

# European Council of Civil Engineers

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DECEMBER 2020

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### **ECCE 3S Initiative**

2020 The Year of the 3S Approach

"Safe — Sound — Sustainable"



The European Council of Civil Engineers declares the Year 2020 as the Year of the 3S Approach Safe – Sound – Sustainable

The European Council of Civil Engineers has declared the Year 2020 as **the Year of the 3S Approach Safe – Sound – Sustainable**. The official opening event of this initiative was held on 14th December 2019, at Nicosia, Cyprus during the 27th General Assembly of the Cyprus Association of Civil Engineers.

It is a fundamental and inalienable human right for everyone to live in a Safe, Sound and Sustainable home. For this reason, it is necessary to have first and foremost structural security in buildings and then sustainability.

Europe's engineers, and ordinary citizens alike, are wondering why significant amounts of money are invested in improving the shell of buildings, ignoring the structural adequacy of these buildings, especially in countries located in earthquake-prone areas.

The suggestion is that a holistic policy should be drawn up for the structural or seismic upgrading of the structural wealth of European States, along with the wider sustainable environmental upgrading, approaching the problem in a rational way.

The new trend nowadays is...smart financing for smart buildings. But a building can only be called smart... once it fulfills the 3S approach "safe, sound and sustainable".

ECCE has launched the 3S Initiative aiming to raise awareness on this topic in an effort to make an impact towards achieving one of the most important Human rights affordable, Safe, Sound and Sustainable buildings (3S).

In this context, ECCE has published the **3S Manifesto** in the beginning of 2020 and has recently prepared the **Position Paper titled "The Need for integrating Structural / Seismic Upgrade of Existing Buildings, with Energy Efficiency Improvements".** 

### **Read ECCE's Manifesto**

**Read ECCE's Position Paper** 

The 3S Manifesto has been translated to various languages to facilitate the dissemination and enhance the publicity of the initiative among its members. The 3S Manifesto translations and the Position Paper "The Need for Integrating Structural / Seismic Upgrade of Existing Buildings, with Energy Efficiency Improvements" can be accessed in the <a href="ECCE web page">ECCE web page</a>.

ECCE is very satisfied to notice that ECCE's campaign on the 3S initiative gains ground continuously as we acknowledge the adoption of these ideas by other European organizations.

The European Commission's Joint Research Center is being carrying out the European Pilot Project: Integrated techniques for the seismic strengthening and energy efficiency of existing buildings. This Pilot Project puts forward a holistic approach to improve simultaneously the seismic safety and energy efficiency of the European building stock. ECCE was invited to participate and present its views and the main points of the Position Paper "The Need for integrating Structural / Seismic Upgrade of Existing Buildings, with Energy Efficiency Improvements" during the JRC online Workshop that was held from 16 until 19 November 2020.

The pilot project directly supports several European Commission priorities including the Green Deal's call for renovating in an energy and resource efficient way. It provides technical background in support of the Renovation Wave initiative and an action plan to modernise the European building stock.

### **ECCE's Position**

The Renovation Wave Initiative communication states "An integrated approach to building renovation means boosting energy performance of buildings by applying the 'energy efficiency first' principle, deploying renewables, preparing for climate impacts, deploying urban green and blue infrastructure and incorporating circular economy, waste treatment and pollution prevention principles."

Although we agree with the concept of a wider and integrated approach of renovation, we have to remark that it is still far from a holistic view of the problem of maintaining and upgrading the performance of existing buildings and infrastructure.

Renovation and retrofitting works need to be done in parallel with other necessary interventions so that the essential requirements established in the Construction Products Regulation are also respected.

Providing safe buildings and infrastructure for the citizens of Europe is clearly a political responsibility and obligation which needs to be sought after by not only European professional organizations but by the National Governments as well.

Watch the video presentation of the 3S approach initiative that was delivered during the 71<sup>st</sup> ECCE General Meeting <u>here</u>.

# Construction 2050 Alliance Webinar "The role of Construction in the national recovery plans"



On 2<sup>nd</sup> December 2020, the Construction 2050 Alliance brought together experts from all over Europe, including representatives from the European Commission, the European Parliament and national governments. They discussed the important role that the construction sector may play as the European economy recovers slowly from the COVID-19 pandemic. The Alliance's key message is that the built environment must be a key priority in all national Recovery plans and in the new EU funding initiatives.

As in our fight against climate change, for which the construction ecosystem plays a key role, the built environment provides solutions to mitigate the impact of the pandemic. Indeed, while it was estimated that on average European citizens spend more than 90% of their time indoors, this has significantly increased as confinements and curfews have become the new norm. Living in safe, healthy, properly ventilated and energy efficient buildings is thus crucial for EU citizens, the economy, and the planet.

It is for the reasons highlighted here above that, the members of the Construction 2050 Alliance held a high-level discussion on the role that the built environment should play in the post-COVID-19 recovery, more specifically, its weight in future decisions on European funding in response to the pandemic.

This first public event of the Construction 2050 Alliance allowed for open and transparent exchanges between Member States representatives, Members of the European Parliament (MEPs), high-level Commission officials, as well as European construction experts.

Whilst Member States presented their plans for the built environment in their respective national strategies under the new recovery instrument, "Next Generation EU", the European Commission confirmed that construction may

"The built
environment must
be a priority for
Next Generation
EU"

be prioritised in the national Recovery Plans as it can play a key role in the recovery and resilience of the EU's economy. However, this must be requested by Member States that have full ownership of their national Recovery Plans and should be the result of a consultation exercise with national stakeholders. On the same line, MEPs Iskra Mihaylova (Bulgaria, RE) and Pernille Weiss (Denmark, EPP) suggested that national debates feed each other through an exchange of best practices on effective policy measures.

The representatives of the Alliance stressed that investments in the renovation and modernisation of the European buildings and infrastructure will deliver positive results in terms of health, comfort, adaptability and environmental impacts. Such investments offer key opportunities for a built environment that would be more resilient, safer, more comfortable, more cost-efficient and sustainable. Therefore, the 47 EU associations that form the Alliance call together for the

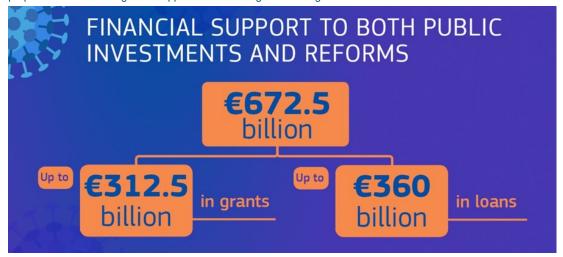
built environment to be a key priority in all national recovery plans and in the new EU funding initiatives.

Click here to access the recording of the event.

Click here to read the Concept note of the Construction 2050 Alliance.

### The Recovery and Resilience Facility

The Recovery and Resilience Facility (the Facility) will make €672.5 billion in loans and grants available to support reforms and investments undertaken by Member States. The aim is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions.



By offering large-scale financial support for investment and reforms, the Facility will better prepare Member States for a sustainable recovery.

The Facility will enter into force when the negotiations among the co-legislators on the Regulation are concluded.

### The Facility and NextGenerationEU

The Commission proposed the Facility on 27 May 2020 as the centrepiece of <a href="NextGenerationEU">NextGenerationEU</a>, a temporary recovery instrument that allows the Commission to raise funds to help repair the immediate economic and social damage brought about by the coronavirus pandemic. The Facility is also closely aligned with the <a href="Commission's priorities">Commission's priorities</a> ensuring in the long-term a sustainable and inclusive recovery that promotes the green and digital transitions.

On 21 July 2020, the European Council reached a political agreement on NextGenerationEU, including the Facility, and the 2021-2027 long-term EU budget.

#### National recovery and resilience plans

Member States will prepare recovery and resilience plans that set out a coherent package of reforms and public investment projects. To benefit from the support of the Facility, these reforms and investments should be implemented by 2026.

The plans should effectively address challenges identified in the <u>European Semester</u>, particularly the <u>country-specific recommendations</u> adopted by the Council. The plans should also include measures to address the challenges and reap the benefits of the green and digital transitions.

Each plan is expected to contribute to the four dimensions outlined in the <u>2021 Annual Sustainable Growth Strategy</u>, which launched this year's European Semester cycle.

- Environmental sustainability
- Productivity
- Fairness
- Macroeconomic stability

The Facility is an opportunity to create European flagship areas for investments and reforms with tangible benefits for the economy and citizens across the EU. These should address issues that need significant investment to create jobs and growth, and which are needed for the green and digital transitions. The Commission strongly encourages Member States to put forward investment and reform plans in the following areas:



(Source: European Commission's website)

### **ECCE's Position**

The European Council of Civil Engineers would like to point out that infrastructure investment, even transport and environmental projects (e.g. hydraulic works, waste management, etc.) are not included in the flagship areas for investments and reforms that are recommended by the Facility aiming to mitigate the economic and social impact of the coronavirus pandemic in the EU member states. We strongly disagree with the absence of infrastructure investment among the flagship areas and we believe that this is wrong not only in terms of the infrastructures' contribution to the recovery but also in relation with the impact of infrastructures in economy's productivity. As a matter of fact, the IMF's most recent Fiscal Monitor publication suggests that investment in infrastructure would prepare economies for the transition to the post-Covid

-19 world and would help create jobs. It is argued that governments need to scale up public investment to ensure successful reopening, boost growth, and prepare economies for the future. You can view the report here.

The European Council of Civil Engineers strongly believes that investment in infrastructure projects and in the built environment must be a key priority in all national Recovery plans and in the new EU funding initiative

# The Renovation Wave Initiative: doubling the renovation rate to cut emissions, boost recovery and reduce energy poverty

The European Commission has published on 14<sup>th</sup> October 2020 its <u>Renovation Wave Strategy</u> intending to double Europe's renovation rate in the next ten years and contribute to making the continent carbon neutral by 2050.

Europe's buildings account for 40% of EU energy consumption and 36% of greenhouse gas emissions, with more than 34 million Europeans at risk of energy poverty and unable to heat their homes as a result of poor energy performance. Renovation will help to combat these problems, but significant effort is needed to stimulate investment.



Executive Vice-President for the European Green Deal, Frans Timmermans said: "We want everyone in Europe to have a home they can light, heat, or cool without breaking the bank or breaking the planet. The Renovation Wave will improve the places where we work, live and study, while reducing our impact on the environment and providing jobs for thousands of Europeans. We need better buildings if we want to build back better.'

The strategy will prioritise action in three areas: decarbonisation of heating and cooling; tackling energy poverty and worst-performing

buildings; and renovation of public buildings such as schools, hospitals and administrative buildings. The Commission proposes to break down existing barriers throughout the renovation chain - from the conception of a project to its funding and completion - with a set of policy measures, funding tools and technical assistance instruments.

