The 63rd ECCE General Meeting was held on 4th – 5th March 2016 in Madrid, in Spain, hosted by the Colegio de Ingenieros de Caminos, Canales y Puertos (CICCP). The 63rd ECCE General Meeting was organized as part of the celebration of an International Civil Engineering Congress which hosted the Portuguese and Spanish Speaking Civil Engineering Professional Associations (CICPC) Congress concurrent with its annual General Assembly. Particularly, the 7th Council of Civil Engineering Professional Associations from Spanish and Portuguese Speaking Countries was held on 29th February – 1st March.

On 29th February the CICPC Meeting was held. On the same day the Homage Ceremony rendered by the Colegio de Ingenieros de Caminos, Canales y Puertos, the World Council of Civil Engineers and the Instituto de Ingeniería de España for the legacy of Professor José Medem Sanjuan and the presentation of WCCE’s José Medem Sanjuan Civil Engineering Excellence Award were held at the premises of the Instituto de Ingeniería de España. On 2nd – 3rd March the International Congress of Civil Engineering “Paths to bring the world together” was held. ECCE President was member of the Honour Committee of the Congress.

As a postscript to the First International Conference of Civil Engineering, the Madrid Declaration was signed, with the aim of showing the commitment of the profession to sustainable development and global concern about climate change. Therefore, the profession offers its technological capabilities and expertise to mitigate its effects. The Madrid Declaration has been signed by the following institutions and their respective representatives:

- Juan A. Santamera Sanchez, president of the Colegio de Ingenieros de Caminos, Canales y Puertos (Spain);
- Vicent Esteban Chapapria, president of the Association of Civil Engineering, Channels and Ports (Spain);
- Alfonso Alberto González Fernández, president of WCCE - World Council of Civil Engineers;
- Włodzimierz Szymczak, President of ECCE - European Council of Civil Engineers;
- José Tadeu da Silva, president of UPADI - Pan American Union of Engineers;
- José Manuel Pereira Vieira, president of FEANI - European Federation of National
The 63rd ECCE General Meeting was very well attended. Among the distinguished guests were the WFEO Past President Eng. Marwan Abdelhamid, the ECEC Secretary General Mr. Klaus Thurriedl, the WCCE President Eng. Alfonso Gonzalez, and the WCCE Past President Mr. Emilio Colon.

During the 63rd ECCE General Meeting the Institution of Civil Engineers (United Kingdom) after a period of one year that had suspended its activity and participation in ECCE, was unanimously accepted as ECCE Member again starting its membership from 1st January 2016. ECCE also accepted a new Full Member, Ukraine. The organization that represents Ukraine in ECCE is the Association “Information Technologies in Construction of Ukraine”.

In the course of the 63rd ECCE General Meeting a number of important issues were discussed and critical decisions were taken. It was decided that ECCE will join the Engineering Association of Mediterranean Countries (EAMC) with the status of observer and the ECCE representative to the EAMC, Mr. Aris Chatzidakis, was appointed by the ECCE President. The ECCE Standing Committees were terminated and their closing activity reports were presented by their Chairmen. The New ECCE Strategy was the major topic of this General Meeting and time for detailed discussion was dedicated to it. The Guidelines for the “ECCE Position Papers and other activities” was finalized and a number of suggestions for ECCE Position Papers was presented at a conception stage. The New ECCE Strategy has been welcomed by the ECCE Members and positive thinking and brainstorming was achieved. The idea of opening of the ECCE Individual Membership with the status of Associate Membership was voted and finalized too. Finally, the Transatlantic Trade & Investment Partnership was also discussed and a presentation on the latest evolvements on the TTIP negotiations was delivered by Mr. Govind Nadkarni from the Texas Board of Professional Engineers.

The video recordings of the 63rd ECCE General Meeting can be watched here.

The European Council of Civil Engineers would like to express its gratitude to the Colegio de Ingenieros de Caminos, Canales y Puertos for the successful organization of the 63rd ECCE General Assembly and their exceptional hospitality.

CICCP, CICPC-CECPC, ECCE, WCCE
"Civil Engineers committed to UN’s objectives of sustainable development and climate action”

Madrid Declaration

The undersigned, on the occasion of the celebration in Madrid of the 5th Iberoamerican Congress of Civil Engineering, the 7th General Assembly of the Council of Civil Engineering Professional Associations of Portuguese and Spanish speaking countries CICPC-CECPC, the 63rd General Assembly of the European Council of Civil Engineers - ECCE and other events organized by the World Council of Civil Engineers - WCCE proclaim that:

THE CHALLENGES OF OUR SOCIETY

Social and economic development relies upon the sustainable management of the world’s natural resources. The depletion of natural resources and its negative effects on environmental degradation, among others; desertification, drought, land degradation, water scarcity and biodiversity loss step up the challenges facing mankind.

In addition to these, our world faces the challenge of climate change and an unstoppable process of urbanization and population growth. Climate change is one of the biggest challenges of our time and its adverse effects undermine the potential of all countries to achieve sustainable development.
Such situation requires well targeted and sustained action in time, not subject to political cycles, with the joint commitment of governments, professionals and society as a whole.

**OUR VISION, OUR ROLE**

We, civil engineers set our collective role to overcome the challenges faced by our society in order to achieve full social and human development in harmony with the environment and on such grounds we consider that

- Civil Engineers, as members of the global community must base its practice in compliance with the ethical, human and social values of our time.
- Civil engineering should commit its expertise and practice to solve social and technical demands linked to the territory.
- Consequently civil engineering, as a professional activity, should be able to identify achievable goals consistent with the stakeholders’ interests and problems through effective management and efficient use of the tools and resources available.
- The existence of an Engineering-Society Nexus implies the mutual commitment on which engineers take the responsibility to faithfully serve society, whereas society is to provide the means to honour such undertaking.

Civil Engineers share the global concern for sustainable development and climate change. Therefore, we offer our technological capabilities and expertise to achieve the 17 Sustainable Development Goals (ODS) and his 169 goals as reflected in Agenda 2030 for the sustainable development of the UN General Assembly approved by September 2015. We also align ourselves with the efforts to enforce the agreements of the Conference of the Parties, COP-21 in Paris, December 2015, recognizing the need for a progressive and effective response to the urgent threat of climate change, on the basis of the best available science.

The objectives to be accomplished, in particular the satisfaction of population’s basic needs and the development processes conducive to an overall improvement of living conditions, find Civil Engineering an essential resource to make these objectives come true.

**OUR RESPONSIBILITY**

The responsibility of Civil Engineers to society is very high. Under society’s mandate to create a sustainable world and improve overall quality of life, civil engineers concur with American Society of Civil Engineers’ Vision 2025, according to which we serve as competent, collaborative and ethical way experts:

- Planners, designers, builders and managers of economic and social engine of society, which is called the built environment;
- Custodians of the natural environment and the proper and efficient use of its resources;
- Innovators and integrators of ideas and technologies in the public, private and academic sectors;
- Risk Managers of any uncertainties caused by natural events, accidents and other threats; and;
- Leader in debates and decisions that shape both environmental and infrastructure public policies.

Civil engineers have clearly defined responsibilities in planning, design, construction, operation and maintenance of physical infrastructure. This infrastructure requires the use of natural resources and include all types of buildings, power plants and distribution lines, industrial facilities, transportation networks, water resource services and urban water systems. They are expected to remain in service, sustainable and safe for their intended life cycle, typically from 50 to over 100 years. Such are exposed and are potentially vulnerable to extreme weather effects such as droughts, floods, heat waves, strong winds, storms, fires, and accumulation of ice and snow. Engineering Codes and practice intend to provide acceptably low risk of failures in serviceability, durability and safety throughout the service life of such infrastructure and services.

Civil Engineers must now apply their knowledge to also find durable ways of providing social welfare consistent with respect to the natural environment. Designing sustainable solutions to address society’s infrastructure needs require proper understanding of the natural processes, in order to assess any possible environmental impacts before its implementation and, if needed, propose the mitigation or protective measures needed. Proper internalization of environmental costs is to be included to any economic analysis in addition to any direct or indirect costs, as such environmental costs are generally supported overall by the community without being accounted on other stakeholders.

Therefore, we, Civil Engineers, need to incorporate into our professional body of knowledge the disciplines which enable the inclusion of sustainability criteria for climate action and environment to be included in any multicriteria alternative assessment along with other more traditionally considered criteria (economic, geomorphological, geotechnical, hydraulic, structural . . . ).

Territory in its natural state, in addition to presenting natural risk factors (flood, fire, lightning, volcanic eruptions, storms in the sea and coasts, earthquakes, tsunamis, etc.) has a limited hosting capability, with human development requiring action on the territory, of which a large share falls under the commission of Civil Engineers to study and implement.

