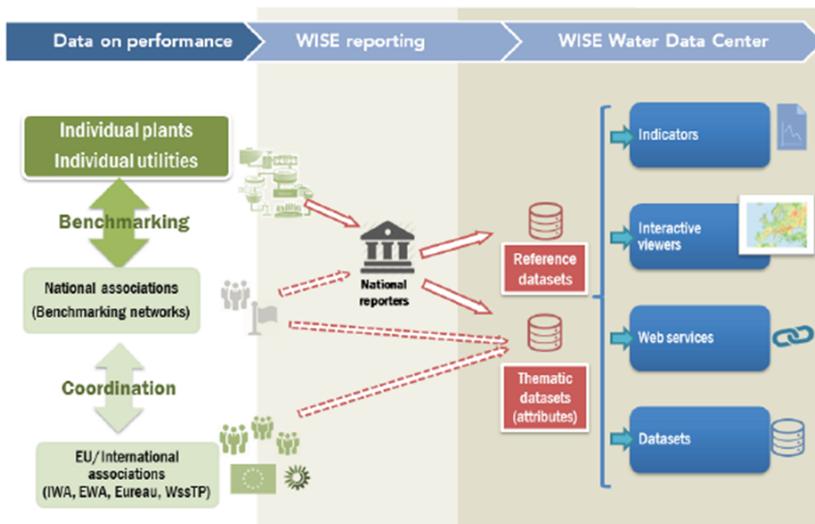
- Financing for EU Competitiveness
- Water & ICT
- Water-Energy-Food Biodiversity Nexus
- International Relations
- Water and Industry
- Techwatch
- Resource Recovery
- Membrane Technologies
- Emerging Compounds
- Urban Water Pollution
- Bathing Water
- Agriculture & Irrigation
- Eco-System Services
- Green Infrastructure
- Managing Hydroclimatic Extreme Events
- Shale Gas

Milestone: by 2020, all WFD RBMPs have long been implemented. Good status — quality, quantity and use — of waters was attained in all EU river basins in 2015. The impacts of droughts and floods are minimised, with adapted crops, increased water retention in soils, and efficient irrigation. Alternative water supply options are only relied upon when all cheaper savings opportunities have been taken. Water abstraction should stay below 20 % of available renewable water resources.

**Statistical data**

Statistical data can be gathered from the Water Information System for Europe (WISE, [www.water.europa.eu](http://www.water.europa.eu)), which is a partnership between the European Commission (DG Environment, the Joint Research Centre and Eurostat) and the European Energy Agency. The network is sketched roughly in figure 7.1 (EEA).

**Figure 7.1 Conceptual overview of options for sharing data on performance beyond compliance**



**ECCE member examples**

ECCE is an association of different national members with different and sometimes diverging interests. This is the fact also with respect to water issues. But in general the “water street” is of great importance to go in a coordinated manner, because many “normal water issues” have changed dramatically due to climate change, population growth, overuse of water etc.

**United Kingdom**

So, even in water rich countries like the United Kingdom a close eye is put on “water as bloodstream of the biosphere and it is a vital and precious resource, which the developed world too often takes for granted”. This is the wording of Richard Coackley, former ECCE president, in the ICE “State of the Nation Report on Water 2012”. The official recommendations of ICE are given here.

And: “Understanding water and its interdependence with food, energy and the environment is vital if water is to be managed effectively and efficiently. The challenges facing UK’s water security are with us, are serious, and require immediate attention. In the future, there will be a looming gap between supply and demand due to a growing population and the impacts of climate change”.

**Georgia**

So, it could be helpful for our relative new ECCE member Georgia, which hosted our 59th ECCE General Assembly in Tbilisi, 31. May 2014, if ECCE could distribute such information to its members and possible investors. Up to now it was not ECCE’s daily work to do so, but based on the actual water slogan 2014 this could be an actual and supportive result of ECCE work.

**Cyprus**

Water shortage e.g. by losses in Cyprus – and other ECCE member states around the Mediterranean Sea is part of the normal life. George Demetriou, vice-chairman of the SC E&S, gave an interesting paper at the 57th GA in Lisbon, Portugal, in May 2013. Looking at figure 6.4 water losses are also a EU issue, as long as it concerns losses in distribution networks.

**THE STATE OF THE NATION: ICE’S MAIN RECOMMENDATIONS**

The UK has a looming and significant challenge to its water security. As a matter of urgency ICE recommends that leadership is established to deliver a strategic, coherent and integrated roadmap to water security. ICE recommends that:

Hydropower pipeline boosts several new megaprojects above 100 MW capacity that are currently open for investment

Project	Capacity	Forecast Invest. volume USD millions	Ready to invest?
• Namakhvani Cascade	450 MW	805	●
• Khaishi HPP	400 MW	620	●
• Oni Cascade	270 MW	599	●
• Nenskra HPP	210 MW	570	●
• Tobarı HPP	200 MW	310	●
• Farı HPP	180 MW	297	●
• Lentekhi HPP	120 MW	189	●

• Hydropower pipeline also boosts ~70 small/medium projects (<100 MW capacity) that are currently open for investment

www.investingeorgia.org

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Table 1: Hydropower projects in Georgia

Figure 6.4 Schematic overview of terms used for water losses in distribution networks

System Input Volume	Authorised Consumption	Billed Authorised Consumption	Billed Metered Consumption	Revenue Water
		Unbilled Authorised Consumption	Unbilled Metered Consumption	
	Water Losses	Apparent Losses	Unauthorised Consumption	Non-Revenue Water
		Real Losses	Leakage on Transmission & Distribution Mains Leakage on Service Connections up to the point of Customer Meter Leakage and Overflows at Storage Tanks	

Source: IWA Water Loss Task Force (\*) and European Commission, 2013a (\*\*).



