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Dear Colleagues,

As we gather for our annual meeting of Civil Engineers on January 31 and February 1, 2025, in Yaoundé, I would like to commend the commitment and dynamism of each of you in striving for an ever more innovative, responsible, and impactful profession. This year's edition is centered on the theme "Sustainable and Resilient Infrastructure", a topic of utmost relevance in the face of the environmental, social, and economic challenges we encounter.

The past year has been marked by significant progress, including the completion of **CLOSER 3.0**, the success of **BATIMAT**, and a record number of new members admitted to the Order. These achievements reflect our collective determination to make civil engineering a cornerstone of sustainable development in Cameroon and beyond. The 2024 Activity Report and the 2025 Action Plan embody this ambition through emblematic projects such as the **Engineer's Building**, the implementation of professional certifications, and the strengthening of our presence in public spaces and major infrastructure projects.

Our efforts must now align with a broader dynamic, where technological innovation and sustainable practices become the standard. The Technical Day provides an opportunity to share practical solutions, exchange expertise, and collectively shape a vision for resilient infrastructure capable of meeting the growing demands for quality, safety, and sustainability.

I therefore invite you to actively participate in these discussions and to uphold the values of ethics, competence, and solidarity that define our Order. Together, we can continue to construct sustainable works and tackle the challenges of civil engineering for future generations.

With my best regards,

Kizito NGOA, Eng. President of the Order

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National Order of Civil Engineers

	14 th Ci	vil Engineering Technical Day - Yaoundé, Friday January 3	31, 2025	
8:30 - 9:30	Reception and registration of members of the Order			
9:30	Arrival of guests			
10:00	National Anthem, Receipt, Program Secretary General of the Order			
10:10	Speech of the President of the Order President of the Order			
10:20	Opening speech by the Minister Minister Minister			
10:30	Presentation of the Technical Day Suzanne NGANE, Eng.			
10:40	Introductory presentation Léon ZENAN, Geotechnician Eng.			
11:00	Family photos; Visit to the stands; Coffee break; Departure of guests			
SESSION 1	Risk Management			
11:30	Presentation 1	Strategies for resilience against climatic and structural risks	Marie Christine NYEMB, Eng.	
11:40	Presentation 2	Impact of non-compliance with standards on construction safety: a brief review	Bruno TAYO, Eng.	
11:50	Presentation 3	of structure collapses in Cameroon Urban infrastructure and climate change: What strategies to limit the loss	Hyppolite ETENDE NKODO, Enq.	
11.50	Presentation 3	of economic infrastructure in the Far North of Cameroon?	пурроние втемые мкоро, вну.	
12:00	Interactive Danel Di	or economic minuscrate in the rail north or earner out		
12:00	Interactive Panel Discussion			
SESSION 2	Commercial communication			
12:40				
12:40	Presentation 5	Design and construction of resilient infrastructures Optimization of the thermomechanical characteristics of local materials used	Dieudonné EKOUTA, Eng. MODJONDA, Eng.	
12.50	Presentation 5	in construction in the Sudano-Sahelian zone of Cameroon	морлонра, Eng.	
1:00 PM	Presentation 6		Laurant CAVOLL Fra	
1:10 PM		Approval procedure for innovative geosynthetics in Cameroon	Laurent SAKOU, Eng.	
1:40 PM	Interactive Panel Discussion			
SESSION 3	Commercial communication Innovation and sustainable materials			
1:50 PM	Presentation 7	Communication, incommunication and acommunication to drive change	Pr. Léopold Maurice JUMBO	
1.50 1 101	r resentation /	and create the conditions for acceptability	r i. Leopoia maurice Joinbo	
2:00 PM	Presentation 8	Comparative study of the mechanical performance of gypsum-based composites	Dr. Vannick Carao	
2.00 F IVI	riesentationo		EVOUNG NNENGUE	
2:10 PM	Presentation 9	reinforced with neuropeltisacuminatas and sisal fibers Wood-concrete composite slab: an economical solution for rehabilitation	Henriette Reine NGAH NOMO, Eng.	
2.10 PW	Presentation 9	•	neimette keine NGAH NOMO, Eng.	
2 20 DM	Internation Dec. 10	in Cameroon, case of a building in Douala		
2:20 PM	Interactive Panel Discussion and Closing Remarks End of the Technical Day of Civil Engineering			
3:00 PM		ii Day oi Civii Engineering		
	Cocktail			

27th Ordinary General Assembly of the Order - Yaoundé, Saturday February 1, 2025		
8:30 - 9:30	Welcome and registration of members of the Order	
9:30	Word of welcome from the President of the Order Swearing in of the new Civil Engineers	
11:00	Commercial communication	
11.15	Election of bureau of the General Assembly Examination and adoption of the agenda Report of the activities of council for the year 2024 > Actions executed > Financial balance sheet 2024 Oversight audit report Approval of the GA Engineer's Building Project Survey on the Employability of Civil Engineers CLOSER 3.0 Launch Examination and adoption of plan of action — 2025 Examination and adoption of the Draft budget — 2025 Adoption of recommendations of TD14 Other matters	
3:00 PM	End of the program Lunch	

The 14th Technical Civil Engineering Day (JTGC), under the theme "Sustainable and Resilient Infrastructure," will address major challenges faced by Cameroon's civil engineering sector, including climate impacts, sustainability demands, and local realities. This edition will highlight innovative solutions, tailored approaches, and concrete examples to meet the growing need for high-performing infrastructures.