A large share of United Nation’s 17 Strategic Development Goals -SDGs are deeply linked with the practice of Civil Engineering:
• Goal 6 - "Ensuring the availability and sustainable management of water and sanitation for all"
• Goal 7 - "Ensuring access to affordable, reliable, sustainable and modern energy for all"
• Goal 9 - "Building resilient infrastructure, promoting inclusive and sustainable industrialization and foster innovation"
• Goal 11 - "Making cities and human settlements inclusive, safe, resilient and sustainable"
• Goal 13 - "Take urgent measures to combat climate change and its impacts"
• Goal 14 - "Conserve and sustainably use oceans, seas and marine resources for sustainable development"
• Goal 15 - "Protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt the loss of biodiversity"

It should also be noted that ensuring adequate water quality is a goal which is horizontal to other goals objectives, such as Goal 3 "Ensure healthy lives and promote the well-being for all at all ages".

We also align ourselves with the Paris Agreements presented at the Conference of the Parties, COP-21 December 2015, recognizing the need for a progressive and effective response to the urgent threat of climate change, on the basis of the best available science.

COP-21 Agreements aim to revert global average temperature to no more than 2°C over pre-industrial levels and drive efforts to reduce such limit to just 1.5°C over pre-industrial levels, recognizing that this would therefore substantially reduce the risks and effects of climate change and improve our adaptability to climate changes’ impacts and promote low Green House Gases - GHG emissions driven development.

The implementation of the Paris Agreement, requires the workings a Subsidiary Scientific and Technological Advisory Body to which several important tasks should be entrusted such as the development of specific working programs and action plans regarding several aspects of the Paris agreement. Engineering contribution to such body is to be necessarily and should be channelled through WFEO and its member organizations.

**THE ROLE OF CIVIL ENGINEERING PROFESSIONAL ASSOCIATIONS**

In a globalized world, in which the civil engineering profession contributes decisively to improve the quality of life of mankind, it is necessary to establish sound partnerships between those who share common interests, for the benefit of our professional Engineers and society as a whole.

Due to this, we advocate the need for the existence and irreplaceable role of Civil Engineering Professional Associations to

a. promote adequate broad-based training of at least 5 to be expanded throughout the professional life through continuous professional development.

b. regulate the civil engineering practice for the sake of society.

c. provide continuing professional education to its members.

d. enforce ethical and deontological codes of practice ensuring: honouring public interest; security and protection against impostors; efficient use of natural resources; environment protection; vulnerability reduction to natural disasters and climate change (in their dual role of mitigation and adaptation)

e. contribute to the prevention of corruption (zero tolerance)

f. cluster the different professional groups involved in civil engineering

We want to become present in society, interacting with all stakeholders to understand their needs, helping them in providing the best response and vindicating our role and function.

We know it is necessary to have some international platforms to position us well in a global world, to facilitate solidarity knowledge and experience transfer and professional mobility of Civil Engineers, in a context in which albeit local variations, there is a growing need for civil engineers worldwide.

**OUR COMMITMENT**

The signatories representing a large share of the more than 8,000,000 Civil Engineers in the world, consider civil engineering as a profession of public service and because of this we commit ourselves to:

1. **Assert the ethical commitment towards society of the Civil Engineering professionals** over any other influence that may risk independent judgement and professional dignity.

2. **Enforce ethical codes of practice ensuring:** the honouring public interest, protection against unlicensed practice; efficient use of natural resources; environment protection; vulnerability reduction to natural disasters and climate change (in their dual role of mitigation and adaptation)

3. **Foster links between the civil engineering community and society,** promoting greater participation and commitment to sustainable development and climate action.

4. **Support the COP-21 Paris Agreement on climate and** of many of United Nations Strategic Development
Goals and its 169 associated targets through the implementation of innovative technologies and engineering practices, looking forward to the implementation of cost-effective technologies, providing solutions based on sound engineering criteria and robust climate projections, in order to mitigate the rate and magnitude of climate change and its inevitable impact on society and quality of life.

5. **Follow the codes of practice** adopted by the World Federation of Engineering Organizations (Code Of practice for sustainable development and environmental protection "Think global, act local" of 2013, "Code Of Good Practice: Principles of Climate Change Adaptation for Engineers", 2015) and developing them specific to each local environment.

6. **Enrich Civil Engineering body of knowledge by broadening its education** in disciplines natural sciences and economic analysis, risk management and climate change impact assessment, encouraging continuous professional development and knowledge updating in these fields.

7. **Convey to society the leading role of the Engineer in preventing natural hazards and sustainable land management**, communicating effectively the needs in these areas.

8. **Bolster R&D + I projects regarding sustainability and climate action**, in the relationship between actions on the territory with the use and conservation of natural resources and environmental protection, risk management and corrective and compensatory actions monitoring for the creation of methodologies to be enrich future performance analysis through experimental data.

9. **Celebrate congresses, workshops, courses, conferences and meetings in which the principles and commitments contained in this Declaration are fostered** and its application in the different areas of activity of Civil Engineers.

10. **Contribute through our practice in** achieving the following objectives

    a. **The reduction of Greenhouse Gases - GHG emissions** among diverse sectors through regional and local action.

    b. **Improved climate resilience resistance of various types of infrastructure** to withstand climate impacts, and increase their reliability and service lifecycle during extreme weather events.

    c. **The achievement of the engineering challenges for the accomplishment of sustainable development**. directly linked to United Nations SDGs.

11. **Collaborate with our scientific and technological partners** to achieve the desired results through methods and techniques such as systems thinking; the development of international standards and codes of practice; conducting climate risk assessment as part of normal practice; and the adequate assessment of social, economic and environmental impacts.

12. **Cooperate actively with the respective national governments** in order to:

    a. **Design and develop, jointly with the education authorities, education programs and training curricula to provide sound civil engineers to assume their significant responsibility towards society on topics such as sustainable development and climate action.**

    b. **Develop and implement infrastructure investment plans to create the most feasible sustainable development** through continuous and steady pluriannual planning, independent from political cycles.

    c. **Foster the participation of reputed engineers in decision making** either in technical or political positions.

**Madrid, March 2016**
SAVE THE DATE!

The 64th ECCE General Meeting will take place on 21 - 22 October 2016, in Athens, Greece hosted by the Association of Civil Engineers of Greece in cooperation with the Technical Chamber of Greece.

On Saturday 22 October the elections for the new ECCE Executive Board 2016-2018 will be held.

Stay updated through our website here.

Be an ECCE Member (EUCivEng)
ECCE Individual Membership

The European Civil Engineer

The profession of the Civil Engineering is mostly performed where the construction is being made, in Europe or in any part of the world.

Today, within the European Union, construction companies have activities in many countries, so civil engineers have to move to foreign countries and to work all over Europe.

To allow this professional movement EU published a Directive on Professional Mobility, to facilitate the recognition of Civil Engineers across Europe.

Nevertheless the Directive considers under this title, professionals with quite different academic or pro-
fessional backgrounds, what can lead to unclear situations for society.

The EU Directive on Mobility proposes the creation of a European Database of Civil Engineers, interconnected through national organizations.

ECCE appeared in 1985 to promote the quality of Civil Engineering with a professional recognition where academic/professional quality is guaranteed by the national organizations.

ECCE as representative of those organizations, and to promote quality in professional recognition, is opening its membership to individual members, allowing for their image recognition as European Civil Engineers.

Join ECCE, be a EUCivEng!

ECCE goals:

- To present in Brussels the views of the European civil engineers.
  (ECCE participates in the High Level Tripartite Forum for Construction in EU)
- To establish international contacts with other associations.
  (ASCE, JSCE, KSCE, ECCREDI, Mediterranean countries, etc.)
- To promote the relevant professional information across Europe
  (Publication of e-journal, books, reports, etc.)
- To organize Conferences across Europe about Civil Engineering
  (See the conferences presentations in ECCE website)

May I become an Individual ECCE Member?

Yes, although ECCE is an association of national organizations, individual civil engineers may also be Individual Associate Members, with access to all the information and discussion forums, but they may not vote in ECCE General Assemblies.

Being an ECCE individual member you will have the reference EuCivEng

What do I get as an ECCE Individual Member?

- If you just want to be an ECCE member, you will receive:
  The e-journal and all relevant information from EU Commission
- If you want to come to our meetings, you will get:
  Participation in 2 International conferences per year;
  Participation in 2 General assemblies per year;
  Participation in Brussels Engineers Day each 3 years;
  To be in contact with civil engineers across Europe (EU and nonEU).
- But if you want to be really active,
  You are welcome to participate in the discussion forums or to propose position papers to be submitted to Brussels.

And you get also the ECCE membership card!

- The ECCE card identifies you, through your national organization, as a Professional of Civil Engineering in your country and a EUCivEng in ECCE.
- It is expected that in the future the card will allow an automatic civil engineering identification across Europe, according to the EU Mobility Directive, when national organizations implement their database of Civil Engineers.
How can I become an ECCE Individual Member?

Please send to ECCE headquarters (ecce_sps@otenet.gr):

1. Registration Form
2. Document from your ECCE National Organization
3. Excel sheet with your information + Photo

After receiving the notification of acceptance proceed to the Payment Details.

What are the Payment Details?

- To be an ECCE individual member there is an annual fee of 20 euros.
- If you are older than 65 you pay only once 30 euros and you become member with unlimited validity.
- You can pay in packages of 3 years (60 euros) or 5 years (100 euros), plus 5 euros, with each package, for mail and printing of a new card.