**Water management**  
**Non-Revenue Water Reduction Management -**  
**(Drought climates and the case of Nicosia, Cyprus)**  
 57th ECCE General Meeting – SC Environment and Sustainability  
 in Lisbon, Portugal

31 May - 1 June, 2013  
 George Demetriou  
 Cyprus Council of Civil engineers



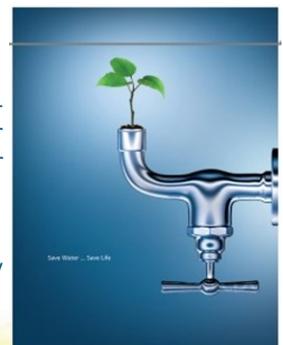
**Germany**

Germany up to now has no real problems in having water resources and adequate water management and distribution services. - But still there is a campaign to save water. On the other hand the result of saving drinking water is the stick of waste within many wastewater tubes, because the tubes and the waste dry out due to little „added or included water“ and have to be „cleaned“ or kept open by flushing them with – clear drinking - water.

**Golf as the international sports activity (!?)**

Actual golf information politics ask for “intelligent, efficient and sustainable use of water on golf courses” and by this gives a response to critics that “Many golf courses use too much water and golf courses are often criticised for taking water that could be used for a better purpose”. So, St. Andrews Links, Scotland, makes significant water savings, Centro Nacional, Spain, uses 100% sustainable sources for irrigation and Belas Clube de Campo, Portugal, does it similar. The published result is: “Sustainability pays” ([www.tourismconcern.org.uk/golf-courses-water-use.html](http://www.tourismconcern.org.uk/golf-courses-water-use.html)).

By Carsten Ahrens - Chair of Standing Committee on Environment & Sustainability –



# NEWS FROM ECCE MEMBERS

## ITALY

### Engineering and Cultural Identity

Engineering is privilege, exaltation, and cultural elevation at the same time. We live the history of mankind, and we are assisted by the presence of engineering.

Engineering is a privilege because it leaves a sign, because it may couple fantasy and doing, because only those who know may do, and those who do not know, just have to give up.

The culture of engineers is, therefore, synthesis of an idea, which – thanks to their competencies, become an implemented and useful work. In addition, it is the engineers' ability in creating sound collaborations among different professions that makes the initial idea becoming real.

Engineering derives its main source from the Enlightenment, and expresses the passage from conceiving to doing.

After years of great technical specialisation, we are beginning to reconsider the interlacing of engineering and humanistic cultures. We have to work hardy in the specific sectors where engineering and architecture cultures are created, with particular reference to Universities. There was no difference once: Brunelleschi was an engineer as well as an architect; so it was for Bernini, Borromini and Bramante, the latter being, furthermore, also entrepreneurs.



In the following centuries, Universities created the differences. At

present, in Italy, we experience the senseless situation that engineering and architecture do not even graze each other. No overlap and no bridge exist between the two cultures any longer. There is a culture of physic-math modelling and the culture of shapes and shaping, and this is wrong.

There is the same need of bringing our doctrinal disciplines – industrial and computer science engineering – back to a universal culture; as they are currently positioned in the academic world, they could merely remain confined in an exclusively specialised scope.

All that said results into newly graduates who have gained professionalisms that are not required on the market, in Italy and abroad. It seems, in fact, that industry wants open minded, flexible professionals, able to master a variety of knowledge.



Looking at the USA Universities, the collective imagination has always considered them as synonymous of technical, specialized and extremely sector-oriented formation; the same consideration applies to the Japanese Universities. They are perceived as the creators of the vision of engineering, which, to be more effective, should be segmented in little sectors of competences.

Even there, this vision is little by little disproving. Important American Engineering Universities have been gradually introducing courses in history, philosophy, anthropology, etc.

This is because engineers have to express their knowledge through

the use of words; indeed, the circulation of projects, thoughts, and principles of design is fed by humanistic knowledge, in all its meanings. Arts, the so called Muses, shall live within engineering, and almost paradoxically, young engineers shall convince themselves that good and clever professionals continue their studies also after graduation.

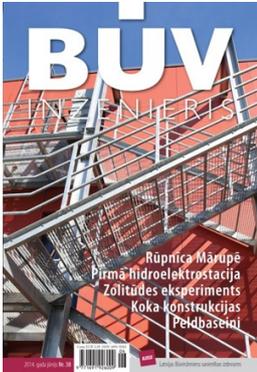
Engineering is still, and will always be, one of the main pillars of the evolution of our world, as all along its history.

Wherever they go, young engineers assert their values; we should not lose time if we want not to dissipate a heritage.

Just to value this heritage, we need to hope in a future that by preserving the past would build on it, and where young students who nowadays are proud of recognizing a teacher to follow and to remember, will be happy to see themselves as the teachers of tomorrow.