The strategy will include the following lead actions:

- Stronger regulations, standards and information on the energy performance of buildings to set better incentives for public and private sector renovations, including a phased introduction of mandatory minimum energy performance standards for existing buildings, updated rules for Energy Performance Certificates, and a possible extension of building renovation requirements for the public sector;
- Ensuring accessible and well-targeted funding, including through the 'Renovate' and 'Power Up' Flagships in the Recovery and Resilience Facility under NextGenerationEU, simplified rules for combining different funding streams, and multiple incentives for private financing;
- Increasing capacity to prepare and implement renovation projects, from technical assistance to national and local authorities through to training and skills development for workers in new green jobs;
- Expanding the market for sustainable construction products and services, including the integration of new materials and nature-based solutions, and revised legislation on marketing of construction products and material reuse and recovery targets;
- Creating a New European Bauhaus, an interdisciplinary project co-steered by an advisory board of external experts including scientists, architects, designers, artists, planners and civil society. From now until summer 2021 the Commission will conduct a broad participatory co-creation process, and will then set up a network of five founding Bauhaus in 2022 in different EU countries.
- Developing neighbourhood-based approaches for local communities to integrate renewable and digital solutions and create zero-energy districts, where consumers become prosumers selling energy to the grid. The strategy also includes an Affordable Housing Initiative for 100 districts.

The review of the Renewable Energy Directive in June 2021 will consider strengthening the renewable heating and cooling target and introducing a minimum renewable energy level in buildings. The Commission will also examine how the EU budget resources alongside the EU Emissions Trading System (EU ETS) revenues could be used to fund national energy efficiency and savings schemes targeting lower income populations. The Ecodesign Framework will be further developed to provide efficient products for use in buildings and promote their use.

### **ECCE's Position**

The European Council of Civil Engineers welcomes the Renovation Wave Initiative which will try to address the twin challenge of energy efficiency and affordability. The European Council of Civil Engineers in a letter addressed to the DG ENER has stated:

As the communication on the Renovation Wave Initiative states "An integrated approach to building renovation means boosting energy performance of buildings by applying the 'energy efficiency first' principle, deploying renewables, preparing for climate impacts, deploying urban green and blue infrastructure and incorporating circular economy, waste treatment and pollution prevention principles.

upgrading the performance of existing buildings and al safety shall be the first target of renovation. infrastructure.

We state that this renovation and retrofitting needs to be done in parallel with other necessary interventions

so that the essential requirements established in the construction products Directive are also respected.

We would like to remind that according to our Directives our structures shall fulfill the following essential requirements:

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and the environment
- Safety and accessibility in use
- Protection against noise
- Energy economy and heat retention
- Sustainable use of natural resources.

ECCE would like to state that the Renovation Wave Although we agree with a wider and integrated ap- shall promote and fund interventions according to proach of renovation we have to remark that it is still far the holistic approach of upgrading the existing from a holistic view of the problem of maintaining and buildings and infrastructure and of course structur-

### 71st ECCE General Meeting

The 71st ECCE General Meeting was held on Friday 23 October 2020 in a virtual environment via Zoom.

The 71<sup>st</sup> CCE General Meeting gathered delegates from 22 out of the 23 Full ECCE Members as well as representatives of some of its Associate Members, Individual Associate Members and invited guests from its partner organizations

### 71st ECCE General Meeting materials:

71st ECCE General Meeting Agenda

3S Position Paper Presentation

**ECCE Brief Activity Report October 2019 - October 2020** 

**ECCE Publications** 

**Construction Industry News** 



#### Watch the broadcasts:

The parts of the 71<sup>st</sup> ECCE General Meeting that were open were livestreamed. You can watch the videos via the following links:

Rehabilitation of Existing Buildings: Structural/Seismic in parallel with Energy Efficiency

71st ECCE GM Open Session

### ECCE participates in the European Commission's Joint Research Center Pilot Project Workshop" Integrated techniques for the seismic strengthening and energy efficiency of existing buildings"



The European Commission's Joint Research Centre organised the workshop about the European Pilot Project Integrated techniques for the seismic strengthening and energy efficiency of existing buildings that was held from 16 to 19 November 2020 in a digital environment.

Earthquakes threaten a large percentage of homes and public buildings across the EU. At the same time, inefficient energy consumption from these outdated buildings is a major source of greenhouse gas emissions. The pilot project puts forward a holistic approach to improve simultaneously the seismic safety and energy efficiency of the European building stock.

The Pilot Project's sustainable approach will combine renovation efforts that reduce building vulnerability to protect lives and will update the energy efficiency of ageing structures to significantly reduce CO2 emissions and tackle energy poverty, while reducing the retrofit's environmental impact.

The pilot project directly supports several European Commission priorities including the Green Deal's call for renovating in an energy and resource efficient way. It provides technical background in support of the Renovation Wave initiative and an action plan to modernise the European building stock.

The workshop had the following objectives:

- Create awareness among participants of the issue's challenges and opportunities
- Engage stakeholders to create a network for information exchange
- Present the pilot project and share the knowledge produced
- Exchange ideas on technical/scientific and policy issues
- Collect feedback on needs, knowledge gaps and expectations to inform efforts in the second phase of the pilot project.

#### **Programme**

16 November 2020 Opening session

Regional impact assessment and contributions to an action plan

17 November 2020 Overview and classification of technologies for seismic strengthening and energy upgrading of existing buildings

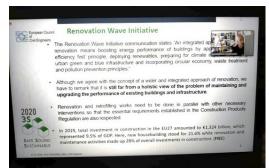
18 November 2020 Analysis of technologies for combined upgrading of existing buildings

19 November 2020 Methodologies for assessing the combined effect of upgrading

Closing session

This Pilot Project puts forward a holistic approach to improve simultaneously the seismic safety and energy efficiency of the European building stock and it is completely aligned with ECCE's 3S Initiative and the recent ECCE Position Paper on "The Need for integrating Structural / Seismic Upgrade of Existing Buildings, with Energy Efficiency Improvements".

In the beginning of October 2020 the President of the European Council of Civil Engineers Aris Chatzidakis participated in a meeting with the team leaders of the Pilot Project to discuss the common ideas that predominate in both initiatives



ECCE President Aris Chatzidakis participated as speaker on the first day of the Workshop when he presented the main points of ECCE's Position Paper on the need for integrating seismic upgrade of existing buildings with energy efficiency improvements. ECCE President in his presentation stressed the importance of the holistic view of the problem of maintaining and upgrading the performance of existing buildings and infrastructure and the need that this approach is integrated in the European Commission's Renovation Wave Initiative.

### ECCE participates in the Thematic Group 1 meeting

ECCE has been participating in the Thematic Group 1 "Stimulating investment in building renovation, infrastructure and innovation" since its establishment. The latest meeting of the Thematic Group 1 was held on 3 December 2020 in a digital environment. ECCE's Vice President/ President Elect Andreas Brandner participated in the meeting on behalf of ECCE.

The meeting consisted of the following parts:

Welcome and introduction by Ms. Fulvia RAFFAELLI, DG GROW.C1

### Part 1 - Digitalization of Construction - Towards a digital transition

- Updates on the Renovation Wave by Ms. Silvia REZESSY, DG ENER.C4
- The Digital Europe Programme by Mr. Matthias KUOM, DG CNECT.A2
- Horizon Europe A new way to build by Mr. Eleftherios BOURDAKIS, DG RTD.F3
- Reflections from stakeholders and Member States: Opportunities and challenges in the digitalisation of companies and public administrations

With reflections from:

- Mr. Jaroslav NECHYBA, Czech Agency for Standardisation
- Mr. Domenico CAMPOGRANDE, The European Construction 2050 Alliance
- Mr. Jimmy FORSBERG, Skanska Sweden Digital Hub
- Mr. Jon ANSOLEAGA, Eraikune Construction Cluster
- Concluding remarks by Ms. Ilektra PAPADAKI, DG GROW.C1

### Part 2 – Initiatives and practical implementation of digitalization

- Welcome and introduction by Ms. Ilektra PAPADAKI, DG GROW.C1
- he power of Al in construction and R&D by Mr. Tristan RANDALL, Autodesk

An Update from the work of the EU BIM Task Group by Ms. Milena FEUSTEL, EU BIM Task Group, German Institute for Federal Real Estate

A discussion on the potential of Digital Building Permits

With reflections from:

- Ms. Francesca NOARDO, TU Delft, European Network for Digital Building Permits
- Mr. Jaan SAAR, Estonian Ministry of Economic Affairs and Communications
- Mr. Risto LEVANTO, Department of Building permits, City Of Vantaa
- Towards an EU Framework for digital building logbooks by Mr. Maarten DE GROOTE, Vito
- Towards an EU digital platform for construction by Mr. Alberto PAVAN, DigiPLACE, Politecnico di Milano
- Concluding remarks byMs. Ilektra PAPADAKI, DG G ROW.C1 and Mr. Michael FLICKENSCHILD, Construction 2020 Secretariat (Ecorys)

The concluding remarks of the meeting are as follows: The necessary elements for successful digitalisation of the sector are standardisation, a common approach to data and processes, language and classification systems. In this context, harnessing the power of data and using open source approaches that can be shared among all the stakeholders across the building lifecycle are of utmost importance. Upskilling and retraining of the workforce and culture change in the sector are indispensable in this transformation. The process can only succeed if stakeholders cooperate across the supply chain and between Member States. The change should be driven by the sector itself, including SMEs, with the support of the public authorities. Construction-specific DIHs and other PPP initiatives could play crucial role in this.

The Agenda of the meeting is available <a href="here">here</a>. The minutes of the meeting are available <a href="here">here</a>. The presentations of the meeting are available <a href="here">here</a>.

### 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.

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Nevertheless the Directive considers under this title, professionals with quite different academic or professional 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

### 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



### 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.

### 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 as a proof that you are member of it
- 3. Excel sheet with your information
- 4. Photograph
- 5. Excel sheet with your name and address

After receiving the notification of acceptance of your application from the ECCE General Secretary, you will be asked to proceed to the **Payment of the Subscription Fee** according to the **Payment Details** that follow.

### What are the Payment Details?

- To be an ECCE individual member there is an anual 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 8 euros, with each package, for mail and printing of a new card.

The payment should be sent by bank transfer to:

#### National Westminster Bank plc, Charing Cross Branch

BIC NWBK GB 2L

IBAN GB28 NWBK 6072 1408 5260 60

Bank Address: National Westminster Bank plc, PO Box 113, Cavell

House, 2A Charing Cross Road, LONDONWC2H 0PD

Account Name: European Council of Civil Engineers

**Account Number:** 550/00/08526060

**Sort Code:** 60-40-05

#### Please ensure that your payment includes your name as a reference.

After payment send a copy of the bank transfer to <a href="ecce\_sps@otenet.gr">ecce\_sps@otenet.gr</a> and you will become ECCE member and you will receive the membership card.