The presentations will cover a wide range of topics: strategies to enhance resilience to climate risks, the impact of non-compliance with standards on structural safety, flood management in the Far North, optimization of local materials for construction, and procedures for certifying innovative products such as geosynthetics. Participants will also discover innovative techniques, including timber-concrete composite slabs for cost-effective rehabilitation and improvements in the thermomechanical performance of natural materials.

At the same time, the human and societal dimensions will be explored through discussions on communication challenges and the acceptability of innovations. The exchanges aim to strengthen the integration of social sciences in promoting sustainable solutions while fostering research and the adoption of local materials.

Expected outcomes include practical recommendations, tools applicable to infrastructure projects, and advances in the use of modern techniques. However, this ambitious initiative faces several constraints: the complexity of technical challenges, stakeholder awareness, the adaptation of innovations to local realities, and limited time to delve deeply into each subject. Nevertheless, this event promises to be a decisive step toward a more sustainable and resilient civil engineering sector in Cameroon.

SUMMARIES

Presentation 0

SUSTAINABLE AND RESILIENT INFRASTRUCTURES: CHALLENGES AND OPPORTUNITIES FOR CAMEROONIAN CIVIL ENGINEERING

This presentation explores the concepts of sustainability and resilience in civil engineering, highlighting their significance for the design and maintenance of infrastructure in Cameroon. It discusses innovative materials and technologies, strategies for adapting to climate change, and a holistic approach to resource management. The distinctions between sustainability (minimizing environmental impacts) and resilience (the ability to withstand and adapt to crises) are also addressed. Concrete examples and recommendations are provided to encourage Cameroonian engineers to integrate these principles into their projects, considering local realities and technological advancements.

Presentation 1

STRATEGIES FOR RESILIENCE AGAINST CLIMATIC AND STRUCTURAL RISKS

This presentation highlights strategies to enhance the resilience of infrastructure against climatic and structural risks while ensuring sustainability. It proposes design methods that incorporate risk analysis, the use of local materials, adaptable infrastructure, and innovative techniques such as numerical modeling and green technologies. Proactive risk management is emphasized, particularly during project planning and execution phases, to prevent failures and optimize costs. Expected outcomes include practical recommendations, concrete tools to ensure infrastructure quality, and examples of applied resilience in railway infrastructure. A poster summarizing these approaches will open the session on risk management.

Presentation 2

IMPACT OF NON-COMPLIANCE WITH STANDARDS ON CONSTRUCTION SAFETY: A BRIEF REVIEW OF STRUCTURE COLLAPSES IN CAMEROON

This presentation examines the causes and impacts of infrastructure collapses in Cameroon, including roads and public or private buildings, often attributed to non-compliance with standards. Recent incidents, such as the collapse of a road in Bonepoupa-Yabassi in August 2024 and a building in Douala in July 2023, have resulted in significant human and financial losses, damaging the credibility of industry professionals. The study identifies major causes such as overloading, structural design flaws, corruption, lack of skills, and environmental degradation. It calls for stricter regulation and rigorous project oversight by public and private institutions to prevent such disasters and restore trust in the construction sector.

Presentation 3

URBAN INFRASTRUCTURE AND CLIMATE CHANGE

The Far North region of Cameroon faces significant challenges related to recurring floods, causing substantial economic losses, including the destruction of urban and rural infrastructure. These floods, exacerbated by physical, social, and technical factors, require comprehensive solutions to enhance infrastructure resilience. This presentation analyzes the characteristics of floods in the region, their impacts on cities like Maroua and Yagoua, and proposes tailored strategies to mitigate losses. It emphasizes integrated risk management, the importance of multidisciplinary approaches, and the development of new civil engineering specialties to address these challenges effectively.

Presentation 4

DESIGN AND CONSTRUCTION OF RESILIENT INFRASTRUCTURES

The design and construction of resilient infrastructures in Cameroon address significant challenges such as floods, landslides, and premature deterioration of structures. This presentation raises awareness among stakeholders—project owners, contractors, companies, and users—about the importance of tailored standards, sustainable practices, and innovative technologies to strengthen resilience and minimize environmental impact. It covers design principles, implementation stages, and the challenges and opportunities linked to resilient infrastructures, emphasizing the need to prepare the country for climate hazards as part of a sustainable and locally adapted development strategy.

Presentation 5

OPTIMIZATION OF THERMOMECHANICAL PROPERTIES OF LOCAL MATERIALS USED IN CONSTRUCTION IN THE SUDANO-SAHARAN ZONE

This study highlights the advantages of local materials, such as adobe, for construction in Cameroon's Sahelian region. It proposes solutions to make these materials stronger, more durable, and comfortable by incorporating natural elements like millet fibers, rice husks, and neem leaves. Tests demonstrate that these additions enhance material strength and improve thermal insulation, making buildings more comfortable and energy-efficient. By using these blends, it is possible to construct environmentally friendly, cost-effective buildings better suited to the region's hot and dry climate. This approach contributes to the development of modern, sustainable construction techniques while promoting local resources.