The payment should be sent by bank transfer to:

2. IBAN: GB28 NWBK 6072 1408 5260 60
3. BIC: NWBK GB 2L
4. Account name: European Council of Civil Engineers

- After payment send a copy of the bank transfer with all the other documents.

(if your membership is not accepted you will be reimbursed)

Join us now!
Become an ECCE Member (EUCivEng)

4th Meeting of the High Level Tripartite Forum
14th April 2016, Brussels

On 14th April 2016, the 4th Meeting of the High Level Tripartite Strategic Forum was held in Brussels. The Meeting was chaired by Mr. Antti Peltomäki, Deputy Director-General, DG for Internal Market, Industry, Entrepreneurship and SMEs.

Introduction and objectives of the meeting

The 4th Meeting of the Construction 2020 High Level Tripartite Strategic Forum was an opportunity to take stock of the implementation of the Construction 2020 Action Plan, to identify where progress has been and made and where further efforts are required. Equally, in view of the proposed mid-term review in 2017, it was an opportune moment to give early consideration to the future orientation and possible revision of the Action Plan.

In addition, the Meeting was intended to support preparation of the forthcoming Ministerial Conference on Construction that the European Commission will organise with the Slovak Presidency, which will take place in Bratislava on 15-16 September 2016. The Meeting provided, therefore, an opportunity for the Forum to identify and highlight developments and issues that could be ‘brought to the table’ at the Ministerial Conference.

The Ministerial Conference will be organised around two main topics, which are mirrored in the agenda of the Forum Meeting. The first considered the construction sector’s interrelations with the broad sweep of EU-level cross-sectoral policy initiatives. The second focused on strengthening the business environment for construction so as to support performance improvements and increase the sector’s competitiveness.
Reporting on the main discussion points

**Rapporteur**: Mr Jan Maarten de Vet, Ecorys

**Sustainability in construction: closing the gap**

*Boosting the attractiveness of the construction industry (‘Appeal’)*

- A need to further improve the attractiveness and image of the construction sector (as a high tech sector – Smart construction?)

- Not as an aim but a tool to close the skills gap along the value chain (‘defuse the skills time bomb’)

- Make apprenticeships work (e.g. apprenticeship pledge initiative, apprenticeship ‘ambassadors’, ‘youth for construction’, learning from practices in other MS)

- Recruiting beyond standard target groups – including women and young people (role models)

- A need to associate the sector more to trust, confidence and quality (e.g. step up inspections, Master Builder Awards, certificates)

- A dilemma: public versus private quality control

- Bring in the consumer dimension in the sector – boost consumer confidence and trust in the sector (e.g. insurance-backed warranties, guarantees/certificates)

**Sustainability in construction: closing the gap**

*Buildings and infrastructure as enabler (‘Holistic’)*

- Buildings and infrastructure are taken for granted – they should not as buildings do not last forever and as there is a building mismatch (health and safety, energy efficiency in existing buildings)

- A need for a life cycle approach and apply circular economy principles – a large share of building costs relate to operation and maintenance

- A need to look at costs and benefits of measures across the whole value chain; much information is lost and much scope for spectacular gains (BIM)

- Cooperation can pay off: e.g. shared equipment, inter-trade set-up

- Digital technologies can help to improve productivity along the value chain: but roll-out of BIM requires compatibility of software, standardisation and training

- A need to see how the sector can better contribute to broader policy goals (e.g. energy efficiency – a need for full use of tools and instruments e.g. public procurement)

**Sustainability in construction: closing the gap**

*A need to raise innovativeness and productivity, especially amongst SMEs (‘Innovate’)*

- The good news: European construction is innovative world-wide

- A lot of innovation is simple and readily available, but needs to be shared and promoted in order to increase take-up – technological institutes can help!
• Barriers to innovation: regulation as well as culture (from cost avoidance to gains)
• Areas of progress: modular construction, 3D printing, BIM, certification
• Innovation in construction is a priority for all stakeholders (including clients) – as it brings about quality and long term benefits for all
• Innovation in work organisation: e.g. sharing of equipment
• Digital technologies: much catching-up to do (design, 3D printing, workflow planning) e.g. in public procurement
• Implement new tools and techniques: BIM Building Information Management

Building a supportive environment

A need for good governance and good policies (‘Smart’ regulation)
• A need for good regulation due to risk, health and safety, energy and resource use, etc.
• But also a need to streamline permits and regulation – the way to go
• A need to tackle transaction costs
• Streamlining building sustainability frameworks
• A need to anticipate public investments
• Modern public procurement policy implementation requires a change in mind-set of all actors involved
• A Single Market for construction can bring competition and drive down costs – need for EU-wide standards

Building a supporting environment

Involve all stakeholders along the policy life cycle (‘Engage’)
• A need to strike a balance between business-friendly and consumer friendly
• Developing policy (e.g. building regulations) by engaging with stakeholders leads to consensus, prevents mistakes and supports implementation
• Stakeholders include contractors, suppliers, designers, operators/building maintenance and consumers (affordability)
• Transparency pays off (e.g. participative planning, market consultation in public procurement)
• A crucial role for local and regional governments to align to national strategies

Key conclusion of relevance to the Ministerial conference on Construction
1. More efforts are needed by all to increase the appeal of the construction sector and to contribute to modernisation – and make use of existing good practices in MS
2. Reach out beyond traditional stakeholders: media, consumers, women, youth
3. A holistic approach helps the construction sector itself but also to contribute to economic and society (‘to do good’)
4. Construction sector a major ally for building the circular economy (life cycle costing)

5. Innovation is key - much scope remains for increasing the take-up of innovation: ICT and BIM, Alliances for Innovation (Smart Construction)

6. Good practices exist amongst MS governments to coordinate policies affecting the construction sector; a need to share and promote these

7. Better buildings and infrastructure require that modern public procurement policies are effectively implemented at all levels (e.g. resource efficiency criteria, life-cycle assessment, cost measurement, etc.)

8. A Single Market for construction can bring competition as well as innovation – but requires EU-wide standards?

9. Involving all stakeholders in policy preparation results in better rules (including consumers)

10. A need to promote synergies between EU and MS initiatives

Agenda and presentation of the 4th HLF meeting can be found here.

TTIP negotiations: A draft framework for the civil engineering community

Update April 13th, 2016

Discussions during the 12th round of negotiations on the Transatlantic Trade and Investment Partnership (TTIP) took place in Brussels between 22nd – 26th February and covered all three pillars of the agreement – i.e. market access, the regulatory cluster and rules. During such negotiation rounds, a preliminary discussion of the feasibility of bringing to the negotiation rounds the mobility for professional services was brought up by the EU negotiating team. US team accepted to explore such potential during the following negotiation rounds. Such information was received through the Spanish Government due to their direct line with the EU negotiating team the day before the celebration of ECCE’s 63rd General Assembly in Madrid.

The following week, ECCE was invited to the TTIP Virtual dialogue that was promoted by the US Embassy and the European Commission Representations to their respective EU countries. Such event was held on March 10th simultaneously and broadcasted to all EU countries. No further information was provided regarding topics of ECCE interests in the question round presented to both heads of the negotiation teams.

On March 22, we were contacted by the Spanish Government. We were informed that the head of the EU negotiation team, Ignacio García Bercero had met with Spanish officials, whom presented ECCE’s views on civil engineering professional mobility. Due to their lack of specifics in their conversation, Mr. Bercero requested an executive summary of both ECCE’s interests and concerns on the topic, and any potential guidelines on the items that will be brought up if the topics arrive at the negotiation table. He also requested the potential replicability and broadening of this topic to other branches of engineering.

On these grounds, we compiled the issues which are now being discussed by both the Texas Board of Professional Engineers - TBPE and Spanish Colegio de Ingenieros de Caminos, Canales y Puertos regarding their potential professional mobility bilateral agreement. TBPE’s professional framework basics are concurrent with US federal model and all US Free Trade Agreements Mutual Recognition Agreements - MRA such as North America’s Free Trade Agreement - NAFTA and AUSFTA - Australia’s Free Trade Agreement and Colegio’s framework basics also lie within EU’s regulations framework.

Such document was presented on March 25th and was disseminated among EU’s negotiation team by Mr. Bercero. For the time being, we have received no feedback on the topic by the European Commission. We are still pending a meeting with the negotiators’ assigned to our area of interest. I presume we will be able to hold such meeting during the month of April, as Brussels’ bombings have impacted such scheduling.

In addition to this, I was informed that both European International Contractors and the European Federation of Engineering Consultancy Associations (EFCA) are working in further recommendations regarding the scope of
negotiations.
Hereby I enclose the document requested by the EU negotiating team. Such document must have served well the teams as EU’s chief negotiator has stated the following in his conclusion statement to 13th TTIP rounds held from April 25 – April 29, 2016 in New York, NY.

We also made some progress in discussions on services. The EU’s objective is to pursue a high degree of ambition and gain substantial new market access for EU firms. We also had a good discussion on mutual recognition agreements for professional services and made significant progress in the consolidation of the text. Finally, we had extensive discussions on public procurement. Here, we started to consolidate our respective texts. But for us, it is clear that we need to reach a similar level of progress in access to procurement markets as in tariffs and services in order to move the negotiations to the end game.