### **News from ECCE Members**



### Bulgaria

### The first Virtual Forum and Exhibition in Bulgaria, Sofia on December 3-5



8:00 - 19:30

Работна среща - Съюз на строителните инженери в България:Необходимостта от конструктивно/сеизмично преустройство на съществуващи сгради, успоредно с подобрения на енергийната ефективност.Новата тенденция е интелигентно финансиране за интелигентни сгради.



Paботни срещи

аботна среща - Съюз на строителните инженерия в БългариязНеобходимостта от онструктивно-бизмично преустройство на сместуващи с грады, усповредн с юдобрения на енергийната ефективност.Новата тенденция е интелигентно финансиране в интелигентни сгради. Моля задавайте своите въпроси към участните от панела в панела Въпроси и Отговори".



доц. д-р инж. Цветан Георгиев Доцент катедра Метални, дървени и





The first **Virtual Forum and Exhibition** for Real Estate, Investment, Construction and Innovation was held in Bulgaria, Sofia on December 3-5.

For the first time in history, over 30,000 people from all over Bulgaria visited the virtual Forum Real on December 3-5.

The virtual Forum Real for Real Estate, Investments, Construction and Innovations was held under the auspices of the Mayor of Sofia, Ms. Yordanka Fandakova, under the patronage of the Minister of Regional Development and Public Works, Ms. Petya Avramova and with the strategic partnership of the Chamber of Builders, National Real Estate Association, the Union of Architects, Union of Civil Engineers in Bulgaria, National Association of Construction Contractors and many others.

Over 300 experts participated, as speakers, in the largest conference program on the topic. For the needs of the Forum were created 3 virtual conferences and several exhibition halls. Among the speakers are the most prominent investors, architects, builders, financiers and analysts, designers, innovators, scientists, public figures and representatives of the executive and municipal authorities in Bulgaria.

Along with the topics that concern everyone in the Forum Hall, in the Business Innovations Hall there were many specialized discussions for all participants in the construction and investment market.

Visitors also were able to attend specialized workshops and trainings by leading architects, interior designers, economists and analysts.

Within 3 days, visitors were able to hear over 70 different discussions on topics that directly concern everyone.

The Forum became a virtual meeting of the participants in the construction business in Bulgaria.

Union of Civil Engineers in Bulgaria (UCEB) was presented with a **virtual expo stand**, which also promoted the activities of the ECCE, as well as the latest ECCE Position paper "The need for Structural / Seismic Rehabilitation of Existing Buildings, in parallel with Energy Efficiency Improvements".

An online **Virtual working meeting of the UCEB partners** was held within the Forum, which was attended by over 200 participants. Dimitar Natcev, UCEB President presented ECCE Position paper in detail.

Roumiana Zaharieva, PhD MSc Civ.Eng., Associate professor and Head of Department of Building Materials and Insulations at University of Architecture, Civil Engineering and Geodesy presented briefly the scope of the JRC Pilot project "Integrated techniques for the seismic strengthening and energy efficiency of existing buildings" and her findings within this project related to the implementing measures for upgrading buildings in six European countries. She compared the situation in Bulgaria with those in Croatia, Cyprus, Greece, Romania and Slovenia. She concluded that despite of the adopted legislation in the field of the energy efficiency of buildings and the provisions of Eurocodes, including EC8-part 3, there are only a few examples of implementation of joint measures, which are rather procedures to consider the two aspects, but due to the time and funding restrictions, as well as some social issues (technical audit, accommodation, etc.) and lack of public awareness, there are practically no combined or integrated measures applied in a significant scale. Assoc. prof. Zaharieva pointed out some discrepancies in the Bulgarian legislation and funding Programs on Energy efficiency of buildings which hinder the process of implementation of joint measures. She advised that the large panel buildings were out of the scope of JRC project so far, while for Bulgaria they represent the greatest challenge.

Dr. Eng. Tzvetan Georgiev, associate professor in University of Architecture Civil Engineering and Geodesy (UASG) and expert in National Earthquake Engineering Center (NEEC), reminded that the generation which is currently is living in Bulgaria, has not experienced catastrophic earthquake, but this should not calm down us. UASG and NEEC fully support the holistic integrated approach towards the renovation and seismic upgrade of existing buildings and believe that the legislation framework has to be complemented by stricter regulations in this direction and this process has to be provided with targeted funding.

Eng. Maria Stefanova, Secretary General of Chamber of Engineers in the Investment Design, Regional branch Sofia, examined how the seismic upgrade and energy efficiency are related to the contribution of buildings to the sustainable development in aspect of the new common EU framework Level(s) of core indicators for the sustainability of office and residential buildings. The implementation of Level(s) requires the use of integrated approach to Sustainable Structural Design.

Eng. Stefan Kinarev, President of Chamber of Engineers in the Investment Design, Regional branch Sofia, focused on the changes related to the preparation of the <a href="Energy Efficiency">Energy Efficiency</a> project and the role of the designers of various specialties in this project. In the current practice, the role of Heating and Ventilation designers / engineers is favored, and other specialties have a secondary role. The Energy Efficiency project is limited to the building envelope. It is necessary to rethink the energy rehabilitation of buildings.

From the discussion and the presented opinions became clear the message to the visitors of the event that:

A building can only be called smart, once it fulfills the 3s approach "safe, sound and sustainable". We need Smart financing for Smart buildings.



Георги Брашнаров

During the second day December 4 of the Forum Real in the hall "Business and Innovations" a panel discussion on Digitalization took place: The construction industry and the building stock: The digitalization of the construction sector - new services and regulations. How will innovative digital solutions allow the industry to optimize its operations and increase the transparency?

Despite the fact that the panel took place at the end of the day - 18.30, the interest in this topic was very high and more than 380 people took part in it virtually.

Dimitar Natchev, UCEB President took part in this panel discussion.

He expressed his opinion concerning the steps of the digitalization of the investment design, implemented in Bulgaria so far and the options of digital construction permits, problems with implementation of technical passports for buildings. The new EU "Digital Building Logbook" and similar term building passport also were discussed. It was clearly stated that a systematic, well organized and standardized scheme for data gathering and storage is very important. The discussion continued with problems from product information to digital logbooks, from BIM to Digital Twins also the need for Digital skills development for professionals within the construction sector.

As a Chairman of BDS/TC- 101 "Sustainability of construction works", which is also responsible for Building Information Modelling (BIM) standards, Dimitar Natchev emphasized the key role of common standards (CEN, ISO) for implementation of BIM. He stressed that the standards ensure future interoperability and compatibility of data sharing and use. What the construction industry needs is "big and open"

BIM, which integrates the entire value chain and is characterized by full interoperability of software and open access to it. He talked about the work of TC 101 on adoption of Industry Foundation Classes (IFCs) for data sharing in the construction and facility management industries (ISO 16739:2013), Data dictionaries, Data delivery manuals and the series of EN ISO 19650 - Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling. Both new international standards provide guidance on the organization of information about construction works and information management using BIM.

He concluded that the adoption of open BIM standards is an essential first step to industry digitalization providing a common interoperability.

BIM is the basis for our digital infrastructure. BIM is about transforming the way we consider and operate our built environment. The uptake of BIM depends on public authorities. The construction professionals should go with little steps ahead – concluded panelists.

For us, the participants in the Forum, it was a pleasure and a great challenge to be part of this impressive technically virtual event, attended by over 30,000 people, with the opportunity to have a virtual expo stand, to participate in panel discussions, to make a virtual video working meeting of our organization, to make contacts with partners and clients, to join the multi-directional information stream, to receive feedback on the kind of people who have visited our events, to be where we are not physically.

Union of Civil Engineers in Bulgaria (UCEB)

### Open Meeting of Technical Committee TC 101 "Sustainability of construction works" Bulgarian Institute for Standardization



An open meeting of Bulgarian Institute for Standardization, Technical Committee TC- 101 "Sustainability of construction works", was held on November 19.

The meeting "host" was the Virtual Classroom of Chamber of Engineers in the Investment Design, branch Sofia (KIIP, Sofia), which gave the members of KIIP the opportunity to become informed about the current work of TC.

The meeting was organised in two panels. In the first one on the topic of **Sustainable Construction** two presentations were provided:

With small steps towards sustainable construction:

**Environmental product declarations** - Roumiana Zaharieva, PhD MSc Civ.Eng., Associate professor and Head of Department of Building Materials and Insulations at University of Architecture, Civil Engineering and Geodesy.

ECCE Position paper *The need for Structural / Seismic Rehabilitation of Existing Buildings, in parallel with Energy Efficiency Improvements* - Dimitar Natchev, UCEB President

The second part of the meeting was dedicated to the **Digitalization and Building Information Modeling** (BIM). The following presentations were given:

**Data templates and configurable construction objects** - scope of the prEN 17549-2 standard, stage of work, the contribution of BIS TC 101 - eng. Stanislav Dermendzhiev, Cobilder

BIM adoption in the UK - the change and success after 10 years - eng. Maria Stefanova, KIIP, Sofia

Projects developed by the Ministry of Regional Development and Public Works related to the digitalization of the construction sector in the Republic of Bulgaria - eng. Nikolay Stankov - Advisor to the Minister of the Ministry of Regional Development and Public Works.

An on-line discussion was held on the issues raised.

Union of Civil Engineers in Bulgaria (UCEB)





### Perit André Pizzuto elected President of the Kamra tal-Periti



The Kamra tal-Periti held its Annual General Meeting on the 10<sup>th</sup> December 2020, the day after the Periti Act was moved to second reading in Parliament. Outgoing President, Perit Simone Vella Lenicker, welcomed this important milestone during the Kamra's first virtual AGM, and highlighted the strong ties between this legislation and the challenges faced by the profession and the building industry. She also reported ongoing divergence on pertinent aspects of the Bill on two crucial aspects relating to (1) the alignment of the liability period with European averages and with insurance products available on the market, and (2) the appointment of the Board of Professional Conduct. The Kamra was satisfied that

the Bill had generally reflected the direction laid down in previous General Meetings and now augurs that it can achieve full agreement with the lawmakers on these outstanding matters in the interest of the profession and the industry.

The General Meeting approved two motions reiterating its position on the Periti Act and the Building and Construction Regulations Framework, and entrusting the Council of the *Kamra* to ensure that decisions approved during previous Meetings are implemented. The first motion related to the pending divergences highlighted above. The second related to the Building and Construction Regulation Framework and the AGM once again entrusted the Council to ensure that Government honours its written commitments made in August 2019 regarding the implementation of the necessary legislative and administrative changes.