## LATVIA

### Magazine “Būvinženieris” (Civil Engineer) of the Latvian Association of Civil Engineers



In 2006, the Latvian Association of Civil Engineers (LACE) started to publish a small

magazine “Būvinženieris” containing just 48 pages to share information with its more than 750 members. Since then, the number of members is now approaching 800 but the volume of magazine has increased four times. The readership has also grown considerably as there are many other readers who subscribe for the magazine, not just the LACE members. The magazine readership now extends to civil engineers, industry administrators, designers, architects, construction managers and supervisors, scientists, academic faculty and students.

The magazine “Būvinženieris” is published six times a year. It is a practical and educational guide. Apart from specific information on news updates the magazine also offers detailed analyses of events, legislation, technologies, construc-

tions and the most recent developments in the science of civil engineering and architecture, as well as informs about the experience in other countries and interviews prominent personalities, namely engineers. The “Būvinženieris” always publishes the analysis of mistakes by experts where they also offer their solutions.

Once a year, in co-operation with the enterprise database Lursoft, based on the State Revenue Service data and the data from the annual reports of the companies, the “Būvinženieris” carries out a study of the construction industry in Latvia, investigates its trends, analyses the performance of the companies in different regions and counties, studies the scope of activity of the designer companies, etc.

The magazine organizes reader polls on a regular basis about a wide variety of subjects, such as construction supervision, architectural supervision, competence assessment of the construction specialists, qualification, and many others.

Articles about the issues of energy efficiency play a very important role. The magazine takes part in the organizational team of the contest “The most energy-efficient building in Latvia”, participating in the assessment work of the panel of judges and also organizing discussions about the energy efficiency theme. The magazine has a

special column named “Diary of the most energy-efficient building”.



In 2013, for the first time in Latvia, the “Būvinženieris” established a new tradition – a contest for the “Grand Prix of the Construction Industry” where the panel of judges consisting of 36 industry experts assess the engineers and architects working in the construction industry in two nominations: “The Lifetime Contribution Award” and “The Engineer/Architect of the Year”, meanwhile the highest prize of the construction industry in Latvia – “The Foundation Stone” is awarded by the State President and the Minister of Economy. This year the formal awards ceremony will take place on 10th September in the recently opened National Library of Latvia.

The archives and full contents of the previous issues of the magazine (2006-2011) are available [here](#).

## LITHUANIA

### Lithuania Gets National BIM Roadmap

Lithuania is gearing up to make its entry into the elite club of European states implementing Building Information Modeling (BIM) at the national level. After several years of considerations and looking at the Scandinavian example, the Lithuanian construction sector pulled together to establish a public body Skaitmeninė statyba (SKST) (Eng. Digital Construction), which has become the main advocate of BIM in Lithuania.

As soon as the Government, as

expected, delegates all the required powers to SKST it will operate as the main engine of Lithuanian BIM both at the national and international level. However, there is still a certain concern that the Lithuanian government is not yet fully aware of the benefit provided by BIM to the whole country's economy.

The Lithuanian Builders Association became the main initiator of SKST. Since the summer of 2013 it has been led by an experienced construction engineer Dalius Gedvilas, having put aside his own

business and undertaken the elimination of the problems pending in the construction sector. He takes it as a personal challenge to implement BIM at the national level.

Versed in the foreign experience in BIM implementation, Dalius Gedvilas is also well aware that the most advanced and strongest Lithuanian construction companies already use BIM in their domestic and international operations. Norway and Sweden are the main foreign markets of Lithuanian construction undertakings.

However, there is a part of compa-



**Participants of the Conference**

panies which have already mastered the use of BIM and consider it their competitive advantage. They are therefore avoiding to expose themselves or to promote BIM implementation at the national level.



**Participants of the Conference**

Such companies are primarily concerned with their own interests, while Dalius Gedvilas is preoccupied with the prospects of the whole Lithuanian construction sector, and he is good at finding like-minded people.

On March 5, 2014 the total of 13 unions and associations founded a public body Skaitmeninė statyba. Naturally, the Lithuanian Association of Civil Engineers became one of its founders. In the upcoming autumn, when the meetings of members of several more associations take the required decisions, SKST will already have about 20 stakeholders.

BIM is not a cheap toy; therefore, projects are being developed for obtaining the primary financing of operations. With the new EU financial perspective, attempts will be made to seek assistance from the EU Structural Funds.

It is anticipated in the roadmap for a one-year term approved by the stakeholders of Skaitmeninė statyba on April 28 this year.

The document provides for negotiations with the selected construction classification system owner regarding the acquisition of rights for system use and the legalising of the classification system by November 1. It is presumed that the Danish

CUNECO will be selected.

Yet another principal decision is to establish the IFC format for data exchange in Lithuania, to agree upon and to approve the minimum parameters to be applied in the IFC format regulation in Lithuania among the stakeholders of the construction process.

All that should culminate in Skaitmeninė statyba (<http://skaitmeninestatyba.lt/>) joining buildingSMART International.

Among other homework is the initiation of development and accreditation of the BIM study programme as well as the organization of studies under this study programme in higher education establishments.

It is self-explanatory and raises no doubts. However, the opinion of SKST stakeholders currently diverges whether 3D design and the application of BIM methods in objects estimated at EUR 5million or more should be made mandatory in public procurement procedures. Yes, it is eventually going to happen but should it really happen a year later?



**Dr. Håvard Bell, CEO Catenda AS, making presentation at BIM conference in Vilnius**

As for now, Lithuania eagerly gathers all information available about the use of BIM and its dissemination across Europe. The BIM conference held in Vilnius at the end of April brought together about 200 attendants. Among other things, the experts from Norway, Denmark, the United Kingdom and Finland noted that Lithuania was in a privileged position because it could still avoid the mistakes which have been made by BIM pioneers.