At least, the topic is on the negotiation table, much more than expected one year ago. It is a long journey to achieve professional mobility between the EU and the US, but any journey begins with a first stride.

José Francisco Sáez
ECCE Executive Board Member
May 3rd, 2016

Our Interests
The interest of the European Council of Civil Engineers is to safeguard the quality of professional practice of civil engineering on both sides of the Atlantic. Its aim is to stimulate regulatory frameworks for professional temporary mobility, less demanding but more specific, as is the case implementing Directive 2013/55 / EU and its predecessor the 2005/36 / EC on the recognition of professional qualifications. Trying to accomplish maximalist goals on recognition systems for full recognition on the same terms as a national professional may become very difficult because of the existence of at least two professional examinations in the US model.

Furthermore, given the exposure of the civil engineering sector to public procurement, is also in our interest to eliminate or reduce administrative barriers requiring full-licensed native professionals as private representative of such contracts in both territories.

Our Concerns
ECCE’s main concern regards the compliant professional practice of civil engineering according to the national regulatory framework, as is common to other professions. This fact, although not directly related to the professional activity, may have impact in event of any claims or litigation and if so, will require a technical and not exclusively regulatory analysis. Otherwise the effective implementation of this treaty in the field of civil engineering will be undermined.

Related to this, another concern present in the civil engineering community draws attention to the possible impacts arising from the lack of knowledge regarding both civil and criminal liability of professional practice in the territory of application and the difficulties for European SMEs to access the specific insurance sector in US.

Last but not least, and although not directly related to the treaty itself, another concern refers to the potential inefficient implementation of the treaty in its administrative aspect. For this reason, it is in our best interest that professional chambers and competent authorities become directly involved in the works to develop such framework aiming a streamlined procedure for the applicant.

Objective of negotiations
The aim of the TTIP negotiations regarding this topic according to the European Council of Civil Engineers is achieving a temporary license mechanism on the following terms:

Rights
- Full licensure for foreign professionals in host country for
  a) temporary period / b) duration of the project.
  The b option would be more restrictive in activity but easier to implement.
- Corresponding immigration status during the duration of such professional activity.
- Ability to assume contractual assignment for public procurement contracts.

It may be necessary to identify contract amount thresholds as well as applicable administration bodies for this capability. Currently the procurement thresholds for publication in the OJ are € 6 million in the case of execution of works and 134000 € in the case of supply contracts by state authorities.
Requirements

- Knowledge of the language of the destination country. Although obvious, should be explicit.

- Professional license in force in country of origin. Those countries in which the engineering profession is not regulated may be required to provide additional information. Such item may be certified by professional chambers.

- Minimum high education degrees leading to professional activity and substantial equivalence of the same duration. Under this heading underlies the existence of two different professional levels in Europe (engineering and technical engineering) compared to a only level of professional training in US (PE). This requirement may be linked to the minimum professional experience for a harmonized application for both professional level license.

- Minimum professional experience overall to qualify for application. The European legislation is more lax in this respect requiring only two years of professional to apply for professional mobility mechanisms. Other similar agreements require a five year minimum. In any case, this decision has potential immigration implications, since lower minimum experience requirement increase the chance of free establishment in the host country.

- Professional experience in host country. The minimum possible. The different existing frameworks in US require at least one year of experience in destination. This experience requirement may be influence the duration for the temporary license according to thresholds of contract and professional experience.

- Identification of specific expertise regarding the host project. Only applicable in the case of choosing the option b) temporary license linked to project.

- Education in country specific legislation, professional responsibility and professional ethics. This training could be given either on arrival or even before and provided in origin by the competent authorities, professional chambers or licensing boards. This training could obviated if experience is credited on arrival.

Conclusions

The prioritization of the characteristics of goals far exceeds the scope of the document. The European Council of Civil Engineers offers the negotiating team for the TTIP its collaboration and assistance in clarifying any points of the document as well as any other work that they can consider of interest.

Should you require further information on the topic, please contact ECCE Secretariat.

Consultation on the Fitness Check for the Construction Sector

The European Commission has launched a public consultation to gather the experience, views and opinions of interested stakeholders and the public on the impact of current EU legislation for the construction sector.

Policy fields

Industrial policy: Construction sector
Impacts of EU legislation relating to Internal Market, Energy Efficiency, Environment, Health and Safety

Target group(s)

All: construction industry, middle-sized and micro enterprises, industry associations, public authorities, EU country authorities, private organisations, trade unions, consultancies, other relevant stakeholders and citizens are welcome to contribute to this consultation.

Period of consultation

From 29 March 2016 to 20 June 2016.

Objective of the consultation

The aim of this consultation is to gather the experience, views and opinions of interested stakeholders and the public on the impact of current EU legislation for the construction sector. It asks about key procedures and issues
affected by these legal instruments. The results will feed into the Fitness Check for the Construction Sector undertaken by the Commission which is expected to be completed by the end of 2016.

The Fitness Check is part of the Commission's Regulatory Fitness and Performance Programme (REFIT). It involves a comprehensive, evidence-based assessment of whether the current regulatory framework is proportionate and fit for purpose, and delivering as expected. Specifically, it assesses the relevance, effectiveness, efficiency, coherence and EU added value of the abovementioned legislative framework.

**Background**

The construction sector is at the heart of the Europe 2020 strategy and is one of the keys to unlocking the 2020 vision for smart and sustainable growth and jobs. More than any other sector, the performance of the construction sector determines the development of the overall economy: not only does it generate almost 9% of GDP and provides 18 million direct jobs in the EU, construction consumes about €800 billion of intermediate products from various industrial sectors. The construction sector has been hit particularly hard by the financial and economic crisis. At the same time, the building sector is facing a number of challenges to mainstream practices to save energy, to minimise the sector's contribution to man-made climate change, and to minimise its total environmental impact in terms of emissions, material use, water use and waste generation, which is considerable.

Making buildings more energy- and resource-efficient is increasingly considered an urgent global challenge. Buildings are responsible for 40% of total final energy use, and 36% of greenhouse gas emissions in EU countries. Improving energy efficiency in buildings therefore represents important cost-effective potential for meeting the EU's targets for reducing greenhouse gas emissions by 2020 and beyond.

To enhance the competitiveness and sustainability of the construction sector in the EU, it is essential to ensure a properly and effectively functioning Internal Market for construction products and services, with a clear and predictable legal framework. It is also necessary to ensure that administrative and compliance costs are proportionate to the objectives pursued by the legislative acts.

In 2010, 13.4 million people were employed in the construction sector in the EU. Making them, and the rest of the workforce, safe in their working environment, and doing this in a way that protects workers without raising costs to businesses more than is necessary (which could lead to significant job losses) is a key social objective of EU legislation.

Protecting the environment across the EU and beyond is an urgent responsibility. The construction and use of buildings in the EU account for about half of all our extracted materials and energy consumption, about one third of water consumption, and generates about one third of all waste. Requiring control and minimisation of the waste we produce and making sure that major projects consider the environment through assessing possible impacts before a project is implemented are essential steps to realise resource efficiency gains and to protect our environment that is essential to maintain prosperity and high quality of life.

Therefore, the present public consultation offers a unique opportunity for society to provide direct feedback, identifying some of the main success factors, shortcomings or unintended effects offered by the legal framework.

**Scope of the consultation**

The Fitness Check focuses on 15 EU legislative texts in the policy fields of Internal Market, Energy Efficiency, Environment and Health & Safety - and, more specifically, on those provisions within these EU texts that may impact the construction sector. This public consultation asks about key procedures and issues affected by these instruments.

In particular, the open public consultation includes questions relating to the following EU legislative texts:

- Construction Products Regulation (No 305/2011)
- Professional Qualifications Directive (2005/36/EC)
- Services Directive (2006/123/EC)
- Late Payments Directive (2011/7/EU)
- Ecodesign Directive (2009/125/EC)
- Energy Labelling Directive (2010/30/EU)
- Occupational Safety and Health Framework Directive (89/391/EEC)
- Directive on Temporary or Mobile Construction Sites (92/57/EEC)
Questionnaire structure

This open public consultation begins with an introduction followed by two main sections, each asking questions on a group of EU legal acts in the areas of Internal Market and Energy Efficiency, and Environment and Health & Safety respectively. Each main section has various subsections.

Three sets of questions have been elaborated in order to gather the most relevant information from various stakeholders.

Please fill in the questionnaire until 20 June 2016!

To answer online or to download the PDF version, please click on the relevant link.

a. I am answering as a citizen.

b. I am answering as a professional in the construction sector (e.g. employee, self-employed, entrepreneur) or on behalf of an organisation/institution/company

c. I am answering on behalf of/as an employee of a public authority.

Consultation on proposal to introduce a Services Passport and address regulatory barriers in the construction and business services sectors

In the beginning of May the European Commission published a public consultation on the proposal to introduce a services passport and address regulatory barriers in the construction and business services sectors, and possible action to address barriers in the insurance sector.

This consultation stems from the Single Market Strategy which announced several actions to further develop the single market for services, in particular:

1. An initiative introducing a services passport for key economic sectors;
2. An action to address regulatory barriers for key business services and for construction services;
3. An action on insurance requirements for business and construction service providers.