Perit André Pizzuto was endorsed as President through a unanimous vote. He has contributed to the *Kamra* for the past 6 years, spearheading the publication of *A Modern Building and Construction Regulation Framework for Malta*, as well as the setting up of the Emanuele Luigi Galizia Awards. In his address, he spoke of three main aspects that will characterise his term, namely: the strengthening of the Kamra as an organisation capable of generating resources and delivering services to its members; renewed efforts to restructure the industry and its legal framework; and eagerness to modernise the profession so it can rise to the challenges posed by climate change, digitalisation of design and information modelling, and emerging construction technologies.

Dr Amber Wismayer was elected as Vice President. She has held the role of Honorary Secretary of the Kamra since 2013, a role she will retain until end-2021.

The AGM elected two new Council members, Perit Matias Camilleri De Marco and Perit Adrian Mangion, and confirmed two incumbents Perit Dr Jeanette Muñoz Abela and Perit Anthony Bezzina.

The appointment of Kevin J. Borg as Managing Director of the Kamra tal-Periti was also announced during the General Meeting. He has been tasked with the implementation of a detailed and holistic three-year Business Plan which was approved by the Council earlier this year.



KTP President Perit André Pizzuto



KTP Vice President Dr. Amber Wismayer



**New Council Member Perit Mati**as Camilleri De Marco



an Mangion



New Council Member Perit Adri- Managing Director Kevin J. Borg



Interview of the Engineer António Costa Silva, Professor of the Instituto Superior Técnico / University of



António Costa Silva prepared the Strategic Vision for Portugal 2020-2030 Economic Recovery Plan, basic document of the Recovery and Resilience Plan that Portugal recently delivered in Brussels. For the Engineer, the pandemic revealed that the Portuguese are "exceptional in abnormality and banal in normality". Despite the resilience shown in recent months, Costa Silva believes that Portugal only sought to outline a Strategic Vision because it's living an abnormal situation, otherwise, "we wouldn't even think about it".

"We will not be able to achieve a developed Country with undervalued engineering"

In July, you presented the first version of the Strategic Vision for Portugal 2020-2030 Economic Recovery Plan. When did the Government's invitation come up and what were the Executive's reasons for selecting you?

You'll have to ask that question to the Executive and the Prime Minister António Costa. I didn't know the Prime Minister personally. He invited me to lunch at the end of April and during lunch he said that he had seen some of my public interventions, accompanied the articles I periodically wrote in Público Newspaper and thought that I would be the right person to prepare a strategic vision: someone outside the Government, outside the system, an outsider, who has no party connection, but who is nevertheless a citizen who does not resign from thinking and reflecting on the Country's problems.

### What are the challenges in developing a plan of this nature?

Many of the things I explained in the Strategic Vision document were issues that I had been reflecting on for a long time. I really like the American philosopher Nelson Goodman who spoke about the possible worlds that are within the real world. Portugal has a series of possible worlds, contained in the real world, but they never materialize. This is an excellent stage for these worlds to materialize. Firstly, we are an Atlantic economy at the crossroads of three continents and, therefore, have a high potential to promote logistical platforms, connections, transport and energy networks with these three continents. We have a central position in the Atlantic. We are living in a century that is undoubtedly the century of connectivity. The countries that will triumph are those that are able to insert themselves in the global, logistic, energy, commercial, technology, knowledge and financial networks. And Portugal can do that. Then, geoeconomics is one of the keys to development in the 21st century.

#### What does that mean?

It means that we are a nation with an average soft power - this explains, for example, the election of António Guterres, Durão Barroso, António Vitorino. The Country has a diplomatic body, visibility, and an attraction from the different continents of the World, which manages to aggregate platforms. If we can do it in diplomacy, why not also do it in economics? That's what geoeconomics is. We can perfectly mobilize many European funds to carry out what is Europe's neighborhood policy. And at the same time, link all of this to the fight against desertification. Portugal lacks the aggregation of all these platforms, a paradigm that may change with the future financial requirements.

#### What influence did your training have as a manager and engineer in achieving the Strategic Vision?

It had a great influence. We live in a society that often tries to diminish engineers. But engineers can be distinguished by the following: they are trained to solve problems. And we are tired of conversation and rhetoric in the Country. We see a lot of interesting people, full of ideas, but who never get to the heart of problems. What I tried with this plan was to make a serious diagnosis of the Country's economic situation - remember that Portugal was slightly recovering from previous crises. But the truth is that we have structural constraints that have never been overcome in our economy: a very limited internal market; decapitalized companies; a huge public debt, inhibiting economic growth; a productive structure with limitations; low productivity; falling investment. And this crisis has made all these problems even more evident.

#### You said recently that Portugal will get worse before it starts to get better. What is the answer to this crisis?

To put people and companies at the center of the Economic Recovery Plan! Portugal has all the functional skills. Where do we fail? In the Institutional competences. More sustainable public policies are needed, continuous over time, better thought out. It is necessary to radically improve the management of companies. Portugal also has deficiencies in terms of marketing and internationalization of its products when working in international markets and, there, the role of Engineering is crucial. It is necessary to link Engineering to design, to the product, and to know how to sell that product. If Portugal possesses these skills, why is the Portuguese economy not making the leap? The reason is simple: the areas of added value still weigh little in our exportations. In Portugal, we are filled with creation, but we forget to raise our ideas on a global scale.

#### What is the role of Engineering in the economic recovery process of Portugal?

Engineering is crucial in the 21<sup>st</sup> century. All the changes happening in this century, all the ideas that are transforming the World, come from the areas of digital - artificial intelligence, advanced robotics, sensors - and biology. I believe that this is the century that will cross biology with computing, completely opening new areas, some even within the limits of deontology and ethics. Technologies will not solve all the problems of the World, but the intelligent use of technologies can change the World. And Engineering is at the heart of these technologies. It's Engineering that will develop the application of digital technologies. It's Engineering that will develop new applications for the energy transition, for the new life of cities, for autonomous cars.



Basically, for all the technologies that will mark this century. We won't be able to achieve a developed Country with undervalued engineering. This does not exist in any country in the World. Engineers always bring ideas, innovations and the ability to execute and transform, obviously with the collaboration of all other professions. But it is engineers who are at the heart of economic change, at the heart of creating new products and new areas with high added value

#### But in order to achieve that, we must guarantee that the best professionals stay in Portugal.

Talents and professionals are critical. And we will not be able to attract talents and establish them in Portugal if there is no transformation in our economy. Our economy has an undeniable transformative capacity. We have functional skills. If we bet on digital technologies to innovate industrial processes, work, business models themselves, we will be able to build a Country with a future. And who's going to do that? Young people.

### The Recovery Plan defines ten strategic axis, each consisting of dozens of proposals that are now expected to materialize over the next decade. How is it that so much remains to be done in Portugal?

Much remains to be done because, firstly, the Country has no continuity in public policies. In *Why Nations Fail*, by Daron Acemoglu and James A. Robinson, the factors that explain the success of the most developed nations in the World are highlighted. One of these factors concerns the quality of the institutions. We are a Country that, sometimes, does not treat well its institutions. But institutions are essential. If we have political institutions, regulators, courts that work, we will achieve a much better Country. *To bet on the quality of institutions is to bet on the quality of people*. Another factor is the intelligence of public policies, especially economic policies. Today we have a Prime Minister and a Minister of Economy who are excellent at connecting with companies. But beware: economic policies must be consistent across political cycles. We cannot do one thing now and change everything tomorrow with another party. Quoting José Ortega y Gasset: "Breaking the continuity with the past, wanting to begin again, is a lowering of man and a plagiarism of the orangutan". I think that in Portugal, we often plagiarize orangutans. The Country is fed up with that. It is fed up with the same players, the same proponents, the same ones that pull the Country down. *The people are not one of the reasons for the Country's backwardness. The people are hard workers. The problem is the elite, or part of the elite, that pulls the Country down and does not know the Country.* 

### If Portugal, Europe and the World weren't going through this pandemic crisis, wouldn't it also be necessary to develop a strategic vision for economic recovery? Shouldn't this or previous Governments have initiated a recovery plan, even in a period of recovery instead of economic degrowth?

That is an excellent question and I know that I will irritate many people with my answer. We are exceptional in abnormality and banal in normality. If there is an exceptional situation, a pandemic, a brutal exogenous shock like the one we are living, the Country is mobilized, it responds. The response from the National Health Service, the Directorate-General for Health, health professionals, the Government, was extraordinary. We are capable of everything. Except that tomorrow the vaccine will be discovered, and we will return to our normality, to our "little wars of rosemary and marjoram", to autophagic struggles, to childish disputes. And we entertain ourselves as if we were in the school playground. The Country is fed up with that. But back to the question: we have this Strategic Vision because we are in an abnormal situation, because otherwise, most likely, we wouldn't even think about it. And there are people who still ask: why do we need a plan? Because we need to think about the future. As the English say: "failing to plan is planning to fail". If we fail to plan, we are planning a failure. This is what we continuously do in our Country.

### Are we at risk of, once the pandemic is over, going back to the previous normality?

We are always at that risk. One of the things that most pleases us in terms of development is our mental paradigm. We must counter this paradigm. That is why I argue that we are exceptional in abnormality and banal in normality. Once in normality, everything is fine... We are complacent, resigned, each one goes back to their own corner and things go on... And that way, we don't realize that we are creating more difficult development conditions.

### The public consultation to the Strategic Vision obtained a total amount of 1.153 contribution proposals. Has our society a duty to comment on the future of Portugal?

Absolutely. Following the launch of the Strategic Vision, namely in the public discussion, there were 1.153 contributions from the north, center, south of the Country, autonomous regions, universities, technological centers, companies, municipalities, and various regional bodies. There were even contributions from citizens. One of the most extraordinary contributions came from a young man from Guimarães (Braga), aged 17, who proposed to make Portugal the World center for artificial intelligence. If we look at the last five years, the amount of information in the World has increased 20 times and we are already managing to transform information into knowledge and knowledge into wisdom. Then, data science is going to be crucial. This is going to be one of the most important areas in the future.

### The Order of Engineers also made its contribution.

The Order of Engineers had a priceless contribution, starting with its President, who is a facilitator, a thinker and an articulator of the various subjects. The Order was and is always ready to make its contribution, it is interventional, and this is extremely positive for the Country because when we analyze the axis of the Strategic Vision, Engineering is present in most of them.

In the face of the pandemic and the need to implement the Recovery and Resilience Plan, both the Prime Minister and the President of the Republic have called for political consensus. Is it possible? I think so.