By Edvinas Butkus  
Executive Director

Lithuanian Association of Civil Engineers

Photos: Photos by Edvinas Butkus and LBA

**Lithuanian LNG terminal construction: a challenge of three milestones**

Currently Lithuania imports all natural gas from the only source – the Russian Federation. In order to diversify energy sources according to EU directive and National Energy Strategy, Lithuania has made decision to implement the project of Liquefied Natural Gas (LNG) terminal – first of its kind in the Baltics.



**A bird's eye view of the future LNG terminal in Lithuania**

The construction of the LNG import terminal is a national objective that needs to be accomplished in order to ensure the independence of the energy sector in Lithuania. LNG terminal is expected to create natural gas market in Lithuania, since presently country imports the entire quantity of natural gas (around 3 billion cubic meters annually) via only main gas grid laid from Russia across Belarus. Lithuania claims that the price set by Gazprom for the gas has been not fair for many years.

Once the terminal starts operating, consumers in Lithuania will have a possibility to get natural gas at the global market prices. In July 2010, the Lithuanian government empowered state-controlled stock company Klaipėdos Nafta, which operates oil import and export terminal in Klaipėda harbor, to implement the LNG project. The infrastructure works have started in 2012 and the launching of the terminal has been scheduled for the end of 2014.

The LNG terminal itself is a completely new know-how in the region and its implementation requires highly skilled professionals and engineering experts for each of the terminal parts. Works are being

carried out by international team – from the main contractors to the material and equipment suppliers.

#### Flexible FSRU technology

The LNG terminal will be based on three elements: FSRU (Floating Storage Regasification Unit), jetty and the pipeline.



**Civil works of the Jetty in progress**

Klaipėdos Nafta is developing the infrastructure and will be operating the terminal. The main activity of the terminal will be to receive LNG from ocean going LNG carriers, store LNG, regasify it and supply gas to the main gas grid. It will also offer a service of reloading LNG into smaller vessels for the supplies to smaller LNG import terminals, bunkering of LNG-fuelled ships and other purposes.

FSRU technology was chosen over an onshore terminal for several reasons. FSRU project requires a significantly lower capital investment than onshore construction and is faster to implement and involves more flexible technology. The FSRU is built by South Korean company Hyundai Heavy Industries Co., Ltd. and is contracted from Norwegian Høegh LNG Ltd. for 10 years lease period with a purchase option. The lease contract guarantees such elements as the maintenance of the FSRU and the crewing. The FSRU will be able to cover 100 per cent of Lithuanian gas demand (up to 4 billion cubic meters). The LNG vessel will be permanently moored to a fixed jetty that forms part of the marine facility.

The jetty is being constructed by Latvian company BMGS AS in southern part of Klaipėda port, the Curonian Lagoon next to the Kilaules Nugaros (Pig Back's) island. The total superstructure will cover 653 square meters.

#### Gas and service platforms

The jetty is composed of several structures: high pressure gas plat-

form, service platform, berthing and mooring dolphins, and catwalks. This is a concrete structure mounted on pillars. The base height is 6,5 m above sea level. FSRU will remain moored at the East side while at the West side of this platform a dock for service boats will be built.

Totally 134 piles were used for the jetty construction. One of the core elements of the jetty is high pressure gas platform, which will consist of pile foundations, reinforced concrete pile cap and berth for service vessels. It has been dimensioned to accommodate facilities, needed to reload gas from the FSRU, and the metallic structure for service barge berthing. This platform is a rectangle of 30 m in length and 24 m in width, supported by twenty piles distributed in five rows of four piles each. Platform's superstructure consists of a reinforced concrete slab (300 mm thick) which lies on a network of reinforced concrete beams and plates.



**Pipeline work in progress**

Berth for service vessels will be made out of steel sections. It consists of 4 main frames that will be attached to the reinforced concrete superstructure and piles. Main frames will be interconnected with three chords which in turn are interconnected by struts.

Another important part of the jetty is service platform. It relatively could be divided in three parts: pile foundations, reinforced concrete pile cap and berth for service vessels. The whole structure consists of a concrete base mounted over pillars. The service platform has been designed to accommodate

power supply, firefighting pumps and electric switchboards room. This platform is a rectangular of 30 m length and 24 m width. It consists of a reinforced concrete slab (also 300 mm thick), which lies on a network of reinforced concrete. Piles and beams distribution has been designed to avoid interferences between holes and beams. Platform is supported by 24 piles distributed in four rows of six piles each.

#### Specific connections

Six mooring and three berthing dolphins have been designed, all of them made of reinforced concrete and mounted on pillars. All mooring dolphins in the terminal consist of a 12 x 12 m slabs. The thickness of the berthing dolphins at the dock side is 4 m to accommodate the fenders. Mooring dolphins are equipped with quick release hooks, capstans and associated equipment and hardware. One of the berthing dolphins will be the base for the access gangway system.

For the communication of the whole jetty structure catwalks of the different length will be constructed. A 35 m catwalk joins service platform to the south mooring dolphin. Catwalks are made of steel box type profiles, hollow, in order to minimize the corrosion exposed area. Catwalk cross section is a rectangle of 1.50 m wide and 2.50 m high. Sides are metallic structures composed of a triangular lattice framework (truss) composed of upper beam, lower beam, diagonals and stanchions. Catwalks from high pressure gas platform to service platform have supports that hold firefighting pipes, electrical and communication cables.