Presentation 6

APPROVAL PROCEDURE FOR INNOVATIVE GEOSYNTHETICS IN CAMEROON

Since 2016, innovative geosynthetic products have been used in Cameroon for road construction, rehabilitation, and maintenance due to their economic and technical benefits. Under Decree No. 2016/0848/PM, the approval procedure involves four stages: certification of compliance in the country of origin, submission to the Ministry of Public Works (MINTP), characterization by LABOGENIE, and experimental testing. Two main categories of geosynthetics have been approved: asphalt reinforcement geosynthetics, which effectively prevent reflective cracking and extend pavement lifespan, and soil reinforcement geosynthetics, which enhance bearing capacity and soil stability for various applications. This presentation details the steps of the approval process, practical feedback, and technical specifications for these innovative products.

Presentation 7

COMMUNICATION, NON-COMMUNICATION, AND A-COMMUNICATION TO DRIVE CHANGE AND CREATE CONDITIONS FOR ACCEPTANCE

This presentation examines the challenges of communication in promoting the use of local materials for infrastructure development in Cameroon. It analyzes barriers related to public understanding of innovations and designers' inadequate strategies. Drawing on Dominique Wolton's concept of «communication, non-communication, and a-communication,» the study evaluates the communication practices of the National Order of Civil Engineering and suggests ethnographic approaches to bridge the gap between research and public acceptance. The findings aim to integrate social and environmental sciences to develop territorial marketing strategies, including media campaigns and educational programs, to enhance the acceptance of sustainable and resilient solutions in civil engineering.

Presentation 8

COMPARATIVE STUDY OF THE MECHANICAL PERFORMANCE OF PLASTER-BASED COMPOSITES REINFORCED WITH NEUROPELTIS ACUMINATAS AND SISAL FIBERS

This study compares the mechanical performance of two types of natural fibers, Neuropeltisacuminatas and sisal (Agave sisalana), used to reinforce a plaster composite. Plaster samples contained 0%, 5%, and 10% fibers, in short or continuous forms. Compression and flexural tests measured their strength and elasticity. Results indicate that continuous sisal fibers offer the best performance, enhancing the material's strength and flexibility. This research highlights the potential of natural fibers to reinforce construction materials while remaining environmentally friendly and cost-effective.

Presentation 9

WOOD-CONCRETE COMPOSITE SLAB: AN ECONOMIC SOLUTION FOR REHABILITATION IN CAMEROON, CASE STUDY OF A BUILDING IN DOUALA

This study proposes an innovative and cost-effective solution for improving existing buildings in Cameroon through timber-concrete composite (TCC) slabs. These slabs, lighter and more economical than traditional slabs, extend the lifespan of structures while reducing loads. An analysis conducted on a four-story building in Douala demonstrated that TCC slabs allow for additional floors while maintaining building stability, requiring less reinforcement and lower costs compared to hollow-core slabs. Moreover, the study identified Iroko wood as ideal for humid conditions. This approach promotes the use of focal materials to construct sustainable buildings tailored to the challenges of urbanization.

PANELISTS



Moderation - Eng. Emeritus Suzanne MOGUE SOBNGWI sp. NGANE

First Vice-President of the Order, Emeritus Engineer MOGUE SOBNGWI sp. NGANE Suzanne, a graduate of the Polytechnic School of Yaoundé, has acquired solid and versatile expertise, establishing herself as an accomplished professional.

Her remarkable career at FEICOM, where she currently serves as Director of Partnership Projects and Programs, includes supporting the design and implementation of projects as well as developing initiatives to mobilize resources for Decentralized Local Authorities. One of

her most recent achievements is the establishment of a funding window for projects addressing climate change.

She is also deeply committed to mentoring and coaching young professionals, whom she welcomes for internships, study visits, or first employment opportunities.

Suzanne is the author of an inspiring essay on decentralization in Cameroon, where she highlights the crucial role of governance in achieving sustainable development.



Introductive presentation - Eng. Léon ZENAN TADONKENG

With 27 years of experience in geotechnical engineering, Léon ZENANTADONKENG is the Manager of SOL SOLUTION AFRIQUE CENTRALE and Promoter of SIMCA products. A graduate in Civil Engineering (1998, top of his class) from the National Advanced School of Engineering, he further specialized in Soil Mechanics (Clermont-Ferrand, 2000) and Environmental Engineering (ParisTech, 2009). As President of the Cameroon Association of Private Laboratories (ALCP-GEO) and a member of the International Society for Soil Mechanics and

Geotechnics, he has conducted over 2,500 building foundation studies, 500 bridge projects, and numerous road and landslide geotechnical assessments. His expertise spans innovative geotechnical solutions and infrastructure inspection across Africa. A black belt in Taekwondo (2nd Dan), he blends technical precision with disciplined leadership.



Presentation 1 - Eng. Marie Christine NYEMB

Civil Engineer Marie Christine NYEMB is a graduate of the International Institute for Water and Environmental Engineering (2iE) and the National Advanced School of Public Works in Yaoundé. A specialist in railway infrastructure, she currently heads the Railway Infrastructure Studies Unit at the Ministry of Public Works in Cameroon. With over 15 years of experience, she has held various positions, including in the

monitoring, execution, and assessment of road and railway infrastructure projects. Certified in soil treatment techniques and the design of engineering structures, she is also recognized for her expertise in public procurement and contributions to technical training programs. As a Junior Engineer at the National Order of Civil Engineers (ONIGC), she combines technical expertise with active community engagement.