#### Are you sure about that?

Relatively. I was called by the Economy Committee of the Assembly of the Republic to discuss the Strategic Vision document with all parliamentary groups. It was almost four hours of a very interesting debate, in which each party expressed its concerns. But despite that, I felt that there are many points of convergence. It is around these points that we must build a program that generates a broad political consensus. In crises, it is necessary to seek, not what divides us, but what unites us and can be transforming for the Country. *Crises are frequent, but transformations are much rarer.* We are living a unique moment in which we can use this crisis to really transform the Country. In order to so, a more resilient economy is necessary and to prepare it for the future. If we look at the party range, there are parties that are very sensitive to reindustrialization and the strengthening of national production; others in relation to energy transformation, the fight against climate change; others in relation to qualification, social policies, protection of the most vulnerable. It is necessary to combine all this in a panoply of solutions that mobilize the political system and the Country. All of this without forgetting the central role of people and companies. *If we let businesses be devastated, it will be a catastrophe.* 

### How do you explain that there are still doubts about the thoroughness and transparency in the implementation of European funds? What has failed so that this mistrust remains?

Mechanisms are needed to speed up citizens' confidence in the decisions they make. Democracy is a conflictual regime. It is essential to have a public government portal where it can be stated the funds that were received, how and to whom they were allocated, what were the criteria, what is the execution rate, what is the monitoring, what are the responses. It would be extremely interesting if we had a portal where everything is clearly identified, which allows public scrutiny.

#### Public Administration: what reasons do you find for such disinvestment in recent years?

Public administration must radically change the way it operates. If the Public Administration continues with a business as usual attitude, we will not be able to execute this Recovery and Resilience Plan. Careers in Public Administration are not very attractive. There are sectors with excellent professionals, qualified, but very unmotivated. On the other hand, we let the Public Administration create a very bureaucratic culture. An Administration that works to make opinions and not to solve problems. Currently, if a company wants to launch a large investment, it must go through five, six, seven bodies in the Public Administration, where each one of them gives its authorization, makes its opinion. And basically, nothing moves. It is necessary to create a new culture in Public Administration with the injection of young professionals, mainly engineers, IT professionals. We won't be able to achieve the digitalization of the Public Administration unless we have a rejuvenation of its professionals.

### Once European funds are received, Portugal will have to implement, on average, more than six billion euros per year. With a Recovery and Resilience Plan and funds from the European Union, why is it so difficult to spend this money?

It is difficult to spend this money because of all the problems that we have already discussed in terms of the functioning of Public Administration. Portugal needs a lot of investment; it needs companies to present their projects. But if they must have contact with six different bodies to do so, spend months and months waiting to get a positive opinion, we are not going anywhere. It is absolutely critical to have a structure, a competence center, directly dependent on the Prime Minister, with all the authority to decide, not to replace Public Administration, but to speed up decisions, to be an interlocutor for companies, projects and to place the whole machine running.

### As a citizen, how would you like to see Portugal at the end of the decade?

Honestly, I would like to see a Country that would cease being in last place in terms of the percentage of the population that finishes Secondary Education. I would like to see a Country that over the decade reached more than 3% of investment in science and technology. I would like a Country with a better equipped National Health Service; with health professionals that have planned careers; with all the other central areas of sovereignty, justice, regulation, functioning with more quality and greater demand. I would like to see a Public Administration without its bureaucratic culture, more oriented towards solving problems, responding to companies, citizens and making the economy run. And I would love to see a re-industrialized Country. If we look at manufacturing industries such as heavy and light metallomechanics, electronics and software technologies, biotechnologies, health sciences, to the sea, logistics platforms, we can do a lot. Therefore, I would like to see a Country capable of producing wealth and distributing that wealth correctly. We must avoid national shame, where more than a million people live in poverty. This is not acceptable. If we can do all this, making the energy transition, substantially improving the level of our cities and changing the trajectory of the interior of the Country, we will have a hugely better Portugal in the future.

#### **Biography**

António Costa Silva was born in 1952, in Angola. Professor at Instituto Superior Técnico (IST), he achieved the aggregation in Planning and Integrated Management of Energy Resources.

With a degree in Mining Engineering from IST, he completed a master's degree in Petroleum Engineering at Imperial College, London, and a PhD in both institutions.

In 1980 he started his professional career at Sonangol, in Angola, integrating the Production Department.

From 1984 to 1997 he worked at Companhia Portuguesa de Serviços.

From 1998 to 2001 he was Executive Director of the French multinational CGG, coordinating exploration and production projects in the Middle East (Bahrain), Mexico and Russia.

From 2001 to 2003 he worked at the French Oil Institute, in Paris, as Director of Reservoir Engineering and Director of Operations. He was responsible for and coordinator of technical teams in some of the largest oil and gas fields in the World.

Since 2003, he has been Chairman of the Executive Committee of Partex Oil and Gas, an oil company held until 2019 by the Calouste Gulbenkian Foundation.

In 2020, he was invited by the XXII Constitutional Government to outline the Strategic Vision for Portugal 2020-2030 Economic Recovery Plan, a document framing the options and priorities that should guide the recovery of the economic effects caused by the Covid-19 pandemic.

### By Pedro Venâncio in INGENIUM (Ordem dos Engenheiros Magazine) Photos Paulo Neto



The Management of National Association of Builders (NOSTROY) and Moscow city Department of construction have visited the **Qualification Assessment Centre** (QAC) which is being founded now in Moscow on the initiative of one of the major construction companies "Group of companies FCC /Finance Construction Company/ Leader".





In 2019 the group of companies FCC, a multidisciplinary developing company, one of the leading real estate market players, put forward an initiative on establishment of its own Qualification Assessment Centre (QAC) which should provide professional assessment of workers' and engineering personnel of several construction specialties which are in most demand within the FCC.





**Working Meeting** 

Inspection of the QAC premises and infrastructure

The Moscow department of the Russian Society of Civil Engineers (MD RSCE) has become a founder of a new QAC. On July 28<sup>th</sup>, 2020 the Council on professional qualifications in construction took a decision on giving the organization the status of QAC. 24 working specialties of the 3d , 4<sup>th</sup> and 5<sup>th</sup> levels of qualification have been chosen as basic. Among them are installers of different engineering systems and building constructions, concrete workers, roofers, plasterers, decorators, etc.

In October 2020 the refurbishing of premises and infrastructure was completed. The QAC is situated on the production areas of the 1<sup>st</sup> House-building plant.

On October 29th, 2020 the inspection of the QAC premises and infrastructure took place as well as a working meet-



Practical exam facilities

ing with participation of the Deputy director of the Moscow city construction department Mr. Sergey Suschenko, the Head of the Council on professional qualification in construction, Vice-president of NOSTROY Mr. Alexander Ishin, the President of NOSTROY Mr. Efim Basin, the Vice-president of the FCC Mr. Nikolay Zamytskiy, the Director of the QAC Mr. Oleg Tyurin and the Executive director of Nostroy Mr. Victor Priadein.

The QAC is equipped with convenient working places which can be transformed for the practice examination purposes on a wide range of working specialties.

Each working place has connection to water, electricity and compressed air. The storage areas for materials and equipment are also organized. The cloakrooms are provided for participants. The theoretical exams rooms are furnished. Now it comes the turn of computers installment, servers, video systems and purchasing of special equipment for practical examinations.

The participants of the meeting discussed the plan of preparation evaluation tools, documents regulating the QAC work within the system of the independent qualification assessment, the issues of video control on reliability of exams results, as well as dissemination of the qualification assessment practice of personnel in construction complex of Moscow city.







Qualification assessment of working special-

The first exam in the QAC took place on December 2<sup>nd</sup>, 2020.

Nowadays the issue of qualification assessment especially in the construction spheres is very relevant. It is time to bring matters of work quality to the higher level. And it can be done only with the unified system of workers' qualification control system which envisages conducting examinations and arranging of the unified data base on the specialists of different kind who confirm their qualification on regular basis from year to year. This will ensure more guarantees to an employer as well as a specialist making it easier to find the decent employment and implementation of one's skills.

We are absolutely sure that construction business in other countries is facing the same problems and undertaking certain steps of solving them. Therefore we would be glad to share our experience with those who get interested in it. And we would be happy to get to know other countries achievements in this field as it can be tremendously beneficial for all of us.

We are looking forward to any feedback to Moscow department of the Russian Society of Civil Engineers /MD RSCE/ e-mail address: info@morois.ru



The Turkish Chamber of Civil Engineers held its 47<sup>th</sup> General Assembly and elections on 19-20 September 2020, in Ankara. The newly elected Board of Directors of the Turkish Chamber of Civil Engineers convened on 2<sup>nd</sup> October 2020 and is formed by the following:

**TANER YÜZGEÇ** President



**PARLAR** Vice President



SIDIKA GÜLSUN ÖZER AKKUŞ Secretary Board Member



**SELIM TU-LUMTAŞ** Treasurer Board Member



JALE ALEL **Board Member** 



LEVENT DARI **Board Member** 



**VEYSEL ÖZKAN** Board Member



### "Civil engineers are ideally placed to make a significant difference to our collective future." - Rachel Skinner becomes 156<sup>th</sup> President of the Institution of Civil Engineers

On 3 November, Rachel Skinner became the 156th President of the Institution of Civil Engineers and marked the start of her year with our first ever fully-virtual Inaugural Address. In the 5 days since, the event has received over 2.000 views online.

With more than 2000 people watching live across the world, Rachel's address broke all records for the largest group of ICE members and supporters ever assembled at one time in the ICE's 202-year history.

Within her live address, which focused on the single theme of Net-Zero Carbon, Rachel went on to launch a brandnew film called "Shaping Zero".

It features a cast of famous faces such as world-renowned explorer Sir Ranulph Fiennes, Chair of the UK Committee on Climate Change Lord Deben, former UK Secretary of State for Energy and Climate Change Amber Rudd, former ICE President Sir John Armitt, the Mayor of Los Angeles Eric Garcetti and the Mayor of Stockholm Anna König Jerlmyr, Eden Project Founder Sir Tim Smit and many industry experts. A specially commissioned film, it provided the opportunity for another first: Rachel was able to share her virtual stage with over 30 people, bringing their views directly to all 95,000 ICE members.

Rachel spoke passionately about just one issue: Net-Zero Carbon and the need for civil engineers to act together, urgently, to help reduce carbon emissions and therefore address climate change. She was clear that climate change is the primary existential threat to our long-run future, and that we must use the next decade to 2030 to take action if we are to avoid catastrophic impacts across the planet.

### **UN75: Sustainable Engineering in Action book published**

ICE has launched UN75: Sustainable Engineering in Action, the latest in the series of ICE books produced in partnership with publisher Artifice Press.

The publication helps raise awareness of the vital need for sustainable development and infrastructure and highlights the role that engineering has to play in tackling the UN's Sustainable Development Goals (SDGs).

ICE was there at the start of the UN, as on November 16th in 1945, the UNESCO charter was signed and the first ever UNESCO meeting took place in the Great Hall, One Great George Street. This book celebrates both the 75th year of the UN and the progress in engineering sustainability over this time.