Specific Agom R-Max bearings for catwalk supports on concrete decks are designed to carry combinations of vertical loads, horizontal loads, longitudinal and transversal movements and rotations. From civil engineering point of view, in total approximately 6500 cubic meters of concrete, 900 tons of reinforcement and 250 tons of steel structures will be used for jetty construction.

#### Installation with HDD

The jetty is connected to approximately 18 km a pipeline, where offshore laid pipe length is about 3 km. Through this pipeline gas will

be transmitted to the consumers.

The pipeline will originate in the Klaipeda harbor at the jetty where the FSRU is moored. Pipeline route works are being carried out by German company PPS Pipeline Systems and have started on High Pressure Gas Platform. The beginning of pipeline route in the continent is in the coast site on the Smelte peninsula in the land, which is property of Klaipeda port.

Horizontal directional drilling (HDD) technique is being provided for Curonian Lagoon crossing, where the water is 3-9 meters deep. The pipeline will be laid for flow in one direction from the FSRU to the Lithuania natural gas distribution grid. Gas pipeline is being laid from the LNG terminal through the Curonian Lagoon to the coast by drilling an underground borehole and pushing gas pipes under Pig Back's island and Curonian Lagoon at the depth of 25-35 m.

In addition to the whole pipeline infrastructure, the works include

gas send-out facilities on the jetty, a gas metering station to be located close to the tie-in point of the gas transmission grid, two main line valves sites along the pipeline route, a third one at the metering station and a fourth to provide for a connection for a future pipeline and also tie in to the existing gas distribution grid.

#### Starting this year

All LNG terminal project implementation works are being designed and executed in compliance with the requirements provided in the Environmental Impact Assessment (EIA). Construction is planned to be finished and LNG terminal will be operational from December 2014. About one billion cubic meters of gas is expected to be regasified during the first year of terminal operation. Designated supplier JSC LitGas shall import minimum gas quantity (540 million cubic meters annually) that is necessary for the uninterrupted terminal operation, therefore the terminal shall always

be operational.

Due to the strengthened environmental requirements from 2015, the vessels sailing in the Baltic Sea and the North Sea will have to consume lower sulphur content fuels. LNG, being clean fuel in terms of environmental protection, will become one of alternatives to the other fuels, as no sulphur compounds exist in its composition. Klaipedos Nafta (<http://www.oil.lt/index.php?id=home&L=1>) is looking for such business opportunity as well.

Written and translated by Klaipedos Nafta 2014.05.29

Photographs copyright Klaipedos Nafta

## POLAND

### 12th Engineers' Forum "Bridge Construction Innovations"

Traditionally, the 12th Engineers' Forum took place in Poznań, on the day of the opening of the Innovations-Technologies-Machines Fair, i.e. 3 June 2014. This year's Forum was organized by: Polish Federation of Engineering Associations – NOT, Polish Chamber of Civil Engineers, Polish Society of Bridge Engineers, Poznań International Fair and Academy of Engineering in Poland. The 12th Engineers' Forum took place in the Poznań International Fair Congress Centre, under the heading of "Bridge Construction Innovations". Among its 250 participants, the Forum featured numerous representatives of the scientific, economic and technical communities.

The agenda of the engineers' debate was interesting and aroused huge interest of the participants. The 12th Engineers' Forum was opened by the representatives of its organizers. They appeared in the following order: Ewa Mańkiewicz-Cudny, President of the Polish Federation of Engineering Associations – NOT, Andrzej Byrt, President of Poznań International Fair, Stefan Czarniecki, Vice President

of the Polish Chamber of Civil Engineers, Prof. Janusz Szelka, Chairman of the Polish Society of Bridge Engineers, and Prof. Marek Bartosik, Vice President of the Academy of Engineering in Poland. The President of the Polish Federation of Engineering Associations, Ewa Mańkiewicz-Cudny warmly welcomed all participants and guests, especially the guest of honour, Prof. Jacek Guliński, the Under-Secretary of State in the Ministry of Science and Higher Education, and Ewa Tomala-Borucka, General Director for National Roads and Motorways. Stefan Czarniecki, the Vice President of the Polish Chamber of Civil Engineers, in a short speech stressed the role and importance of construction engineers for the Polish economy and their part in the implementation of innovative technologies and materials.

The Forum's guest of honour, Prof. Jacek Guliński, the Under-Secretary of State in the Ministry of Science and Higher Education, in his speech pointed to the need for close relationships between science and business. Referring to the Forum's topic, he said that on the 'bridges' between science and economy depends the capability to

absorb structural funds by science and economy.