Presentation 2 - Eng. Bruno TAYO

Bruno TAYO holds a Master's degree in Structural Engineering from the University of Johannesburg. Currently an independent civil engineer, he began his career in 2002 as a site Engineer during the renovation of Cameroon's Ministry of External Relations. He later joined Soil and Water Investigation as a geotechnical technician and laboratory manager, contributing to projects such as the construction of the Lokundje

Bridge in Lolodorf and the Megomeyen Airport in Equatorial Guinea. In 2007, he joined ECTA BTP, overseeing various projects, and has since participated in numerous national and international construction endeavors across the African continent.



Presentation 3 - Eng. Emeritus Hyppolite ETENDE NKODO

A Civil Engineer, Urban Planner, and Transport Economist, Mr. ETENDE specializes in development strategies and infrastructure project management. An international consultant since 1998, he has worked in several sub-Saharan African countries on projects funded by international partners, focusing on road infrastructure, urban planning, and climate change adaptation. A member of the National Order of

Civil Engineers in Cameroon (Emeritus Engineer grade) and the National Order of Urban Planners, he also teaches at the University of Yaoundé I. As the promoter of BREIT Consulting, he provides specialized engineering and technical assistance services. He recently produced a report on flooding for the Islamic Development Bank.



Presentation 4 - Eng. Emeritus Dieudonné EKOUTA

Emeritus Engineer and Regional Representative of the Order for the Littoral Region, Dieudonné EKOUTA graduated from ENSPY (1993). Specializing in industrial construction, transportation, project management, and economic evaluation of projects, he is certified in major project management by the Polytechnicum of Normandy, where he participated in specialized seminars. He served as Acting General Ma-

nager of PI ENGINEERING from 2004 to 2009, while holding the position of Technical Director from 2003 to 2019. Currently, he is the Manager of SETCO ENGINEERING Sarl, a consulting firm he founded in 2019. He has led numerous projects as Project Director or Project Manager in Cameroon and Central Africa. A certified mediator by the CAMA (Council of Graduate Lawyer Mediators of Africa) since November 2024, he is also a professional instructor at ENSPD and Saint-Jérôme Polytechnic in Douala.



Presentation 5 - Eng. MODJONDA (& Eng. Emeritus DANWE RAIDANDI)

A Lecturer-Researcher and Civil Engineer, MODJONDA holds a Doctorate/PhD in Engineering Sciences with a specialization in Civil Engineering from the National Advanced Polytechnic School of the University of Maroua. He is currently an Assistant in the Department of Civil Engineering and Architecture at the same institution. With extensive practical experience, he has collaborated with public works companies

and consulting firms, taking on roles such as Site Supervisor, Project Manager, Project Monitoring Engineer, and Deputy or Lead Control Mission Officer.



Presentation 6 - Eng. Laurent SAKOU

An engineer and expert in geosynthetics and geotechnics, Mr. SAKOU has over 15 years of experience in studying and executing infrastructure projects in Europe and Africa. Currently the Africa Director of HUESKER, he oversees technical and geotechnical studies for road, railway, airport, hydraulic, and environmental infrastructure projects, incorporating innovative geosynthetic and nature-based solutions. His exper-

tise spans the design and sizing of geotechnical structures for resilient infrastructures in more than 30 Áfrican countries. An author of several scientific publications, he is recognized for his mastery of geotechnical challenges and solutions on an international scale.



Presentation 7 - Pr. Léopold Maurice JUMBO

Léopold Maurice Jumbo is an Associate Professor in Information and Communication Sciences at the University of Dschang (Cameroon), where he coordinates the Master's program and the Information and Communication Sciences department. Holding a PhD on the use of ICT in healthcare professions in Cameroon, his research focuses on communication dynamics, power strategies, and the interplay between

media, ICT, and society. He has authored numerous academic articles and books, addressing topics such as spontaneous advertising, community media, and identity in the public sphere. A former journalist, he has also worked as a communication consultant. His hobbies include sports, cinema, reading, and tourism.



Presentation 8 - Dr. Yannick Serge EVOUNG NNENGUE

Dr. Yannick NNENGUE EVOUNG holds a PhD in Mechanics and Materials Science from the University of Douala. Currently an Assistant Lecturer at ENSET Ebolowa, he teaches in the fields of mechanics and materials science. With a rich academic and professional career, he previously taught at the Tibati Technical High School (2005–2009) and the Ebolowa Technical High School (2012–2024). His passion for research and

teaching led him to earn a DIPET 1, DIPET 2, Master's degree, and a PhD. With deep expertise in materials science, he plays a key role in training young technicians in Cameroon.



Presentation 9 - Eng. Henriette Reine NGAH NOMO

A Civil Engineer and graduate of the National Advanced School of Public Works (ENSTP) in Yaoundé, Henriette Reine NGAH NOMO has gained diverse experience in public works and building engineering. She has contributed to major road projects, such as Ntui-Ndjolé and Mankim-Meteing, where she was responsible for technical monitoring and analyzing economic and social impacts. Her background also

includes structural optimization of multi-story buildings and materials assessment. Fluent in French and English and proficient in engineering software, she is actively involved in mentoring and raising awareness about engineering among young people. Enthusiastic and innovative, she combines technical expertise with an entrepreneurial spirit.