Infrastructure is key to sustainable development; it influences all 17 SDGs, and in turn they all impact deeply, and increasingly, upon the whole infrastructure sector. We need civil engineers to increasingly use the SDGs in their work, to make society and the world more sustainable.

UN75: Sustainable Engineering in Action presents stories of engineering innovation, and engineering sustainability developing as a mindset within the built environment sector, throughout its 272 pages.

These stories explore engineering sustainability in action from across the industry and in those associated with it, including contributions from consultants, international agencies, infrastructure organisations, environmental firms and educational institutions.

### ICE pledges to promote diversity and access to civil engineering careers

ICE has signed up to the Tomorrow's Engineers Code to increase the number and diversity of young people pursuing civil engineering careers. Co-created by and for the engineering community, the code asks signatories to commit to improving the quality, inclusivity, targeting and reach of activities designed to inspire young people and to build and share understanding of how to do so.

The case for increasing both the number and diversity of the engineering workforce is compelling and, with research showing the positive impact of STEM careers activity on young people's understanding of engineering and their likelihood to consider an engineering career, Tomorrow's Engineers, led by EngineeringUK, brings together resources to support practitioners in getting the most out of their engagement activity.

ICE is <u>currently running digital events for schools</u> to inspire and inform students aged 16-18 about civil engineering careers.

### ICE supports UK seismic hazard map update

A project supported by ICE's Research & Development Enabling Fund and carried out by experts at the British Geological Survey has updated the UK's seismic hazard maps to assist with the implementation of Eurocode 8.

The previous maps - developed by Musson & Sargeant in 2007 - are widely used by the UK's engineering sector to inform decisions relating to seismic hazard. The revised maps have been developed using some of the latest available data, knowledge and methods to support the UK's implementation of Eurocode 8, a European construction standard which covers the design of structures for earthquake resistance.

The new maps give guidance on the levels of ground shaking from earthquakes that might be expected in different parts of the country. The research confirms that earthquake hazard in the UK is low in global terms. It shows that the part of the UK with the highest seismic hazard is Snowdonia.

This is due to the occurrence of significant earthquakes in this area throughout the historical record. The next most hazardous location is South Wales, which has also experienced notable earthquake activity over the last few hun-

dred years. The hazard in areas like the Channel Islands, North Wales, the English-Wales border region, the Lake District and North West Scotland is slightly higher relative to other areas of the UK.

ICE's Research & Development Enabling Fund was set up more than 20 years ago to help civil engineers develop new and innovative ideas and tackle problems in design or construction. It is funded largely through member donations and backs projects of benefit to our membership and the wider engineering community, such as enabling more resilient infrastructure. It is open to any ICE member at any level of their career, including associate members.

The Fund's panel is particularly interested in receiving applications relating to ICE's themes of net-zero carbon, supporting the Sustainable Development Goals and ensuring social value in infrastructure.

### Collaboration is crucial for combatting climate change

ICE's <u>annual Brunel International lecture series</u> kicked off in December with attendees hearing from geologist and environmental scientist Seth Schultz on the opportunities for the engineering community to deliver a carbon-neutral society.

The lecture series is a prestige event hosted by ICE. It aims to inform and influence global engineering issues, and to strengthen links between ICE and engineering institutions in the UK and around the world.

This year's series is presented by Seth Schultz, executive director of The Resilience Shift. Entitled "21st Century Leadership is Partnership: How a Coalition of the World's Engineers Can Change the World", the series will explore how the engineering community can deliver a carbon-neutral and resilient society by mid-century.

The civil engineering industry should worry less about competition so that it can accelerate collaboration to deal with the urgency of climate change, according to Schultz.

Schultz said that information and intellectual property needed to be shared between companies, but engineering firms tended not to do that out of a belief that the only thing that sets them apart is their staff and their project experience.

Speaking at the opening of the Brunel International lecture series, 21st Century Leadership is Partnership: How a Coalition of the World's Engineers Can Change the World, Schultz said that engineers needed to work together as a community practice to share solutions. The coming decade is pivotal in tackling climate change, but it will require "radical partnership, innovation, failure and adaptability," he said.

Schultz helped create some of the world's largest networks of cities working to tackle climate change, such as the C40 Cities and the Coalition for Urban Transitions. Through this, he has seen how intensified collaboration has accelerated action on climate change.

"As cities started practicing deep collaboration, they started leap-frogging the standard policy and implementation cycles. They were shortening the delivery timeframe by experimenting with radical collaboration to implement solutions at the speed and scale that climate change demanded," he said.

Cities were encouraged to share failures as well as successes, and major advancements were made in terms of willingness to set ambitious climate goals and rolling out policies to achieve them, he said.

Previously, the lecture series has been delivered in-person and toured globally for 18 months, however the lectures will now take place online and run from December 2020 to December 2021.

Travelling virtually around the world, Seth Schultz will present his lecture alongside a regional panel of key industry thought leaders. From both a global and local perspective, they will debate some of the biggest issues facing the planet and the profession, before answering audience questions.

### **News from ECCE Partners**

### World Council of Civil Engineers (WCCE)



### Let's talk Civil Engineering Webinar Series

As part of the current strategic plan for the Standing Committee on Construction (SCC), a series of webinars have been developed looking at two of our membership markets: the Americas and Europe - Africa.

Webinars are being conducted in Spanish primarily for the Americas

Webinars are being conducted in Spanish primarily for the Americas membership and in English for the European and African members.

These efforts address the following Objectives:

- 1. Transfer of knowledge, technology, information and sustainable solutions to issues.
- 2. Promote occupational health and quality standards through the promotion of Management Systems.
- 3. Promote meetings, seminars, congresses, information and data exchange.

Due to the global impacts of the COVID-19, the limitations of lockdown notices and difficulty in travel, the option of conducting webinars is an ideal option to disseminate our initiatives. Through ZOOM and YouTube, a keynote speaker or several panel members speakers will address the virtual audience in 2h webinars through presentations with a 1h Q&A open discussion. All webinars will be available through WCCE's **YouTube channel**. Sessions will be delivered in English and Spanish languages and topic will seldom be repeated.

More information about the webinars can be found on WCCE webpage.



### American Society of Civil Engineers (ASCE)

### ASCE AMERICAN SOCIETY® OF CIVIL ENGINEERS

### ASCE's 2020 in Review: Gunalan looks back on remarkable year



ASCE 2020 President K.N. Gunalan

It will forever be remembered as the year the COVID-19 pandemic upended nearly everything. The civil engineering industry soon pivoted to personal protection equipment at construction sites and work-from-home arrangements. ASCE responded quickly, moving meetings and events to digital platforms – all with an eye on keeping civil engineers connected, productive, and serving the public.

ASCE 2020 President K.N. Gunalan, Ph.D., P.E., D.GE, F.ASCE, recently talked with the Civil Engineering Source, looking back on his presidential year, one of the most remarkable in Society history:

### Source: How do you think you will remember your ASCE presidential year?

**Gunalan:** I sought the office to see if we could streamline and reshape the image of the organization as one that is nimble, sustainable, and attractive for future generations of civil engineers.

We looked to different organizational structures and business models to deliver value to our members and the profession. We initiated efforts to be more inclusive, to minimize our carbon footprint by reducing travel and collaborating online, and to consolidate our

conferences. So we were poised to pivot when COVID-19 showed up and helped accelerate the changes we were looking to make.

I am sure many will remember the year as the year when a number of our events were canceled or pivoted to go virtual, but I would like to remember my year as one when ASCE was able to pivot to a 21st century model that will be not only attractive but one that can sustain itself for the foreseeable future.

#### Source: Of what are you most proud of when you assess your time as ASCE's president?

**Gunalan:** I am most proud of our members around the globe and staff who are passionate and committed to the cause. It has been a great privilege and honor to serve the membership and the profession.

#### Source: As you look ahead to 2021, what are you hoping for ASCE members?

**Gunalan:** I am hoping that we all get through this pandemic safely, remain healthy, and continue to strive successfully in a world that we all know will be different.

### Source: What's next for you?

**Gunalan:** We'll continue to look for ways to contribute to our members and profession and see if we can strengthen ASCE's voice with our partners and global organizations, such as the United Nations.

Author Ben Walpole Aff.M.ASCE

Senior Manager, Content Development

#### Discover a new source exclusively for civil engineers



In an ever-changing profession like civil engineering, it's important for engineers to keep up with developments across the industry. But how can you make sure you're getting the news and resources you need?

ASCE has recently launched an all-new digital news source and daily newsletter, exclusively for civil engineers. <u>Civil Engineering Source</u> is your one-stop destination for industry news, technical updates, and career development insights. It also includes a completely redesigned <u>Civil Engineering magazine</u> digital edition and will soon bring in content from <u>Geo-Strata magazine</u>.

Our new Al-driven smart newsletter learns your interests and preferences to deliver personalized news straight to your inbox. This replaces the weekly ASCE News enewsletter and the daily ASCE SmartBrief.

Be sure to check out the <u>Civil Engineering Source</u> online and  $\underline{\text{sign up}}$  to receive your free newsletter.

Author Thomas Smith III ENV SP, CAE, F.ASCE

### Japan Society of Civil Engineers (JSCE)



### Report on the 22<sup>nd</sup> International Summer Symposium (The 75<sup>th</sup> JSCE Annual Meeting: International Session)

The JSCE Annual Meeting held in September 2020 was the first to be held online due to the spread of COVID-19. Unfortunately, due to holding the event online, the scheduled international events (International Round Table Meeting, International Young Engineer Workshop, and Networking Reception) were cancelled. However, the paper presentation, which is part of the International Summer Symposium, was held as the International Session of the 75th JSCE Annual Meeting in the form of discussions online.

The International Summer Symposium has been hosted by the International Student Network Group, International Activities Center since 2012, and this year marked the 22nd time it has been held. The purpose of the event is to provide opportunities for presentations in English for international students and Japanese students studying at Japanese universities. This year also saw a total of 45 papers submitted from across a range of fields such as geotechnical engineering, structural engineering, disaster mitigation, sensing, and materials, and each session was organized as shown in Table 1

Table 1: Sessions of the 22<sup>nd</sup> International Summer Symposium.

Session Name	No. of Presentations	Chairperson
Session (1) Geotechnical Engineering	10	Associate Professor Ying Cui, Yokohama National University
Session (2) Structural Engineering	9	Associate Professor Hiroshi Tamura, Yoko- hama National University
Session (3) Earthquake & Disaster Mitigation	10	Associate Professor Goit Chandra Shekhar, Saitama University
Session (4) Sensing, SHM, BIM, VR	8	Associate Professor Mayuko Nishio, Universi- ty of Tsukuba
Session (5) Concrete Engineering	8	Assistant Professor Yuya Takahashi, The Universi- ty of Tokyo
Total	45	

Our first attempt at holding discussions online this year saw submitted papers and presentation slides published on the website, and the chairperson and participants used the comment function to ask questions to the presenters, which they then answered. Compared to regular presentations, there was a slight sense of distance between the presenter and the participants because it was not done face-to-face, but the online format proved to be an opportunity to delve deeper into the discussions as participants and presenters were able to take time in posting their questions and answers respectively.