Pontatowski Bridge, Warsaw  
(Photo J. Rymusza)

The Forum's agenda included four panels. The first, general one, was devoted to the innovation support in the new financial framework 2014-2020, and featured the following speakers: Marcin Łata, the director of the Competitiveness and Innovation Department in the Ministry of Infrastructure and Development, Ewa Tomala-Borucka, General Director for National Roads and Motorways, Maciej Chrzanowski of the National Centre for Research and Development, and Tomasz Kierzkowski, the director of the EU Funds and Public Program Office in PEKAO S.A. In the second panel, the scientists:

Prof. Jan Biliszczuk of Wrocław University of Technology, Prof. Henryk Zobel of Warsaw University of Technology, Prof. Tomasz Siwowski of Rzeszow University of Technology, Prof. Janusz Szelka of Military Academy of Land Forces, and Prof. Janusz Rymcza of the Road and Bridge Research Institute presented the studies offer concerning the innovations in the bridge construction. The third panel, entitled 'Innovations applied in the bridge construction' included presentations by Polish companies participating in the bridge investments execution, i.e. MOSTY-ŁÓDŹ S.A., VISTAL Construction Sp. z o.o., Firma GOTOWSKI – Budownictwo Komunikacyjne i Przemysłowe Sp. z o.o., and MOSTMARPAL Sp. z o.o. The fourth panel included the presentations of professional profiles of three young innovative engineers. The following introduced themselves: Paweł Gulak, MSc Eng, of PERI Polska company, Piotr Rychlewski, MSc Eng, of the Road and Bridge Research Institute, and Paweł Hawryszków, PhD Eng, of Wrocław University of Technology.

By Bożena Makuch (Polish Federation Of Engineering Associations - NOT)

### What will the 'deregulation' bring?

The draft act on the facilitation of the access to practicing certain regulated professions, the so called 'deregulation act', has been passed by the Sejm and is currently awaiting to be signed by the President of the Republic of Poland. The works on the draft regulations lasted from September 2012.

The accepted version of the draft significantly differs from its original form, which resulted from numerous substantive discussions, legal opinions and comments from the interested communities. The legal changes concern the provisions of the Building Law act as well as the act on professional associations.

The basic assumption for the solutions adopted in the draft is the facilitation and acceleration on the way to obtaining building license enabling to practice the profession. Analyzing the nature of the changes, it should be noted that initially the following were provided:

- the possibility to obtain only an unlimited **combined license to design and supervise** construction works with no possibility to obtain separate licenses to design and to supervise
- **the inclusion of the following specialties into the civil engineering and construction specialty:**
  - \* road
  - \* Bridge
  - \* railway
  - \* demolition
- **the liquidation of the telecommunications specialty**
- **a slight shortening of the design internship**
- **the liquidation of the surveyor function.**

**As a result of numerous substantive discussions, ultimately:**

- **the possibility to obtain separate licenses** to design and to supervise construction works **was reintroduced**
- **the building licenses in all current specialties were kept**, however, under slightly different names
- **the hydraulic engineering specialty was added**
- **the possibility was introduced to obtain unlimited license** regarding execution for **1st degree engineers and** to a limited extent **by technicians and foremen**
- **the institution of a patron was introduced**, but the possibility to shorten the internship period by the patron was abandoned, contrary to the initial draft provisions
- a regulation was introduced, according to which, **the positive result at the written part of the exam is valid for 3 years from its achieving**
- **the design internship period was shortened by half**, i.e. from two years to one year
- **the possibility was introduced to be exempt from the building license exam** by the power of agreement with the university

and **the possibility to acknowledge the student internship** as a part or as the whole of the professional internship; the agreements with universities shall be signed by the chamber national bodies, i.e. the National Council of the Polish Chamber of Civil Engineers

- the regulations providing **the possibility to grant the surveyor title**, were transferred from the provisions of the Building Law act **to the provisions of the act on professional associations – the difference** in relation to the current state is:
  - ◆ the possibility to grant the title for a limited period of time
  - ◆ the requirement to be a member of the chamber
  - ◆ lack of entry into the Central Surveyor Register, maintained by the General Office of Building Control; the list of surveyors will be maintained by the Polish Chamber of Civil Engineers.

The above changes concerned the provisions of the Building Law act, while to the act on professional associations two significant changes were introduced. The first one concerns the liquidation of the urban planner professional association, while the other concerns the changes in the membership of the chamber of architects and civil engineers. According to the draft:

**the members of the Polish Chamber of Architects shall include the persons:**

1. having building license in the architecture specialty (architects and civil engineers):

- 1) to design, unlimited
- 2) to design, limited
- 3) to supervise construction works, unlimited
- 4) to supervise construction works, limited
- 5) to design and supervise construction works, unlimited
- 6) to design and supervise construction works, limited obtained on the basis of the act of 7 July 1994, the Construction Law, i.e. after 1 January 1995.

II. having unlimited license in the architecture speciality to design (architects) obtained before coming into force of the act of 7 July 1994, the Construction Law, i.e. before 1 January 1995.

**the members of the Chamber of Civil Engineers shall include the persons:**

I. having building license in all scopes in the speciality of:

- 1) civil engineering and construction
- 2) engineering:
  - a) bridge,
  - b) road,
  - c) railway,
  - d) hydraulic engineering,
  - e) demolition;
- 3) installation, covering networks, installations and equipment:
  - a) telecommunications,
  - b) heating, ventilation, gas, water supply and sewage system,

c) electrical and electrical power

obtained on the basis of the act of 7 July 1994, the Construction Law, i.e. after 1 January 1995.

II. having unlimited license in the scope corresponding to the scope of the specialties mentioned in point I, obtained before coming into force of the act of 7 July 1994, the Construction Law, i.e. before 1 January 1995.

III. having building license in the architecture speciality (architects and civil engineers):

- 1) to design, limited
- 2) to supervise construction works, unlimited
- 3) to supervise construction works, limited

obtained before the date of the coming into force of the act of 7 July 1994, the Construction Law, i.e. before 1 January 1995.