1- HIGHLIGHTS

The year 2024 enabled the Council of the Order to accomplish several activities in line with the resolutions of the 26th General Assembly held on January 27, 2024. Notably, these included:

- The successful organization of the 2024 Annual Meeting of Civil Engineers in Kribi under the theme «Quality Assurance and Quality Control in Civil Engineering»;
- Recognition of Civil Engineering degrees awarded by the National Higher Polytechnic Institute of Bamenda (NAHPI), the Institut Universitaire des Grandes Ecoles des Tropiques of Douala (IUGET), and the Institut Universitaire des Sciences, des Technologies et de l'Éthique of Yaoundé (IUSTE);
- Evaluation of civil engineering training programs at the Faculty of Engineering and Technology in Buea (FET), the Institut Universitaire SIANTOU in Yaoundé (IUS), and the Institut Universitaire de la Côte in Douala (IUC);
- Leading an impressive delegation of Engineers to the International Construction Fair (BATIMAT) in Paris, France;
- The inaugural special swearing-in ceremony for diaspora Engineers in Paris, France;
- Development of a welcome booklet for new members of the Order;
- Assistance with the professional integration of young Engineers;
- Conducting a survey on the employability of members of the Order;
- Organization of training seminars and conferences on civil engineering;
- Supervision of site visits and sharing of resources and knowledge with members of the Order;
- Providing expert positions on key current issues such as road collapses, deadly landslides, and public procurement systems;
- Digitization of management processes within the Order and the launch of CLOSER 3.0;
- Completion of preliminary sketches, site studies, and a business model for the Engineer's Building Project;
- Continued regional deployment of the Order's representations;
- Collaboration with other professional orders;
- Signing partnerships with companies in the construction sector.

2-2024 ANNUAL MEETING AND COUNCIL SESSIONS

The Annual Meeting of Civil Engineers took place on January 26-27, 2024, in Kribi, South Region. Under the theme "Quality Assurance and Quality Control in Civil Engineering", the event attracted over 700 participants and featured significant milestones, including the revival of technical days (last held in 2020), graduation of Engineers to Emeritus, Senior, and Major ranks, the swearing-in of new Engineers, and the Ordinary General Assembly. The Council of the Order held two ordinary sessions in 2024:

- 61st session on January 11, 2024: Focused primarily on reviewing and validating actions to be presented to the General Assembly.
- 62nd session on July 11, 2024: Mainly addressed initial civil engineering training, with the recognition of Civil Engineering graduates from three
 public and private higher education institutions.

The Council also convened an ordinary session on January 9, 2025, to better prepare for the 2025 Annual Meeting.

3- REGULAR SERVICES OF THE GENERAL SECRETARIAT

Beyond daily administration at the headquarters in Yaoundé, the General Secretariat was engaged in various activities:

- Secretariat support and oversight of the work of various commissions (public relations, professional affairs, professional challenges, employability, and training);
- · Technical assistance to the Disciplinary Chamber;
- · Monitoring and coordination of Regional Representations' activities;
- Support for members in distress or assistance to families of deceased members (at least nine in 2024);
- Examination of 308 applications for registration with the Order in 2024: 268 favorable opinions, 27 unfavorable opinions (in their current state), 6
 applications pending eligibility, 7 applications rejected.
- Admission of 259 new Civil Engineers to the Order's Register in 2024 (compared to 154 in 2023).
- Issuance of 2,308 certificates of registration with the Order for companies and 494 certificates for personal use in 2024 (compared to 2,257 and 893 in 2023):
- Recording of 1,270 seal requests, with 1,005 effectively withdrawn (compared to 1,184 and 903 in 2023);
- Publication and wide dissemination of Newsletter No. 041;
- · Continued digitization of processes within the Order and development of the CLOSER application for members;
- Logistical support for 60 Engineers attending BATIMAT in France and the special swearing-in ceremony for diaspora Engineers;
- · Execution and follow-up of all missions assigned by the President.

4- MAIN ACTIONS BY COMMISSIONS

PROFESSIONAL PRACTICE

Accreditations, Qualifications, and Certifications: Continued discussions with certain administrations and private actors to position the Order as an accreditation body for vocational training centers granting civil engineering skill certifications.

Welcome Booklet: Finalized and validated the project document, with a digital version made available at the 27th General Assembly.

Construction Safety: Several letters sent to project owners to report defects or alert on various identified risks.

PROFESSIONAL CHALLENGES AND ISSUES

New Techniques Dissemination: Compilation of global innovations and trends observed at BATIMAT and consideration of pilot project development.

Technological Watch Strategy: Monitoring international technological and regulatory developments in the construction sector.

Awareness Campaigns: Actions targeting young Civil Engineers on the role of digital tools in the profession.

PUBLIC AFFAIRS

Representations and Participation Monitoring: Review of reports on participation in workshops, seminars, and meetings.

Professional Meetings: Support and supervision of the delegation of Engineers at BATIMAT in Paris.

Interprofessional Meetings: Follow-up on recommendations from the audience granted to National Orders of Engineers by the Prime Minister.

Engineer's Mutual Fund Project: Continued consultations and search for a partner to support the Order.

Engineer's Building Project: Completion of feasibility studies (site studies) and a business model based on the project's architectural program and sketches.

EMPLOYABILITY AND PROFESSIONAL INTEGRATION

Socio-professional Situation of Engineers: Completion of the employability survey with analysis and interpretation of results.

Recruitment of Civil Engineers: Dissemination of multiple job offers for Civil Engineers and profiles for externally funded projects.

Improving Employability: Hosting forums and chats to help young Engineers understand the realities of the labor market in Cameroon and abroad.

INITIAL AND CONTINUOUS TRAINING

Initial Training Actions: Continued evaluations of public and private institutions providing civil engineering training and recognition of degrees awarded by NAHPI, IUGET, and IUSTE.