We would like to take this opportunity to express our sincerest thanks to the chairpersons who facilitated the event while enlivening the discussions, all the presenters, and everyone who participated in the discussions.

Turning our attention to a forthcoming activity of the International Student Network Group, the Company Information Session for International Students is scheduled to be held on Saturday, December 12 with the aim of providing information on Japanese civil engineering companies. This year is the first time the event will be held online, and we will call on companies and international students from all over the country to participate. For details, see the International Activities Center website. We thoroughly encourage you all to take part and look forward to your participation.

【Reported by Ji Dang, International Student Network Group, IAC (Saitama University)】

You can access the latest JSCE International Activities Center Newsletter of December 2020 at the link here <u>IAC News No.98, December 2020</u>.

### Korean Society of Civil Engineers (KSCE)



### **Civil Engineers Day**



The KSCE has first established the "Civil Engineers Day" in March 30, 1998, commemorating the 600 years anniversary of completion of the Hanyang Wall (ancient wall of Seoul City), and has been holding the event annually.

The KSCE encourages civil engineers through the event to take pride in their work, and provides motivation for the continuous advancement of technology and national development by acknowledging and rewarding civil engineers for their contribution to the economic development and national prestige. About 1,000 participants from government, industry, and academia gather in this event to honor Korean civil engineers for their outstanding performances and commitments to the public welfare and for their contributions to the advancement of civil engineering profession, and to promote civil engineering to the pub-

lic, especially to young students. Main events include government awards, KSCE awards, public organization awards, competitive exhibitions, forum, and etc.

Part of the events of this year's Civil Engineers Day that was planned to be celebrated on 10<sup>th</sup> July 2020 had to be cancelled due to the Covid-19 pandemic. However, the Civil Engineers Day ceremony and the Construction Policy Forum were broadcasted live.

### **KSCE International Affairs Committee (IAC)**



Chair Seunghak Lee, Ph.D. Principal Research Scientist, Korea Institute of Science and Technology (KIST)



Vice Chair Jin-tae Han, Ph.D. Research Fellow, Korea Institute of Civil Engineering & Building Technology (KICT)



Vice Chair Jeryang Park, Ph.D. Professor, Hongik University



Vice Chair Kyoungsoo Park, Ph.D. Professor, Yonsei University

### **International Activities**

### Maintain close interaction between Agreement of Cooperation (AOC) societies/institutes

- Promote active exchange of professional knowledge in civil engineering
- Collaborate with mutual participation of annual events
- Hosts official visits to Korea

Promote and maintain partnerships among Asian civil engineering societies (ACECC: The Asian Civil Engineering Coordinating Council)

- Participate/Host Executive Committee Meetings
- Participate/Host CECAR (Civil engineering Conference in the Asian Region) every three years

### **Organize KSCE CONVENTION International Program**

- International Roundtable Meeting
- Civil Engineering Leader's Network (CELeN) Meeting

### Support international students studying in Korea (CELeN)

- Promote CELeN to international students and expand membership
- Organize annual field trips
- Provide networking opportunities through various events

#### **Advertise KSCE activities**

- Publish International Newsletter and KSCE Brochure
- Manage KSCE English website

You can access the KSCE International Newsletter at the link here KSCE International Newsletter.

### World Federation of Engineering Organizations (WFEO)





### Message from the WFEO President GONG Ke

Dear members, associates, supporters, friends, partners of WFEO,

Though COVID-19 has put the world at great disruption, our members and partners of WFEO have exerted themselves to remain at work and together to confront the global crisis. Our efforts to advance the SDGs never stop and "building back better" from the pandemic is stepping up.

The WFEO 50 Year history book is available on our website. The book contains a foreword from the Director General of UNESCO, Ms. Audrey Azoulay, traces the history of WFEO from its founding in 1968, and includes a timeline of important meetings and conferences and profiles of all past WFEO presidents. It may not have included all important activities for fewer archives available, but it does show how we are working on promoting world development insistently.

**Project with International Standards Organization (ISO)** on the draft standard ISO 37000 shows that the contribution of WFEO in the consultation phase of standards development is highly praised and we have gathered and brought the viewpoints of representatives worldwide, particularly from Asia and Africa.

Three consultation webinars on the proposed amendment of the **IEA Graduate Attribute and Professional Competency (GAPC) Framework** were held for all WFEO members and partners with 750+ attendees from 55 countries. The project is expected to improve engineering education and engineering practice to meet the challenges of the 2030 SDGs and emerging technologies.

The Colegio Federado de Ingenieros y de Arquitectos de Costa Rica (CFIA), a WFEO National Member, became a signatory of the International Engineering Alliance Washington Accord in June 2020, marking a major milestone of its journey from 2003. WFEO would like to extend heartfelt congratulations to CFIA on its crucial achievement.

WFEO's participations in the 23<sup>rd</sup> China Beijing International High-Tech Expo and in the 2020 ZGC Forum promote the 2030 Agenda and its 17 SDGs in China and demonstrate the significance of engineering to achieve these goals. It is also highlighted in the webinars that a transformative recovery from the pandemic is strongly needed and young engineers with skills and capabilities could be the driving force for the fourth industrial revolution (4IR) and a sustainable future.

There are also examples shown in this newsletter about how WFEO is continuing to advance engineering and UN 2030 SDGs in recent times. The UN Secretary General Antonio Guterres said in his opening remarks to the GA at the UN 75th anniversary, "This year will be a critical one in the life of our organization. We must prepare to build a strong recovery based on the 2030 Agenda and the Paris Agreement." WFEO will continue to stand with our mem-

bers and partners and to be resolutely international and collaborative during these difficult times.

The next **World Engineering Day (March 4<sup>th</sup>, 2021)** is coming soon, I call you to focus your activities on this special day and use it as a tool to further promote engineering and engineers' development worldwide.

We would like to wish you and your communities the very best, and we will continue to keep you updated through our newsletters.

**GONG Ke** 

President of WFEO

You can access the WFEO Flash-Info #36, October 2020 at the link here WFEO Flash-Info #36, October 2020.

### **European Council of Engineers Chambers (ECEC)**

## \* ece \*

### Digital General Assembly Meeting

European Council On 24<sup>th</sup> June, the ECEC had its first General Assembly held solely via videoof Engineers Chambers conference. All 20 ECEC members, including 16 full members and 4 associate members, took part in the virtual meeting.

The financial report, budget plan 2021 as well as the membership fees were approved by the General Assembly. Two auditors for the year of 2020 have been elected (Nina Dražin Lovrec – HKIG, HR and Juan Blanco Lino – UP-CI, ES).

# **European Civil Engineering Education and Training Association**(EUCEET)



### 13<sup>th</sup> General Assembly of the EUCEET Association

The 13<sup>th</sup> General Assembly of the EUCEET Association was held in a digital environment on **18th September 2020**, due to the current COVID-19 pandemic.

During the General Assembly of 18 Sep20 elections took place and a New Administrative Council was elected.

The EUCEET Association Administrative Council 2020-2022 is composed as follows:



Prof. Jose TURMO (President) UPC Barcelona Tech Barcelona, Spain e-mail: jose.turmo@upc.es



Prof. Linas JUKNEVICIUS (Vice-President) Vilnius Gediminas Technical University Vilnius, Lithuania e-mail: <u>Linas.Juknevicius@vgtu.lt</u>



Prof. Jean BERLAMONT (Treasurer)
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Prof. Laurie BOSWELL City University London, United Kingdom e-mail: <a href="mailto:lauriefboswell@gmail.com">lauriefboswell@gmail.com</a>



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e-mail: JoseAntonio.Lozano@uclm.es



Prof. Diego Carlo Lo PRESTI (General Secretary)
University of Pisa
Pisa, Italy
e-mail: d.lopresti@ing.unipi.it

### 2021 EUCEET Association Conference

The 5<sup>th</sup> International Conference of the EUCEET Association will be held in the spring of 2021 and will be hosted by Aristotle University of Thessaloniki (Greece). This Conference on Civil Engineering Education will be a joint EUCEET/AECEF event.

The Association of European Civil Engineering Faculties (AECEF) is a free association of Civil Engineering educational organisations and their staffs, research institutes, engineering companies, and other - public as well as private - organisations or individuals involved in civil engineering.

AECEF was founded on 14th September 1992 as a non-governmental, apolitical and non-profit making organisation

# The European Federation of Engineering Consultancy Associations (EFCA)

### European consulting engineering market: COVID-19 pandemic continues to hold the industry in its grip



The latest <u>Industry Barometer</u> from the European Federation of Engineering Consultancy Associations (EFCA) shows that the crisis has impacted hiring polices, order stock, turnover and profitability alike. The currently largest challenge for the consultancy and engineering industry in Europe, is the lack of projects.

Henrik, Garver, CEO of the Danish Association of Consulting Engineers and Chair of EFCA's Industry Barometer task force commented the release of the latest EFCA Barometer, which shows biannual trends and expectations amongst European consulting engineers.

"During the summer months, there were signs of improvement and economic rebound. Markets bounced back by 7.6 percentage points and order stocks per full time employee have risen by 2.7 months. Thus, the current state of the European Markets is showing improvements since the spring of 2020, with the majority of markets now being stable, two markets are good, and the remaining markets are either weak or very weak." says Mr Garver.

However, the renewed grip of the pandemic has led to raising concerns about the continuation of the economic rebound. Employment has dropped significantly with no immediate expectations for recovery. Turnover has been reduced in a majority

of countries and the current turnover per employee is €101,808.

Mr Garver added that "Lack of projects is still the most salient concern for the European consultancy and engineering industry. Late payments and political uncertainty have gained in importance compared to previous surveys. Profitability for 2019 was an average of 5.4 percent, compared to 5.6 percent in 2018. For 2020 profitability is expected to decline in nine of 17 participating countries, and remain unchanged in the rest.

The COVID-19 crisis affects all countries in the EU, and it calls for both national economic policy responses and European support measures. EFCA therefore welcome the European Green Deal and the EU's digital strategy in recovering from the coronavirus crisis and building a more resilient, sustainable and prosperous Europe."

The EFCA Barometer (autumn 2020) is available from the website: www.efcanet.org.

### European Construction Industry Federation (FIEC)



FIEC has published the key figures 2019 of the Construction Activity in Europe Edition 2020.

The document is available here.