To access the relevant questionnaire, as well as additional background information concerning the initiatives please visit the link here.

The consultation will run for a period of 12 weeks, until 26 July.

Your contribution, as well as those of any stakeholders which you may find relevant, would be appreciated.
On 28-29 January 2016, the President of ECCE Włodzimierz Szymczak took part in the 24th Bavarian Day of Engineering organized in Munich by The Bavarian Chamber of Civil Engineers.

At the first day of his visit W. Szymczak had a meeting with Dr.-Ing. Heinrich Schröter, the President of the Bavarian Chamber of Civil Engineers. During this cordial and direct meeting President Szymczak presented to his interlocutor current works and plans of ECCE with emphasis on New Strategy which was started to be implement into practice a few months ago. Finally, he directed to President Schröter an offer for Bavarian Chamber of Civil Engineers to join The European Council of Civil Engineers as a Full Member representing Germany in this organization. The proposal was accepted as a very interesting and promising one. Parties agreed further steps which would be taken on that matter.

29 of January started from official celebration of the 24th Bavarian Day of Engineering. It was an impressive meeting which was attended by over eight hundred invited guests from Germany and from abroad.

After the official celebration of the 24th Bavarian Day of Engineering, President Szymczak met with Klaus Thuriedl with whom he discussed the progress and current state of relations between Austrian Civil Engineers and ECCE.

This long and busy day ended with the meeting of President Szymczak and Hermann Sturm - President of ZDI, which is ECCE Associate Member. The meeting was devoted mainly to discussing New Strategy for ECCE and opportunities to increase ZDI participation in the work of our organization.

ECCE President Włodzimierz Szymczak was invited to participate in the "Polish Infrastructure 2016" Conference that took place on 23rd February 2016, in Warsaw, Poland. The conference is the most prestigious meeting of the leaders of infrastructure industry with exceptional reputation in the market, which every year attracts the most important representatives of the sector. Current edition was organized under the auspices of the Mayor of Warsaw. The Forum, which enjoys great recognition of business environment, was an opportunity to discuss issues related to public procurement, the landscape after the extension of the Warsaw Metro.

Discussants assessed the chances of a faster implementation of the commitments on the closure of Polish motorways construction and predict trends for Polish railways development.

ECCE President was invited as a Special Guest and he delivered a speech titled "Why do we have to develop and modernize infrastructure in Poland and why we need to do this now?".

Meeting with the Association of Civil Engineers of Greece

On the occasion of ECCE President’s visit in Athens as panel member at the Round Table on "Updated Information on Regulations for Architects and Civil Engineers Professional Practice and Education on the International level", a meeting at the headquarters of the Association of the Civil Engineers of Greece – ECCE Secretariat office was organized on 4th April 2016. The meeting was attended by the following:

- Włodzimierz Szymczak, President of the European Council of Civil Engineers (ECCE)
- Vasilios Bardakis, President of the Association of Civil Engineers of Greece (ACEG),
- Demetris Koutsoyiannis, Dean of the School of Civil Engineering in the National Technical University of Athens (NTUA)
- Constantine Memos Director of the American Society of Civil Engineers for Region 10 (International,
Chris Tokas representative of the Structural Engineers Association of California (SEAOC) and Director for OSHPD, the organization that oversees California Hospital construction and seismic regulations.

Christos Damvergis, President of the Hellenic Society of Hydraulic Engineers (SMYE).

The main topic of discussion during this meeting was the situation of the Civil Engineering profession in Greece, in Europe and in the USA with emphasis being put on the particular circumstances that we have been facing in Greece and in Europe the past few years of the financial crisis.

ECCE President introduced briefly the European Council of Civil Engineers to the members of the discussion and described the new goals that have been set and the initiatives that ECCE has started implementing. The concept of the ECCE Individual membership and the ECCE Card was discussed as well as the need for ECCE’s presence in Brussels. ECCE President thanked the ACEG President for his invitation and also for hosting the ECCE Secretariat. Overall, it has been a very successful meeting.

On the same day ECCE President had the chance to pay a visit to the grave of the late ECCE past President and friend Vassilis Economopoulos.

Round Table on “Updated Information on Regulations for Architects and Civil Engineers Professional Practice and Education on the International level”

The Round Table Round Table on “Updated Information on Regulations for Architects and Civil Engineers Professional Practice and Education on the International level” was held on 5th April 2016, in Athens, Greece organized by the Technical Chamber of Greece. ECCE President was invited by the TCG President Mr. Giorgos Stasinos and by the President of the Association of Civil Engineers of Greece Mr. Vasilios Bardakis to take part in this Round Table as one of the panel members. The two moderators of the Round Table were Mr. Vasilios Bardakis, ACEG President, and Mr. Nikos Fintikakis, Elected Council Member of the International Union of Architects (UIA) and Director of JCEP-UIA.

The panel consisted of the following persons:

- Professor Memos Constantinos, Director of the American Society of Civil Engineers for Region 10 (all countries outside USA)
- Professor Ramos Fernando, Director of the UIA Educational Committee
- Mr. Szymczak Wlodzimierz, President of the European Council of Civil Engineers
- Mr. Tokas Chris, Representative of the Structural Engineers Association of California (SEAOC)
- Mr. Vonier Tomas, President of the American Institute of Architects and UIA S.G.

Speeches were also given by Mr. Aris Chatzidakis, Member of the International Affairs Committee of TCG, TCG representative in FEANI and ECCE and by Mrs. Tonia Katerini, President of the Greek Association of Architects.

The Round Table started with the speech of the President of the Technical Chamber of Greece, Mr. Giorgos Stasinagos who welcomed everyone and expressed his gratitude to the speakers that accepted the invitation to share their experience and knowledge about the profession of the Architect and the Civil Engineer. He outlined the professional practice of the two specialties. He said that in this time of crisis we ought to create a new plan for the development of the country, the Associations and also as individuals. He stressed that the TCG is trying to resist to the so called deregulation of the Engineering Profession which is not a local issue only. At an EU level we are aware of the issues about the Qualification and Services and the Directives that rule the Single Market. Similar issues have been tackled successfully by Engineering Professional Organizations abroad and especially in the USA. He said that we have to examine the best practices that were implemented abroad, to protect the Engineering Profession in
Greece, to communicate the social aspect of the profession and what the Engineers offer to the society. He con-
cluded that our goal is to minimize the loss and the damage that might come from unbridled competition and to plan
for the future and within this context the TCG organized this event.

The event was divided in two sessions. The first session was moderated by Mr. Nikos Fintikakis, Elected Council
Member of the International Union of Architects (UIA) and Director of JCEP-UIA and the lecturers that come from
the Architects side delivered their speeches and presentations. The second session was moderated by Mr. Vasilis
Bardaklis, ACEG President with lecturers coming from the Civil Engineering side. The sessions were followed by
questions and discussion time.

Below you can find the main points and conclusions of the presentation that were delivered.

Civil Engineers

Wlodzimierz Szymczak, President of the European Council of Civil Engineers (ECCE)

OVERVIEW OF REGULATION IN EUROPE
- Internationally Civil Engineers provide a wide range of activities (ECCE Civil Engineering Charter)
- In Seismic Regions certain fundamental principles must be taken into account in order to arrive at a structural
  concept that is considered sound for the earthquake resistance (e.g. EN1998)
- Examples of shared Activities with Architects (submission of construction related documents, drawing up of
  designs, management of building projects)
- A lot of Greek Civil Engineers act as Building Engineers

Constantine Memos, Director of ASCE Region 10 (International)

VISION for Civil Engineering
- GLOBAL ISSUES (Water & Sanitation, Sustainable Energy, Resilient infrastructure, Resilient and Sustainable
  Cities)
- Civil Engineers serve competently, collaboratively, and ethically as:
  - Master planners, designers, constructors, and operators of society’s economic and social engine—the built
    environment
  - Master stewards of the natural environment and its resources
  - Master innovators and integrators of ideas and technology across the public, private, and academic sectors
  - Managers of risk and uncertainty caused by natural events, accidents, and other threats
  - Leaders in discussions and decisions shaping public environmental and infrastructure policy
- The future path for licensure goes beyond the bachelor degree (master’s in engineering degree – OR – addi-
  tional 30 semester credits of advanced education)
- A strong licensure process is required (experience + professional exams)

Chris Tokas, representative of SEAOC (Structural Engineering Association of California)

Professional Practice Laws and Requirements For Seismic Design of Buildings and Other Structures in
California
- Building Design Authority (Shared activities between Architects, Civil Engineers, Structural Engineers)
- Foundation Pillars for Performance (Codes & Standards, Detailed Plan View, Field Inspection, Materials Quali-
  ty Control)
- Seismic Performance of Nonstructural Components (building contents, service equipment, utilization equip-
  ment, interior/exterior architectural components)

Architects
- Tomas Vonier: a strong licensure process is required (3 years’ experience + professional exams)
- Fernando Ramos: The EC Directives of 2013 and in particular Article 46 which defines the minimum training
  standards for architecture gives a very negative image in comparison with the European architecture educa-
  tion
Summer is coming and the time for WCCE’s General Assembly comes nearer. This time WCCE is travelling to America as 11th WCCE’s General Assembly will be hosted by the COLEGIO DE INGENIEROS CIVILES DE COSTA RICA, founding member of the organization. The activities regarding 11th WCCE General Assembly will be held from 7th to 10th September 2016 in San José de Costa Rica.