Training Monitoring: Participation in the management boards of Polytechnique Schools in Yaoundé and Douala, the National Advanced School of Public Works, and other governing bodies of higher institutions offering Civil Engineering degrees.

Mandatory Continuing Education: Organization of several capacity-building seminars or workshops and project site visits.

International Recognition: Launch of the process for Order accreditation by the International Engineering Alliance (IEA).

DISCIPLINARY CHAMBER & LEGAL ACTIONS

Referrals to the Disciplinary Chamber regarding cases involving colleagues for improper use of the Engineer's seal, negligence in technical document review, or actions harming the profession.

Legal actions for cases of impersonation of the title of Civil Engineer.

IN MEMORIAM

- Marie MAKOUGOUM sp. ALI MOHAMAN (Reg. Number 12-274)
- Hyppolite Marie SAKE (Reg. Number 13-1448)
- Blaise NOUFENAME TATCHUINTE (Reg. Number 03-0654)
- Jean Désiré BISSAI (Reg. No 17-2003)
- Germain FOTSING TAKAMTE (Reg. Number 16-1843)
- Thomas MBONDO KANGA (Reg. Number 02-0042)
- FORSUH Wilfried JING (Reg. Number 08-1042)
- Séverin TOUOMOU MOFFOU (Reg. Number 02-0116)
- Victor Emmanuel NGBWA MBITA (Reg. Number 07-0926)

Project Summary

The project involves constructing an office building (B+G+4) at a total cost of 2.61 billion FCFA. It will house the headquarters of the National Order of Civil Engineering Engineers (ONIGC) on 200 m² and offer rental spaces covering 2,020 m² (excluding common areas and the basement). The building will also include parking spaces, dining areas, relaxation zones, and a rooftop. This project aims to provide modern infrastructure while generating revenue for ONIGC.

It is worth noting that the preliminary studies for the project are directly financed from the Order's budget, which also provides the land for the construction. The total built-up area is 580 m², situated on a 946 m² plot.

SWOT Matrix

- Strengths: Strategic location in a growing neighborhood near Yaoundé-Nsimalen International Airport - Innovative and sustainable architectural design (double-skin facade) Diverse services offered (rental spaces, dining, fitness, etc.).
- Weaknesses: Significant initial investment requiring a complex financial setup Sensitivity to fluctuations in the local real estate market.
- Opportunities: High demand for modern and flexible office spaces in Yaoundé Medium to long-term profitability for shareholders.
- Threats: Risks linked to the bank loan (interest rate) Competition from other real estate projects in Yaoundé.

Benefits for Engineers Subscribing to Shares

- **1. Heritage investment:** Participate in a promising project that generates regular long-term income.
- 2. Professional visibility: Associate your image with a modern and iconic building, a symbol of civil engineering in Cameroon.
- 3. Attractive dividends: Potential profit distribution after loan repayment.
- **4. Exclusive advantages:** Preferential rates for using facilities (meeting rooms, conference halls, etc.).



Key Financial Data

- Total project cost: 2.61 billion FCFA.
- Own funds mobilized: 1 billion FCFA.
- Bank loan: 1.61 billion FCFA.
- Loan interest rate: 8%.
- Repayment duration: 15 years.
- Available rental spaces: Approximately 2,020 m².
- Target occupancy rate: 85%.
- Annual operating costs: 10% of rental revenue.
- Break-even return: Covers loan repayment, operating costs, and generates minimal profit.

Financial Analysis

- Optimal annual rental income: 548,066,400 FCFA..
- Net Present Value (NPV): 0 FCFA (break-even point achieved).
- Internal Rate of Return (IRR): 10%, aligned with the discount rate.
- Target monthly rent: 26,600 FCFA/m².

Subscription Call

Each engineer can contribute to the financing by subscribing to shares in the **Real Estate Civil Society (SCI)** created for this project. Subscriptions are offered in tranches of 1,000,000 FCFA per share. The targeted equity is 1 billion FCFA, with a bank loan completing the funding.

This project presents a unique opportunity to actively support the profession's development while benefiting from an attractive and sustainable investment.

Next Steps for Project Implementation

To reach the groundbreaking phase, here are the detailed activities to be carried out on the **technical**, **financial**, and **legal** fronts:

- Technical Plan: Completion of geotechnical studies; Detailed architectural design; Technical studies; Preparation of the tender documents (RFP); Monitoring administrative authorizations.
- 2. Financial Plan: Project financing structure; Creation of the Real Estate Investment Company (SCI); Finalization of the bank loan; Establishment of a provisional cash flow plan.
- 3. Legal Plan: Formalization of the SCI; Negotiation and formalization of partnerships; Obtaining administrative authorizations; Insurance management.

For the 2025 fiscal year, following a period marked by the development of CLOSER 3.0 and BATIMAT, the Council of the Order plans to focus its efforts on the Engineer's Building Project.

Of course, the Council's regular and statutory activities, as well as those of its support structures, will continue with an emphasis on rationalizing expenditures to address an anticipated unfavorable economic climate.

Projet Engineer's Building

Governance

- Establishment of a Project Steering Committee.

Technical and Financial Studies

- Site study (geotechnical survey).
- Environmental and social impact assessment.
- Continuation of feasibilitystudies.
- Financing model.