To sum up the above, it should be noted that the change in relation to the current regulations will be that **only the group of persons hav-**

**ing building license in the architecture speciality, obtained after 1 January 1995, will be obliged to be members of the chamber of architects, if the said persons would want to use the license in this scope.** The remaining membership regulations shall remain unchanged.

In view of the above, it should be noted that the regulations shall not affect the practising of the profession by individual members of the Polish Chamber of Civil Engineers, i.e. shall not require obtaining additional entry into the Chamber of Architects list.

**The discussed regulations shall come into force after 60 days from the date of the announcement of the act.**

By Dr. Joanna Smarż (Polish Chamber of Civil Engineers)

## 60th ECCE MEETING & CONFERENCE

The **60th ECCE General Meeting will be held on 17-18 October 2014 at the Sheraton Warsaw Hotel, in Warsaw, Poland**, hosted by the Polish Chamber of Civil Engineers (PCCE).

The ECCE Meeting will be combined with the **International Conference "Modern solutions in the bridges construction"** that will be held in the morning of **Friday 17th October 2014**. The International Conference will be co-organized by ECCE and PCCE.

Please find hereunder the links for further information about the 60th ECCE General Meeting and the Conference:

[60th ECCE General Meeting & Conference Information](#)



# CONFERENCES & EVENTS

**IWA World Water Congress & Exhibition 2014, 21-26 September 2014, Lisbon, Portugal** Exhibition: [secretariat@IABSENara2015.org](mailto:secretariat@IABSENara2015.org)



From 21-26 September 2014 the IWA World Water Congress & Exhibition 2014 will take place in Lisbon, Portugal. Over 5,000 global water leaders will meet in Lisbon in September 2014, to discuss innovations, science, business development and new insight and foresight for decision makers in the water sector. Included in the overall congress programme are Forums tackling key issues, bringing together current trends, latest research, guiding strategies, and leading practice; Water & Industry Forum; Water Regulators Forum; Utility Leaders Forum; Water & Cleantech Forum.

For more information visit the [IWA2014 website](#).

**Water for Today and Tomorrow, October 28-30, 2014, Tianjin, China**



WATER FOR  
TODAY  
AND  
TOMORROW

The Chinese Hydraulic Engineering Society (CHES) and the Canadian Society for Civil Engineering

(CSCE) are jointly

hosting an international conference on water resources to be held in Tianjin, China

(about a two hour commute from Beijing) during October 28-30, 2014. Tianjin is home to one of the most prestigious universities in China:

Tianjin University which will be a sponsor and contribute to local organization of the conference. There are various means of travel between Tianjin and Beijing including a bullet train that makes the trip in about 30 minutes.

**IABSE Conference 'Elegance in Structures'**

The IABSE Conference 'Elegance in Structures' will be held in Nara, Japan, from May 13-15, 2015. Participants wishing to present a paper according to the Themes and Topics, are kindly invited to submit an abstract online at: [www.iabse.org/nara2015](http://www.iabse.org/nara2015)

Themes and Topics: Historical Structures; Aesthetic Design; New Application of Materials to Structure; Innovations of Analysis, Design and Construction; Smart Solutions to Mitigate Natural Disasters; New Technological Advances on Sustainability; New Structural Form.

Abstract submission: [www.iabse.org/nara2015](http://www.iabse.org/nara2015)

Download brochure: [Preliminary Invitation and Call for Papers Sponsorship/Commercial](#)

**World Engineering Conference on Sustainable Infrastructure, 2nd - 7th November 2014, Abuja - Nigeria.**



The World Federation of Engineering Organizations) has granted approval to the Nigerian Society Engineers to host the World Engineering Conference on Sustainable Infrastructure with the theme: Development of Sustainable Infrastructure in Africa. It is scheduled to hold between 2nd-7th of November 2014 in Abuja.

For more information visit the [WECSI 2014 website](#).

**American Society of Civil Engineers**

**International Conference on Sustainable Infrastructure 2014**

**6th - 8th November 2014,,**

**Long Beach, California, USA**

Conference Objectives

Infrastructure is an essential component of national competitiveness and social well-being. Designing and delivering infrastructure systems that truly contribute to sustainability throughout their service life is the theme of this conference.

The International Conference on Sustainable Infrastructure (ICSI) 2014 will focus on sustainability in the built environment, presenting relevant engineering research, demonstrations and applications that contribute to competitiveness and well-being. Presentations and panel discussions will cover sustainable infrastructure planning, financing, design, construction and operation: how practitioners are improving sustainable performance to meet the critical challenges of a changing operating environment.

For more information visit the [ASCE website](#).

# ECCE Network

European Commission - Enterprise and Industry Directorate General



European Commission - Internal Market and Services Directorate General



European Construction Forum (ECF)



European Council for Construction Research, Development and Innovation (ECCREDI)



European Civil Engineering Education and Training (EUCEET) Association



European Society for Engineering Education (SEFI)



Council of Association of Long Cycle Engineers of a University or Higher School of Engineering of the European Union (CLAIU - EU)



European Council of Engineers Chambers (ECEC)



European Federation of National Engineering Organizations (FEANI)



World Federation of Engineering Organizations (WFEO)



World Council of Civil Engineers (WCCE)