On the occasion of WCCE’s General Assembly, CIC-CFIA will hold its XV Congreso de Ingeniería Civil.

Further information will be delivered shortly on www.wcce.biz.


Construction Products Europe and the European Construction Industry Federation, the latter representing contractors (micro, small, medium and large enterprises), defend the interests of complementary sectors in the construction value chain. Construction Products Europe members manufacture components that FIEC members install. These two interdependent sectors and the two European associations that represent them have joined forces to point out those aspects of the Construction Products Regulation (CPR) that should be improved for the benefit of both sectors.

Both European industry associations support an open and transparent European standardization system that involves all concerned parties. They welcome European measures that create a level playing field and ensure that the right product is used in the right circumstances in buildings and infrastructure. Contrary to this, the CPR is influencing the development of standards in a way that neither of these goals is achieved.

Press Release

ABC for Sustainable Cities

The “ABC for Sustainable Cities” is published by UNEP (United Nations Environment Programme) and UN-Habitat (United Nations Human Settlements Programme). It is drawn up with the support of FIDIC in cooperation with EFCA.

The “ABC for Sustainable Cities” is a glossary of key terms related to Sustainable Cities.

The publication aims to:
1. Provide clarity on the terms and the concepts related to the issues of Sustainable Cities, by collecting short definitions from internationally recognised sources.
2. Support dialogue and cooperation among stakeholders working on Sustainable Cities, by providing a reference easily accessible by technical and non technical audience.

The publication does not aim to provide globally agreed definitions, but rather to compile existing definitions that may continue to evolve over time and with the input of relevant stakeholders.

The ABC for Sustainable Cities is first of all an exercise of compilation of relevant terms and definitions that are available on the public domain. Definitions have been extracted from official and internationally recognised sources, documents, reports, journals and other publications edited by international organisations and institutions.

Click here for the full document.
New EU public procurement rules applicable from 18th April 2016

As of 18th April 2016, Member States and their public authorities must comply with the three Directives on public procurement and concessions adopted in 2014.

Elżbieta Bieńkowska, Commissioner for Internal market, Industry, Entrepreneurship and SMEs said: “Public procurement rules are there to ensure that taxpayers’ money that goes into the public purchase of goods, works and services is well spent. The new rules will further simplify public tender procedures and render them more flexible to the benefit of SMEs in particular. They also encourage the shift towards an energy and resource efficient economy alongside the well-established objective of achieving the best quality-price ratio.”

Authorities that have already made the transition to eProcurement report savings between 5% and 20%. Given the size of the total procurement market in the EU (€ 1.9 trillion per year), each 5% saved could return around €100 billion to the public purse.

More information can be found here.

News from ECCE Members

Cyprus

Limassol Marina, Cyprus

Multi-storey Car Park

Project Owner: Ministry of Energy, Commerce, Industry and Tourism
Project Developer: LIMASSOL MARINA LTD
Project Consultants: ATELIER XAVIER BOHL ● ARTELIA GROUP ● A. F. MODINOS & S. A. VRAHIMIS ● GE-MAC (Geotechnical Engineering by Alain YZIQUEL) (Structural Engineering by Michael SHAFTACOLAS)
Project EPC Contractor: J&P – ATHENA – CYBARCO – MARINA LEMESOU JOINT VENTURE

Location and key facts about Limassol Marina

The featured multi storey car park is part of Limassol Marina in Cyprus, a prestigious marina of a total construction cost of 350 million euros, consisting of villas, apartments, shops, cafes, restaurants, boat and yacht berths, a marine training school and a cultural centre. It has 650 berths to accommodate yachts from 8m up to 110m at a basin area of approximately 170,000 square meters. It has a multi storey car park of a capacity of 746 cars that is found- ed 5m below water level. The scope of this article is to describe the design concept as well as the construction methods adopted specifically for this car park.

Key facts about Car Park

746 cars ● Total area of 25.000m2 ● 2 underground storeys, ground level and 2 storeys above ground level ● All levels unfold as a continuous spiral with an average ramp slope of 1.5% ● Lowest foundation level is at -5.5m below mean sea level ● South edge of car park is built on reclaimed land ● 400 (A0, A1 size) construction drawings where prepared ● Reinforced concrete structure designed to EC2 / EC8 ● Earthquake acceleration Hg=0.25g ● 21.405m3 of C30/37 and C35/45 of microsilica concrete used ● 2.021 tonnes of B500c reinforcement ● Design – Build – Operate – Transfer type of Contract enabled designers and contractor to provide a mutually agreed type of construction in advance.

Figure 1 - Proximity with open sea
Basic Design Constraints
The location of the car park is partly in the sea. Therefore, the location and the required depth of excavation – 9m deep excavation, 5.5m below water level – troubled the designers as to what would be the best solution in order to provide a safe and dry construction site. The solution adopted, was to construct a perimeter secant pile wall. The piles would be reinforced concrete piles drilled down to a maximum depth of 14m as described below.

Basic Design Requirements
1. A high degree of water tightness
2. To protect the work force from sudden piping which could lead to fatalities
3. To provide adequate dewatering conditions whilst preventing depletion of a nearby river aquifer that would disturb nearby building foundations located within a radius of several metres
4. It would act as a retaining wall for the works
5. The secant pile wall would be a temporary structure to allow the construction of the car park and was not designed to give permanent support to the backfill or to resist seismic loads
6. It was not designed to insure the ultimate water tightness of the finished works

Basic Design Concept
The basic concept to achieve the required water tightness was to locate the end of the piles in the proper horizon i.e. clayey silt that was encountered at a depth of 12m. The dewatering would allow the control of both the seepage and the gradient of flows finding their path in more gravelly patches.

Foundation Conditions
The Geotechnical investigations consisted of three exploratory boreholes and three exploratory pits.

The following key data was extracted:
1. At the north side of the building the soil encountered at foundation level was gravel and cobbles and silty gravelly sand with SPT = 20.
2. At the south side of the building the soil encountered was unsuitable i.e. sea weeds and silty sand.
3. At -8.00m MSL the investigations revealed a layer of sandy and silty clay of very high plasticity and very low permeability.

The presence of the clay was the most important finding. It gave the designers the idea to design and construct the perimeter secant pile wall to penetrate this impermeable layer of clay. This meant that with the use of a number of dewatering pumps, the dewatering of the sea water would be achievable if the rate of dewatering would be equal to the rate of influent water.

Building overall possible settlement
The excavation of the car park would create an unloading of the foundation. The reloading by the weight of the car park and the cars would not compensate the stress reduction created by the excavation. Therefore general settlements were not expected and piling was therefore not necessary to prevent an overall settlement. In general the soil investigations revealed that the ground was suitable for raft foundation while at areas where sea weeds were located, the easiest solution was to excavate and replace them by a compacted backfill of gravels obtained during the bulk excavation.

Construction method stages
The proposed construction method was straightforward:
1. Stage 1 – Excavate the footprint of the car park down to elevation 0.6m amsl
2. Stage 2 – Discard the unsuitable material and select gravels to be dumped along the shore line in order to create working space
3. Stage 3 – Construct a rock fill bund to protect the excavation from waves (See Fig 2, 3 and 4.
4. Stage 4 – Construct the secant pile wall from the platform at 0.6m above mean sea level. The piles were D880mm, 10m and 14m deep. Primary piles reinforcement was 13Ø22, Spiral Ø12/10.
5. Stage 5 – Excavate the inside of the car park with dewatering
6. Stage 6 – Extend the platform towards the sea using selected gravels and sand material for construction of the secant piles of the quay wall.
7. Stage 7 – Construction of car park. Dewatering pumps were stopped once the structure weight was balanced with buoyancy forces.
Construction Timeline

Figure 2 – Design layout of all stages of construction
Figure 3 – South side of excavation

Figure 5 – Construction Stages 1, 2 and 3 – Reclamation or working space and protection from sea waves

Figure 6 – Construction Stage 4 – Construction of secant pile wall

Figure 7 – Construction Stage 5 – Completion of excavation with dewatering

Figure 8 – Construction Stage 6 – Blinding concrete and permanent waterproofing

Figure 9 – Construction Stage 6 – Construction of raft foundation

Figure 10 – Finished Car Park with surrounding buildings
SBAA ENVIRONMENTAL CENTER – AKROTIRI – CYPRUS

The SBAA Environmental Center was completed on October 2014 and the structural designers were nominated for a Structural Award in 2015 by the Institution of Structural Engineers of UK.