### **EU News**

### COVID-19: deal to give go-ahead to the new Recovery and Resilience Facility

On Friday 18 December 2020, Parliament's negotiators agreed with Council on the instrument designed to help EU countries tackle the effects and consequences of the COVID-19 pandemic.

The text, agreed on Friday by negotiators from Budgets and Economic and Monetary Affairs committees with the Council, lays down the objectives, financing and rules for accessing the Recovery and Resilience Facility (RRF) funding. With the agreement on RRF, the last and biggest building block of the Next Generation EU has been put in place.

#### Eligibility to receive funding

Negotiators agreed that national recovery and resilience plans would be eligible for financing if they focus on six policy areas of European relevance - the green transition including biodiversity, digital transformation, economic cohesion and competitiveness, social and territorial cohesion, institutional crisis-reaction and crisis preparedness, as well as policies for the next generation, children and youth, including education and skills. Finally, the RRF will only be made available to member states committed to respecting the rule of law and the European Union's fundamental values.

Each plan will contribute at least 37% of its budget to climate and at least 20% to digital actions. According to the deal, the plans should have a lasting impact on EU countries in both social and economic terms and provide for comprehensive reform and a robust investment package. Furthermore, measures to implement reforms and investments projects included in RRF plans cannot significantly harm environmental objectives.

#### Availability of funding

The amount of €672.5 billion in grants and loans will be available to finance national measures designed to alleviate the economic and social consequences of the pandemic, from 1 February 2020 onwards. The funding will be available for three years and EU governments can request up to 13% pre-financing for their recovery and resilience plans.

Payments of financial contributions to member states will be made by 31 December 2026.

#### **Recovery and Resilience Dialogue**

Every two months, the Commission (responsible for monitoring the implementation of the RRF) may be invited by EP committees to discuss the state of the EU recovery and how the targets and milestones have been implemented by the member states. The Commission will take EP opinions, including EP resolutions, into account. To facilitate this discussion, the Commission will transmit the member states' plans to Parliament and Council at the same time.

#### **Transparency**

To provide comparable information on how funds are being used and allow their use to be properly checked, the Commission will make an integrated information and monitoring system available to the member states.

#### Next steps

The two committees must now approve the agreement, before putting it to a plenary vote. The Council must also approve the deal.

### Drinking water in the EU: better quality and access

The European Parliament approved new rules to further improve quality and access to drinking water and reduce plastic waste from water bottles.

Most people in the EU have good access to high-quality drinking water..  $\label{eq:condition}$ 

To make tap water in Europe even safer, the EU is updating its <u>Drinking Water Directive</u> that sets minimum quality standards for water intended for human consumption (i.e. drinking, cooking, other domestic purposes), protecting us against contamination.

On 15 December 2020, the European Parliament <u>backed an agreement</u> reached with the Council that aims to increase consumer confidence and the use of tap water for drinking.

#### Improved quality standards and access

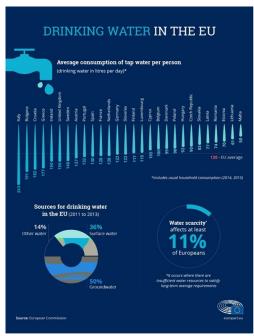
The new law updates quality standards for drinking water, tightening the maximum limits for certain pollutants such as lead and harmful bacteria. It also sets minimum hygiene requirements for materials in contact with water, such as pipes or taps, to avoid contamination. Endocrine disruptors, pharmaceuticals and microplastics will be monitored via a watch list mechanism allowing the EU to update surveillance in line with the latest scientific developments.

Under the new rules, member states must improve access to clean water for everyone, in particular for vulnerable groups with no or only limited access, for example by setting up water fountains in public places, or providing alternative supply systems. They can also opt to encourage the provision of tap water in restaurants - free of charge or for a small fee.

Consumers should also have easy access to information on their consumption and the quality and pricing of tap water, for example on their invoice or via smartphone apps.

### Tap water is eco-friendly

Drinking tap water is not only cheap but also environmentally friendly: Consumers can save money by drinking tap water and lower consumption of bottled water reduces CO2-emissions and plastic waste. According to the Europe-



an Commission, access to better quality water could reduce the consumption of bottled water by 17%.

Clean waters by 2027

Although requirements for a certain level of quality for the EU's rivers, lakes and groundwater, are set in the <u>Water Framework Directive</u>, half of the 110,000 water bodies are still not in a good condition.

In a separate resolution, Parliament called on EU countries to fully implement the provisions by 2027 at the latest, so that all ground and surface waters achieve "good status".

MEPs advocate adequate funding and enforcement and full application of the polluter-pays-principle. They want to see the directive's objectives better integrated in the agriculture, transport and energy sectors. Additionally, the use of fertilisers and pesticides needs to go down, they say.

#### Europeans and their water

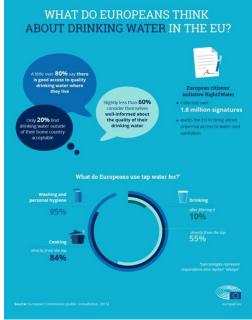
Drinking water is very important to Europeans. The revision of the directive was a follow-up of the successful Citizens' Initiative Right2Water, with more than 1,8 million signatures.

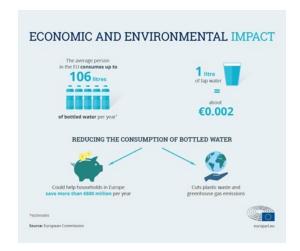
As a public consultation ahead of the legislative proposal has shown, Europeans feel insecure about the quality of tap water when abroad in other EU countries, although compliance rates are high. They also wish to receive more up-to-date information on the quality of drinking water.

#### Next steps

The new drinking water directive will enter into force 20 days after its publication in the EU's official journal. EU countries have two years to comply with the directive.

Source: European Parliament





### 2021 European Year of Rail

The Commission proposed to make 2021 the European Year of Rail to support the delivery of its European Green Deal objectives in the transport field. A series of events, campaigns and initiatives in 2021 will promote rail as a sustainable, innovative and safe mode of transport. This proposal shall also help to step up the pace of rail modernisation, which is needed to make rail a more popular alternative to other transport modes.

It will highlight its benefits for people, the economy and the climate and focus on the remaining challenges to create a true Single European Rail Area without borders.

Commissioner for Transport Adina **Vălean** said: "There's no doubt that railway transport means huge benefits in most areas: sustainability, safety, even speed, once it's organised and engineered according to 21<sup>st</sup> century principles. But there's also something more profound about railways: they connect the EU together not only in physical terms. Setting up a

something more profound about railways: they connect the EU together not only in physical terms. Setting up a coherent and functional network across all Europe is an exercise in political cohesion. The European Year of Rail is not a random event. It comes at an appropriate time, when the EU needs this kind of collective undertaking."

### Agreement reached on proposed Horizon Europe Regulation

A provisional agreement reached under the German EU Council Presidency, between the Council and the European Parliament on the proposed regulation establishing Horizon Europe, means that we are a step closer to the start of this multi-annual EU framework programme for research and innovation for the years 2021 to 2027. The programme will be delivered under the responsibility of a number of public-private-partnerships, which are currently being finalised, with Memoranda of Understanding expected to be signed early in 2021. Further information can be found <a href="https://example.com/hemoranda/bere-number-10">http

### **Commission publishes Mobility Strategy**



On 9 December, the European Commission published its Sustainable and Smart Mobility Strategy which defines ten flagship areas that will guide the institution's work in the coming years. Relevant issues for the construction sector are the envisaged massive deployment of charging and fuelling infrastructure, the completion of the trans-European transport network, the doubling of cycling infrastructure and the construction of missing links in multimodal infrastructure. Importantly, the Commission poposes to review the European economic governance framework to facilitate investment in infrastructure projects of European importance. With regard to transport safety, the Commission points out, priority should be given to investment in ageing structures.

Frans Timmermans, Executive Vice-President for the European Green Deal, said: "To reach our climate

targets, emissions from the transport sector must get on a clear downward trend. Today's strategy will shift the way people and goods move across Europe and make it easy to combine different modes of transport in a single journey. We've set ambitious targets for the entire transport system to ensure a sustainable, smart, and resilient return from the COVID-19 crisis."

Commissioner for Transport Adina Vălean said: "As the backbone that connects European citizens and business, transport matters to us all. We have no time to lose in getting it fit for the future. Digital technologies have the potential to revolutionise the way we move, making our mobility smarter, more efficient, and also greener. We need to provide businesses a clear pathway for the green investments they will need to make over the coming decades. Through the implementation of this strategy, we will create an irreversible shift to zero-emission mobility while making our transport system more efficient and resilient."

Further information can be found here.

### Public Consultations of the European Commission

Please note that the European Communications regularly does Public Consultations many of which are very relevant for the engineering professions. We would therefore advise to regularly check the page and contribute to relevant topics: <u>LINK</u>

### **Upcoming events**

Date	Event	Place
18-20.01.2021	14 <sup>th</sup> Baltic Sea Geotechnical Conference 2020	Helsinki,
	BSGC 2 Crew date  Baltic Sea Geotechnical Conference 18-20 January 2021, Helsinki, Finland bsgc2020.com  https://www.ril.fi/en/events/bsgc-2020.html	FINLAND

Date	Event	Place
26.01.2021	15 <sup>th</sup> WCCE General Assembly  WCCE  WORD COUNCIL OF CIVIL ENGINEERS  https://wcce.biz/	VIRTUAL
19-20.05.2021	DIGITAL CONSTRUCTION WEEK EXCEL LONDON 19-20 MAY 2021  https://www.digitalconstructionweek.com/	London, UNITED KING-DOM
1-4.09.2021	18 <sup>th</sup> International Conference for Women Engineers and Scientists    CWES   8	Warwick, UNITED KING- DOM
19-24.06.2022	3rd European Conference on Earthquake Engineering and Seismology (3ECEES)  3rd EUROPEAN CONFERENCE ON EARTHQUAKE ENGINEERING &SEISMOLOGY  A joint event of the  17th European Conference on Earthquake Engineering & 38th General Assembly of the European Seismological Commission International Conference Centre, Bucharest, Romania.  19 - 24 June 2022  https://3ecees.ro/	Bucharest, ROMANIA



This holiday season is unlike any other, to cap off a year unlike any other. Throughout this season, and as we move into a new (and hopefully better) year, we wish you moments of peace amid the difficulties, connections with family and friends even if they can't be in person, the warmth of memories from holidays past, and wonderful glimpses of the joy that still lives under the surface.

All the best from the President, the Executive Board and Secretary of the European Council of Civil Engineers

Aris Chatzidakis ECCE President

Maria Karanasiou ECCE General Secretary



### **European Council of Civil Engineers**

Secretariat:

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

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