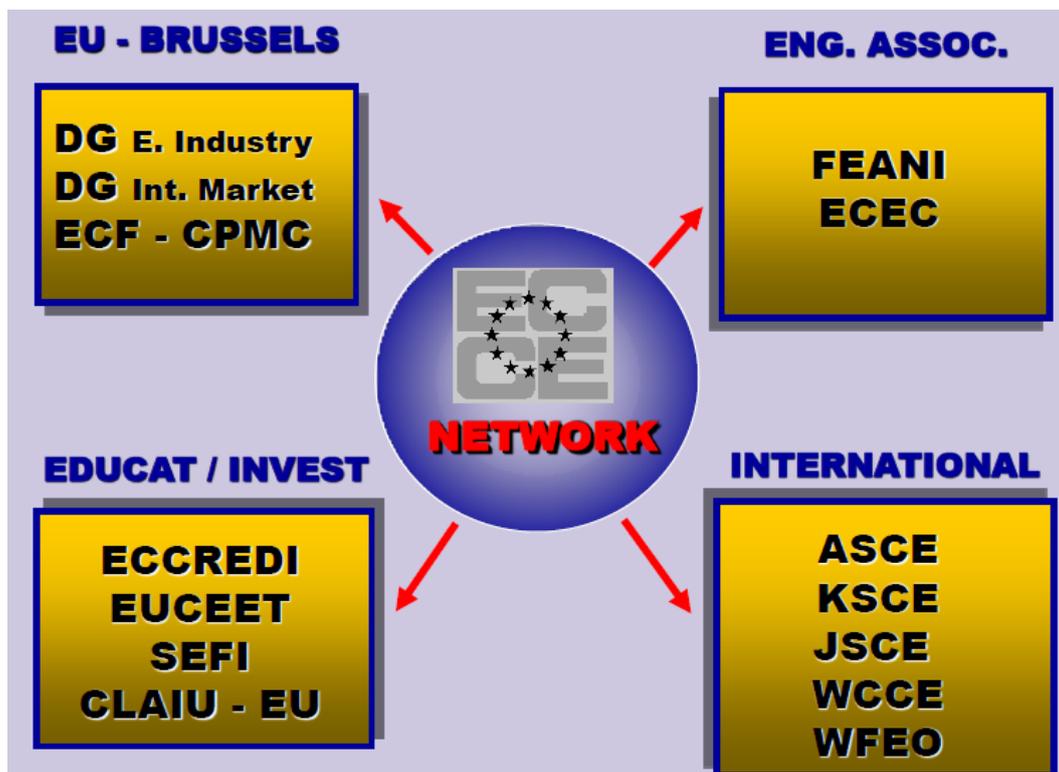
American Society of Civil Engineers (ASCE)



Japan Society of Civil Engineers (JSCE)



Korean Society of Civil Engineers (KSCE)



# ECCE Members

## BULGARIA

[Union of Civil Engineers in Bulgaria](#)

## CROATIA

[Croatian Chamber of Architects and Engineers](#)

## CYPRUS

[Cyprus Council of Civil Engineers](#)

## CZECH REPUBLIC

[Czech Institution of Structural & Civil Engineers](#)

## ESTONIA

[Estonian Association of Civil Engineers](#)

## FINLAND

[Finnish Association of Civil Engineers](#)

## FRANCE

[National Council of Engineers and Scientists of France](#)

## GEORGIA

[Georgian Society of Civil Engineers](#)

## GREECE

[Association of Civil Engineers of Greece](#)

## HUNGARY

[Hungarian Chamber of Engineers](#)

## IRELAND

[Engineers Ireland](#)

## ITALY

[Consiglio Nazionale degli Ingegneri](#)

## LATVIA

[Latvian Association of Civil Engineers](#)

## LITHUANIA

[Lithuanian Association of Civil Engineers](#)

## MALTA

[Chamber of Architects and Civil Engineers](#)

## MONTENEGRO

[Engineers Chamber of Montenegro -Civil Engineers Chamber](#)

## POLAND

[Polish Chamber of Civil Engineers](#)

## PORTUGAL

[Order of Engineers](#)

## ROMANIA

[Union of Associations of Civil Engineers of Romania](#)

## RUSSIA

[Russian Society of Civil Engineering](#)

## SERBIA

[Serbian Chamber of Engineers](#)

## SLOVAK REPUBLIC

[Slovak Chamber of Civil Engineers](#)

## SLOVENIA

[Slovenian Chamber of Engineers](#)

## SPAIN

[Colegio de Ingenieros de Caminos, Canales y Puertos](#)

## TURKEY

[Turkish Chamber of Civil Engineers](#)

## UNITED KINGDOM

[Institution of Civil Engineers](#)

# ECCE Associate Members



ZENTRALVERBAND  
DEUTSCHER INGENIEURE e.V. – ZDI



National Technical University of Athens  
School of Civil Engineering



TEKTAS ENGINEERING



## European Council of Civil Engineers

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“Civil Engineers at the Heart of Society  
Building Life Quality and a Sustainable  
Environment”

The European Council of Civil Engineers (ECCE) was created in 1985 out of the common concern of the professional bodies for Civil Engineers in Europe that the Civil Engineers working together across Europe could offer much more to assist Europe advance its built Environment and protect the natural environment.

At the European Union level, ECCE aims to promote the highest technical and ethical standards, to provide a source of impartial advice, and promote co-operation with other pan-European organizations in the construction industry. ECCE also advises and influences individual governments and professional institutions, formulates standards and achieves a mutual compatibility of different regulations controlling the profession, and formulates standards for a European Code of Conduct of the Civil Engineering Profession and disciplinary procedures applicable throughout the Union.