The article is written by Yiannis Pericleous, MSc, MEng(Civil), MBA, Director of A. J. Pericleous LLC

The SBAA Environmental Center is located on a vantage point in Akrotiri area overlooking the salt lake which is a significant wetland. The Akrotiri peninsula is of international significance and is characterized by the diversity in its flora and fauna. The hydrology and archaeology, history and culture of the area are unique. The salt lakes and wetland system of Akrotiri and marshes were designated as a wetland of international importance under the RAMSAR Convention of 2006 and is a candidate to be a special area of conservation as part of the Natura 2000 network. The Akrotiri peninsula hosts more than 30 different orchid species and the flora of the area includes more than 800 plant species and 10 of these are included in the Red Data Book of endangered species. The salt lake and the surrounding wetlands host the largest number of water birds in Cyprus and during the winter the area is visited by about 20,000 flamingos. The Akrotiri peninsula is of very high importance for archaeology because the earliest known settlement in Cyprus dating to 12,000BC was found there.

The project design was assigned to A. J. Pericleous LLC by CSP-Interserve JV, which is a long term services contractor in the British Bases in Cyprus. The whole design team was from Cyprus and it was led by A. J. Pericleous LLC (Structural and geotechnical design), the architect was Landart Design Group and Aspeleo Consulting Ltd was responsible for the Electrical, mechanical and energy efficiency design.

The vision of the design team was to provide a landmark structure that would not only stand out but also would make people wondering what it is and consequently make them willing to visit the facility. Furthermore, the building should be energy efficient with low carbon footprint by implementing environmentally sustainable architecture and utilizing renewable energy sources.

The building occupies about 400m2 and it is a single storey structure with a mezzanine. The ground floor incorporates all main operations and activities of the environmental center, which are the exhibits hall with various interactive exhibits such as dioramas of wetlands and of the marine environment and terrestrial eco systems, a fully equipped state of the art biology laboratory, a projection room for 50 persons and a conference room with a library. On the mezzanine there are storages and mechanical plant rooms. A large cantilever provides unobstructed view to the wildlife in the wetlands and the visitors can observe the flora and fauna of the area, as well as the city of Limassol. The yard around the building includes a botanical trail that highlights the flora on the different habitat types on the area and a playground for school groups and families.
The concept of the structural design was to combine steel and concrete to create an elegant structural system that would be emphasized by the arches. The main arches, about 30m span, were constructed using steel and their ends were founded on different levels due to the natural slope of the plot. In order to make the structure as sleek and elegant as possible the arches were designed having simple pin connections at their base. The arches form the external dome that house an internal steel structure that forms the various areas and the mezzanine.

The building was designed according to the requirements of the Eurocodes. Computer finite element models were developed to simulate the performance of the building and design against strong earthquake and wind conditions, supplemented by hand calculations for checks. The peak ground acceleration at the area is $a_g = 0.25g$ and the basic wind speed is $V_b = 30\text{m/s}$.

Due to the fact that the building is formed by two structurally independent structures special consideration was given in the dynamic analyses to match the lateral displacements of each structure so that the blockwork walls will not collapse during strong earthquake excitations.

Due to close proximity of the structure to the sea, airborne salt and sand could attach to the flanges and the bolt of the pinned connections of the arches posing a risk to the structural system of the building. The reason is that cor-
erosion will bond together the plates and the pin, making the pinned connection developing moments. As such, the designers developed a simple yet very effective method to avert the risk of chemical bonding between the flanges and the pin due to the corrosion by utilizing teflon plates and grease.

The building was designed as Energy Class A according to the Cyprus regulations. Sustainable design to create cooling in the building utilizing the natural air flow was used and the building was suitably oriented so that a large part of the roof is directed towards the south to maximize the energy production from the about 100m² of photovoltaic panels that produce 10.1kW of electricity, which corresponds to 50% of the electricity demand of the building. Solar panels are also used for the production of hot water.

Cyprus is a fairly arid country with prolonged periods without rain. Therefore, the building has its own small sewage treatment unit to recycle all grey water that is then used for toilets and for irrigation, reducing the water consumption to the absolute minimum.

The Akrotiri Environmental Center was funded by the British Sovereign Bases and its primary purpose is to promote the unique environmental and cultural significance of Akrotiri peninsula through programs and exhibits. Over the last years the Center is visited by about 10.000 persons per year, about 6.000 are school students and 4.000 are visitors and researchers. During the first few months of operation of the new building the comments received by the visitors of the Center were very overwhelming and their number has increased. Finally, the Akrotiri village has a new landmark location and the community is also benefitted by the increased number of visitors who have now the opportunity to spend more hours in the area, the facility and the village.

Full member of FIDIC – FIDIC seminars in Cyprus

The Cyprus Association of Civil Engineers (CyACE) is a full member of the International Federation of Consulting Engineers FIDIC (Fédération Internationale des Ingénieurs-Conseils) since October 2014. The FIDIC (www.fidic.org) is an international organization for standards related to the construction industry, best known for the group of FIDIC contracts.

Through its participation in FIDIC, the CyACE aims to improve the services provided to its members on issues about the construction industry in general and particularly in education and contact management. Thus, the Association now gives the opportunity to its members and to Engineers from other countries to attend high-level seminars on FIDIC contracts.

On 3d and 4th of November 2015 the CyACE and the German Training Institute «Nestor» Nestor Bildungsinstitut GmbH coorganised a two-day high-level seminar titled "The Practical Use of the 1999 FIDIC Conditions of Contract (Construction/Design-Build) " at the Congress Centre "Filoxenia" in Nicosia-Cyprus. The seminar was attended by 35 people and it was presented by accredited international trainers and consultants. Due to the increased
number of applicants the seminar will be repeated on the 23rd and 24th of June 2016.

The CyACE-FIDIC cooperation will continue with the co-organization of seminars for the preparation and evaluation of claims, the training of Adjudicators as well as other courses related to FIDIC Contracts.

Czech Republic

Participants of the 62nd ECCE General Meeting at the gala evening of the 150th anniversary of SIA in Prague, Czech republic

On the end of the last year Czech Institution of Structural and Civil Engineers (CSSI) was reminding the 150th anniversary of the founding of the „Society of Architects and Engineers of the Kingdom of Bohemia“ (SIA), of which it is the direct successor. The gala evening to celebrate the 150th anniversary was held in a representative hall of Bethlehem Chapel in Prague on a very date of establishing the first engineering society in the country – October 31st. At the same time 62nd ECCE General meeting took place in Prague (on October 30th-31st 2015), so the participants of the ECCE session were invited to attend the festive gathering as the accompanying program.

During the gala evening the results of the “Top Ten Personalities of Civil Engineering and Architecture 1865 - 2015” survey were announced. Also “The Tree of Life”- lineage of associations working in the field of construction and architecture operating in the period of 1865 - 2015 in the Czech Republic - was presented as a part of the latest Almanac of CSSI, which was just launched on this meeting. A lot of prominent from the local government and authorities, technical associations and schools, representatives of national and international associations, architects, building contractors and producers of building materials have attended the event.

The “150 Years of SIA” touring exhibition was opened at the Bethlehem Chapel in the afternoon, before the gala evening started. The exhibition presents on 66 large-sized panels a prestigious selection of illustrious personalities in civil engineering and architecture and their works, thematic fields of construction and growing activities of professional associations, while also highlighting the important synergies of both professions for construction work. Last but not the least, it focuses on the current situation in both fields and their prospects for the future.

The aim of the exhibition is to provide orientation in the past and present construction works and show the best achievements of these professions in the Czech Republic. At the same time the exhibition tries to spotlight the significance of engineering and architecture for society as a whole, not only in terms of the functionality of their works, but also in shaping the aesthetics of constructions and public space.

The connection of a personal photographic portrait of the author, short text medallion and the historical and contemporary photographs of the author's work aims to remind the development and success of Czech engineering and architecture.

The exhibition will be continually installed in various cities of Czech republic such as Prague, Ostrava and Brno - mostly at the city halls and Czech universities and scientific-technical centres.

Czech Institution of Structural and Civil Engineers, in collaboration with other associations and chambers, schools and construction companies, wants to show to the wider audience, especially to the young generations, that the architecture and civil engineering are challenging but beautiful professions. The thoughts and creations of our ancestors profoundly altered this country – in a positive way.
Czech Institution of Structural and Civil Engineers, as the principal organizer of the celebrations of the 150th anniversary of the establishment of SIA, highly appreciates the participation of representatives from the ECCE at the opening of the exhibition 150 years of SIA and the Ceremony in Bethlehem Chapel on October 31st, 2015, as well as their interest in activities of Chamber of Engineers and the Association of Engineers in the Czech Republic. If someone is interested in borrowing the exhibition for your organization’s needs, please feel free to contact us.

Looking forward to the further cooperation and intensification of relations with all chambers and associations involved in ECCE.

Ing. Pavel Štěpán

President

Czech Institution of Structural and Civil Engineers

Estonia

EACE 25

Estonian Association of Civil Engineers celebrates 25th anniversary in 2016. Our association was established on 9th of February 1991 by 124 civil engineers. It happened just before liberation from Soviet occupation and restoration of Estonian independence. During 25 years we have grown and increased our activities. Today beside 508 individual members also 4 associations are joined EACE: Estonian Heating and Ventilation Engineering Association; Estonian Geotechnical Society; Estonian Association of Water Supply and Wastewater Engineers; Estonian Association of Water Engineers. Together with the collective members, the association joins close to 950 civil engineers.