Professional Practice

Exercise of the Profession

- Finalization and dissemination of an ethical charter for Civil Engineers.
- Launch of accreditations, qualifications, and professional certifications.
- Revitalization of the process for issuing private client practice authorizations.
- Drafting and publication of the Fee Billing Guide.
- Recognition of Employers and Company Heads employing Civil Engineers.

Engineers' Observatory

- Creation of a CV bank for Engineers seeking jobs or missions.
- Online update of the database of companies, design offices, and ministries employing Civil Engineers.

Professional Challenges and Issues

Raising Awareness

- Awareness campaigns on current issues in the civil engineering sector.
- Sharing best practices identified and published elsewhere.
- Organizing post-BATIMAT workshops and seminars.

Innovative Initiatives

- Development of pilot projects.
- Archiving, by specialty, of study reports for consultation by Civil Engineers.
- Implementation of a technology monitoring strategy.

Public Affairs

Enhancing the Order's Public Presence

- Publication and wide dissemination of the Order's Register.
- Efficient implementation of partnerships with construction companies.
- Monitoring the implementation of roadmaps by Regional Representations.
- Improving ONIGC representation at various meetings, seminars, and workshops.
- Continuing consultations for establishing a Mutual Fund for ONIGC members (MONIGC).

Other Matters

- Following up on recommendations from the audience with the Prime Minister.
- Signing agreements with selected public companies.
- Continuing dialogue with other professional engineering associations.
- Encouraging Civil Engineers to participate in decision-making processes.
- Strengthening communication (social media, web, press briefings, etc.).

Employability and Professional Integration

Employment Data

- Utilizing the CV bank for job or mission seekers.
- Leveraging survey results on employability and professional integration.

Lobbying Actions

- Identifying major infrastructure projects likely to hire Civil Engineers.
- Advocating for the placement of Civil Engineers registered with the Order.
- Lobbying local governments for the recruitment of Civil Engineers.

Coaching and Networking

- Organizing coaching sessions (CV and cover letter writing) to highlight skills.
- Connecting Civil Engineers with real estate developers and monitoring project execution.
- Supporting entrepreneurship, mentoring, and issuing recommendations.

Initial and Continuing Education

Initial Education

- Continuing efforts to streamline programs offered by private higher education institutions.
- Active participation in the governance bodies of recognized training schools.
- Steps toward the Order's accreditation by the International Engineering Alliance (IEA).
- Initiating and organizing orientation seminars in high schools and colleges.

Professional Development

- Visits to construction sites and major projects.
- Highlighting skills gained through daily learning.

Continuing Education

- Organizing technical conferences.
- Developing a portfolio of certified seminars and training programs.

Professional Ethics and Recognition

Ethics and Professional Conduct

- Strengthening ethical and professional conduct monitoring.
- Hosting ethics conferences for new members.
- Increasing referrals to the Disciplinary Chamber, involving all Civil Engineers implicated or mentioned in disputes.
- Following up on legal actions to defend the interests of the profession.

*** SUMMARY OF THE EVALUATION PROCESS *** FOR INITIAL CIVIL ENGINEERING TRAINING IN CAMEROON

The evaluation process for the initial training of Civil Engineers in Cameroon is modeled on international standards in this area. It aims to ensure that public and private higher education institutions provide high-quality training that meets academic and professional requirements.

The process begins with a documentary review of programs, internal reports, and prior certifications to verify compliance with national and international standards. This is followed by an on-site visit, during which a multidisciplinary team examines the infrastructure (laboratories, libraries, equipment), pedagogical arrangements (programs, practical work, industrial partnerships), and management processes (student recruitment and support systems).

Experts meet with stakeholders, including faculty, students, and employers, to assess teaching practices, applied research, and the alignment of training outcomes with market needs. Specific criteria are reviewed, such as the balance between theory and practice, faculty qualifications, mandatory internships, industry partnerships, and career preparation.

Finally, a report is prepared, highlighting strengths, weaknesses, and recommendations to align the training with international standards. This process ensures the credibility of the degrees, enhances graduate employability, and promotes international mobility.

Date and Venue: Saturday, January 27, 2024, Hôtel La Marée, Kribi

Time: 1:00 PM - 4:10 PM

Main Agenda:

- 1. Quorum Verification
- 2. Formation of the General Assembly Bureau
- 3. Moment of Silence for Deceased Engineers
- 4. Adoption of the Agenda
- 5. Proceedings

I. QUORUM AND BUREAU ELECTION

The quorum was confirmed in compliance with Article 13, Paragraph 2 of the Internal Regulations. The General Assembly Bureau was formed as follows:

- Chairperson: Eng. Emeritus NGO YANA Elisabeth
- Vice-Chairperson: Eng. Emeritus EKOUTA Dieudonné
- Rapporteurs: Eng. FANTA ADDA Félicité and Eng. NTAT Gauthier William Aurel
- Censor: Eng. JIOTSOP Martin

A moment of silence was observed in memory of nine Engineers who passed away in 2023.

II. ADOPTION OF THE AGENDA

The proposed agenda was unanimously adopted and included:

- 1. 2023 Activity Report
- 2. Financial Report and 2024 Budget
- 3. Engineer's Building Project
- 4. Recommendations from the 13th Technical Day
- 5. Miscellaneous

III. 2023 ACTIVITY REPORT

Presented by Eng. Simplice FEUZEU, the report highlighted:

- Projects and Technical Visits: Organization of two visits (Nachtigal and local projects) with active participation of 45 Engineers.
- Post-disaster Follow-up: Identification and reporting of 12 high-risk buildings following incidents in Bafoussam and Ngaoundéré.
- Digitalization: Progress on the member management and certification platform, set to go live in December 2024.
- Engineer's Building Headquarters: Land acquisition approved, and preliminary sketches completed.
- Professional Relations: Reintegration of 60 members, collaboration with similar professional bodies, and enhanced job placement for young engineers.