Estonian Association of Civil Engineers holds activity license for professional recognition of civil engineers in Estonia. According to the new Building Code (forced in 01.07.2015) only qualified persons can act in certain areas of activity of construction industry. The qualification of a competent person must be proved by holding professional certificate.

Estonian Association of Civil Engineers has close cooperation contacts with Latvian, Lithuanian and Finnish Associations of Civil Engineers.

EACE is member of Estonian Association of Engineers and since 1997 we are one of the ECCE family members.

SBE16 Tallinn - Helsinki Conference

As a cooperation outcome with Finnish Associations of Civil Engineers in 2016 jointly will be organised Sustainable Built Environment Conference - SBE16 Tallinn and Helsinki Conference. The main theme of conference is “Build Green and Renovate Deep”.

Sub-themes of the conference are:

- Investing in high performance
- How to measure green?
- Nearly zero energy buildings
- Deep, integrated renovation
- Energy aspects in land use planning

This event will take place in 5-7 October 2016. Conference meetings will be held in Estonia (Tallinn) and technical excursions will be organized in Finland (Helsinki). The distance between Tallinn and Helsinki is roughly 80 km and participants will be taken to site visits by boat. It would be an excellent opportunity to visit so called “Talsinki” - by visionary named twin city Tallinn & Helsinki.

During the conference we offer to interested parties possibility to organize also own workshops. It could be targeted for interest group, the topic should fall within conference themes and it will be open for all conference participants. For advertising purposes an exhibition will be available.

On the conference website you can find more interesting information about this international event and also list of Scientific Committee members.

Welcome to SBE16 event! More information can be found here.

Andres Piirsalu

President of Estonian Association of Civil Engineers
News from Georgian Society of Civil Engineers (GSCE)

1. By initiative of Society President of Georgian Society of Civil Engineers (GSCE) Yuri Svanidze continues in order to extend wide area of action of European Council of Civil Engineers (ECCE) negotiations with professional societies in the former Soviet Union countries Azerbaijan, Belarus, Moldova and Armenia Builders. Result of work is Ukraine’s Association membership in the European Society of Civil Engineers.

2. In Georgia, according to a survey of European international experts is adopted the proposal of President Yuri Svanidze on necessity of establishment earthquake engineering international center.

3. Accordingly of the letter of the Secretary-General of the European Council of Civil Engineers was accepted the proposal of President Yuri Svanidze to consider as one of the strategic directions of ECCE seismic construction and related topical issues.

4. On the 61st General Assembly of European Council of Civil Engineers in Naples on behalf of Georgian Society of Civil Engineers by M Bediashvili was made a proposal to create a group in ECCE, who would actively participate in the implementation in seismically active countries of protection from the earthquake impact service – by way of implementation of seismic insulation systems.

The General Assembly approved the proposal of GSCE and decided create within ECCE groups by leadership of Mr. Massimo Mariani, which is a specialist in this field.

On 63rd General Assembly of ECCE by us was expressed the Georgian capital Tbilisi mayor willingness to actively participate in exploring of seismic resistance systems.

Mr. M. Bediashvili on Assembly expressed thanks to Mr. Gorazd Khumar, due whose recommendation Georgian specialists got materials on seismic insulation systems from France, Italy, and Slovenia.

GSCE request is to put this issue before EC to take into account in transnational program of seismic insulation mastering systems, provided to the Tbilisi builders material as well as theoretical and practical assistance.

5. From the Council of Engineering & Technology (India), CET (I) was sent on the name of the President of Georgian Society of Civil Engineers Yuri Svanidze mutual agreement

6. By Tbilisi City Hall were performed various development projects, including:

Project “New Tbilisi”

Tbilisi Development Fund has started a large scale project called “New Tbilisi”, first stage of which has started with rehabilitation of D. Aghmashenebli Avenue - From Aghmashenebli Square to Saarbrucker Square, including “Mshrali Khidi” and Orbeliani square.

Project “New Tbilisi” will be executed stage by stage and consists of the development of the major tourist route, by which already rehabilitated areas will be logically connected to the zones of current rehabilitation. “New Tbilisi” means creation of major public spaces, construction of new galleries and squares, while maintaining the old aspect of the city’s architecture.

“New Tbilisi” is the very first large scale project in the history of the city’s development.

According to the scope of the project, 47 buildings out of which 38 are monuments of cultural heritage will be fully rehabilitated, restored and reconstructed. Networking wires and engineering cables will be fully changed and infrastructure will be arranged. Historic buildings will be reinforced and their entrance halls and indoor yards will be rehabilitated as well.

The old image of the avenue will be restored and the authentic details will be kept. Pedestrian zones will be renewed and pedestrian crossings will be arranged, also more green spaces will be developed. Moreover, rehabilitated zone will be fully adapted for people with disabilities. As a result of rehabilitation, living conditions of the local residents will be seriously improved. Execution of the project will result in significant increase of tourist flows, which is the guarantee of the city’s economic stability.

Additionally, scope of the project about “Mshrali Khidi” and surrounding areas, including “9 March Garden” and “Deda-Ena Garden” will be fully recovered and developed. An underground will be arranged between the gardens mentioned above, where a gallery, markets and a terrace will be located. Pedestrian area will be arranged as well.

Project “New Tbilisi” will last for 3 years and the next stages of it include rehabilitation of the historic gardens as well as restoration/rehabilitation of Firomsmani and Kargareteli streets, Orbeliani Square and development of surrounding areas, by which already rehabilitated part will be connected to the area of current rehabilitation.

The first stage of “New Tbilisi” will be completed by the end of 2016.
Rehabilitation of Ghvinis Aghmarti

Tbilisi Development Fund is intensively working on development of tourist locations in the historic part of the capital. Ghvinis Aghmarti will be soon linked to the part of the tourist route, where many foreigners and local residents are walking each day.

Tbilisi Development Fund has started rehabilitation of the building in this historic area in October 2015. N1, N3, N5 and N7 Ghvinis Aghmarti are the addresses which are currently being rehabilitated. Facades of N8 Ghvinis Aghmarti are already rehabilitated and the works have completed in February 2016.

Construction of the monuments of historic heritage was reinforced and the damaged decorative elements, as well as the whole parts were restored. Apart from the rehabilitation works, indoor yards will be arranged and the infrastructure will be enhanced significantly.

Ghvinis Aghmarti is differentiated in the city by its attractiveness, where the landscape and the urban development are in harmony with each other.

This part of the city can be seen from the left bank of river “Mtkvari”, as well as the old town, and its rehabilitation is of high importance for the city.

Rehabilitation works on buildings located at Ghvinis Aghmarti will be completed by May 2016. Tbilisi Development Fund has spent around GEL 1.000.000 for rehabilitation and restoration works from the budget. Next year, the fund is planning to expand significantly the area of rehabilitation.

Hungary

New Regulation of the Public Procurements in Hungary

The EU Directive 24/2014 on the regulation of the public procurements has to be implemented into the legislation of the member countries by April 2016. Thanks to the collaboration of the professional organizations in Brussels, (ECCE, ECEC, CEPLIS) a lot of the suggestions of the engineering organizations were included to the Directive.

The Hungarian Government decided to speed up the work of implementation, since

1. it seems to be advisable to start the projects of the European fiscal period of 2014 – 2020 with a new regulation instead of introducing the new regulation sometimes during this period, and
2. there are a lot of possibilities in the Directive to improve the decision making process, such as
   a. considering the personal competences of the personnel of the applicant,
   b. considering a suitable period of references,
   c. ways in order to choose the most advantageous project and
   d. considering the life cycle costs of the projects.

The Hungarian Chamber of Engineers played a leading role in the discussions with the Government in the formulation of the regulation.

The main points of the work were:

1. Decision that a new Act is necessary instead of amending the former one.
2. The regulation should be not too long, all details have to be regulated in Government Edicts.
3. Further collaboration of the Authority for the Public Procurements and the Chamber is foreseen to issue detailed guidelines for the decision makers.

The Act No. CXLIII of 2015 on public procurements, accepted by the Parliament and set into force on 1st November 2015. On the same time several Government Edicts were issued, in order to help the use of the Act.

The main results:

1. prohibition of decisions “price only” in certain cases,
2. in the above cases the weight of the price should not be more than 50%,
3. the possibility of accepting “technically equivalent” projects as a reference
4. considering the competences, the knowledge and practice of the personnel of the applicant,
5. the new regulation of the maximum value of the references carried out before,
6. calculation of life cycle costs should be integrated into the requirements.

The Hungarian Chamber of Engineers started to submit the necessary “Guidelines” with other professional organizations and authorities.

7. guideline on considering the personal competences the personal of the applicants,
8. technical equivalences of projects and structures in order to take it into consideration while accepting references,
9. working out ways of life cycle cost calculations,
10. to work out the ways and means in order to use of BIM in project design.

MSc Eng. G. Szőllősszy
Representative of Hungary in ECCE
Hungarian Chamber of Engineers

New ECCE Secretariat address
From the beginning of the year the ECCE Secretariat is hosted by the Association of Civil Engineers of Greece at the following address:

Ippokratous 9, 10679, Athens, GREECE
Tel.: +30 210 9238170
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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.

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