Key Questions Raised:

- Follow-up plans for identified high-risk buildings.
- Digitalization rollout for remote regions.

IV. FINANCIAL REPORT AND 2024 BUDGET

Presented by Eng. Kizito NGOA:

- 2023: Surplus of 11.37 million FCFA achieved through efficient budget execution (77% of revenues and 70% of expenditures).
- 2024: Budget of 170 million FCFA approved, with priorities including:
 - 1. Participation in the BATIMAT fair.
 - 2. Advancement of the Engineer's Building project.
 - 3. Development of the digital platform.

Key Discussions:

- Salary Expenditure: Justified by increased statutory responsibilities.
- Financial Transparency: Reflection to be conducted to align financial statements with the applicable standards (OHADA).

V. ENGINEER'S BUILDING PROJECT

Presented by the President, this project is deemed strategic for ONIGC's visibility.

- Main Features: A 4-story building with a basement, 946 m², to serve as headquarters in Ngoulmekong, Yaoundé.
- Funding: Contributions from engineers, strategic partnerships, and potential credit mechanisms.

Resolution:

• Creation of a Monitoring Committee to expedite the project, with a progress report expected by December 2024.

VI. RECOMMENDATIONS FROM THE 13th TECHNICAL DAY

Presented by Eng. FEUZEU, the following recommendations were validated:

- 1. Risk Zone Mapping: A pilot study to be conducted in partnership with local universities.
- 2. Geotechnical Standards: Development of a specific guide for soil studies.
- 3. Project Quality: Adoption of a project management handbook for infrastructure projects.

VII. MISCELLANEOUS AND CLOSURE

Discussions centered on:

- Professional Integration: Structured internships for young graduates.
- Member Engagement: Call for increased participation in ONIGC activities.

The President closed the General Assembly, urging Engineers to collectively address challenges, particularly the success of the Engineer's Building project.

End of Proceedings: 4:10 PM

The President of GA

Eng. Emeritus NGO YANA Elisabeth



ADVICE FOR YOUNG ENGINEERS TAKING THE OATH

Dear young Engineers,

Your oath-taking marks the beginning of a strong commitment to your profession, your peers, and society. By joining the National Order of Civil Engineers, you pledge to uphold principles that ensure the credibility and excellence of our profession. Here are the key points to remember to practice with diligence and ethics:

1. Responsibility and Commitment

- Your signature and seal on a technical document legally and morally bind you. Always beaware of the consequences of your actions.
- = Ensure that every project you work on complies with current standards, prioritizing safety and public interest.

2. Technical Excellence and Continuous Learning

- Never stop learning. Civil engineering is constantly evolving, and continuous professional development is essential to staying at the forefront
 of your field.
- Participate in training sessions, seminars, and conferences organized by the Order and other specialized institutions.

3. Ethics and Integrity

- Refuse any compromise that could affect the quality of structures or public safety.
- Avoid conflicts of interest and act transparently in your relationships with clients, contractors, and suppliers.
- Never sign a document that you do not fully understand or that does not comply with regulations.

4. Collaboration and Professional Camaraderie

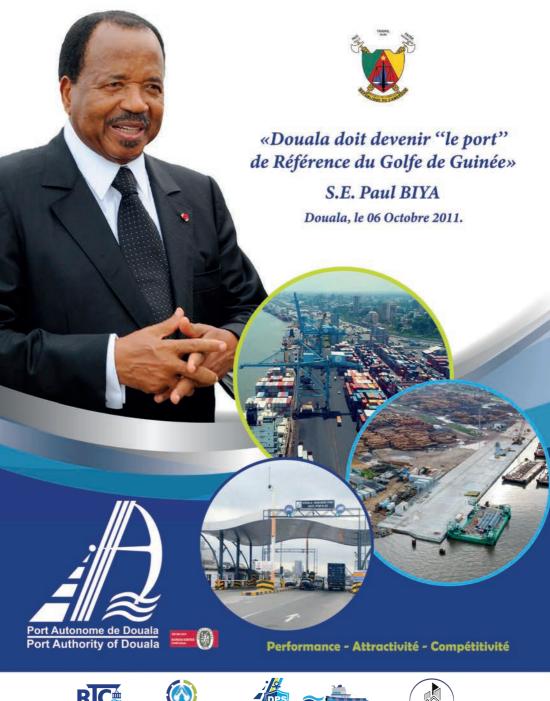
- Respect your peers and rely on their expertise when needed.
- If you are called to replace another engineer on a project, notify them or their legal representatives and act with integrity.
- Contribute to the training of young engineers and the advancement of the profession by sharing your knowledge.

5. Risk Management and Preparedness

- Ensure you have liability insurance to cover potential professional risks.
- Identify technical and contractual risks before starting a project and propose appropriate solutions.

By taking this oath, you are embracing a demanding yet noble profession that is essential to our country's development. Wear your title as a Civil Engineer with pride and live up to the expectations placed upon you.

Welcome to the Order!













Centre des Affaires Maritimes Bonanjo

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