



Uganda Association of Consulting Engineers

IDEAS THAT MAKE A DIFFERENCE

Newsletter | JANUARY 2022



Consulting Opportunities in the electricity sector

Women in Engineering
Young Women Professionals in Leading Roles of Engineering in a Male Dominated Profession

Determination of Construction Claims



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The mission of Uganda Association
of Consulting Engineers is to

develop and promote
the consulting engineering
industry in Uganda to
internationally accepted
standards.

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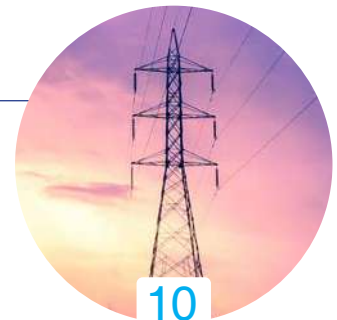
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CONSTRUCTION INDUSTRY DEVELOPMENT COMMITTEE (CIDC)

Inaugural Ceremony of CIDC

The Ministry of Works and Transport (MoWT) is spearheading an initiative to bring together key players in the industry to assist Government chart a way forward for orderly establishment and attempt to streamline the industry in the meantime, by setting up of a Construction Industry Development Committee (CIDC).

The Committee is intended to advise the Ministry of Works and Transport on policy issues relating to the development and regulation of the local construction industry and the impending mainstreaming of the functions of UCICO.



◀ The Minister of Works and Transport Gen. Edward Katumba Wamala appointing CIDC Committee Members



▶ CIDC Committee Chairperson, Eng. Nsimbe Joseph giving his maiden speech.

▲ CIDC Committee Members with MOWT Officials

At his maiden speech, the Chairperson of the Committee, Eng. Nsimbe Joseph of Uganda Association of Consulting Engineers (UACE) mentioned;

"I stand before you on this 21st day of December, the year of our Lord 2021 as the appointed Chairman of the CIDC, to serve on this committee alongside 10 other members for the next three (3) years. I cannot fail to state that this is my maiden government appointment for the years I have lived and I am overjoyed.

With the background and picture painted by the EIC regarding what is expected of the CIDC, I just add a few numbers and pieces of information here for us to muse upon.

Uganda's Gross Domestic Product (GDP) is estimated at USD20 Billion (UGX 70 Trillion). The Ugandan construction industry alone contributes 12% towards this GDP (i.e. UGX 8.5 Trillion). I am so persuaded to say that the CIDC is, as a baseline expected to manage UGX 8.5 Trillion and see this grow because this contribution is all that is known in the last 8 years (since 2013). Although our chief mandate as the CIDC is to support the MoWT in the regulation and development of the industry, it is noteworthy that the hardware (the works, the big figures) is run by the software (the policies and regulations) hence my discussion of the figures above.

Finally, the construction industry mainly comprises three (3) service areas: construction services, professional services and lightly but essentially, support services (regulation, procurement, financial institutions, manufacturing etc). Honourable Minister Sir, the CIDC is well constituted in all these areas (many thanks to the guidance and oversight by your Ministry) and ready to serve.

Therefore, this acceptance is not just mine, but a collective one from all the 11 members of the CIDC here present. We accept the trust and we pray that the Almighty anoints our service not only to this Country but also to Him.

Happy holidays and a great new year 2022.

For God and my Country, Uganda"

S/No	NAME	ORGANIZATION	DESIGNATION
1.	Eng. Nsimbe Joseph	Uganda Association of Consulting Engineers	Chairperson
2.	Arch. Jacinta Kabarungi Bishanga	Architects Registration Board	Vice Chairperson
3.	Eng. Ben Kyemba	Ministry of Works and Transport	Secretary
4.	Mr. Victor Odongo	Institute of Surveyors of Uganda	Member
5.	Mr. JamesOne Olonya	Uganda National Association of Building and Civil Engineering Contractors	Member
6.	Arch. Jennifer Machwo	National Building Review Board	Member
7.	Arch. Brian Muhwezi Asimwe	Uganda Society of Architects	Member
8.	Eng. Vincent Ochwo Olie	Uganda Institution of Professional Engineers	Member
9.	Eng. George Bwanga	Engineers Registration Board	Member
10.	Mr. Julius Ssenyonjo	Civil Society Coalition on Oil and Gas	Member
11.	Mrs. Barbra Mugenyi	Surveyors Registration Board	Member



▲ CIDC Committee Heads with MoWT Officials

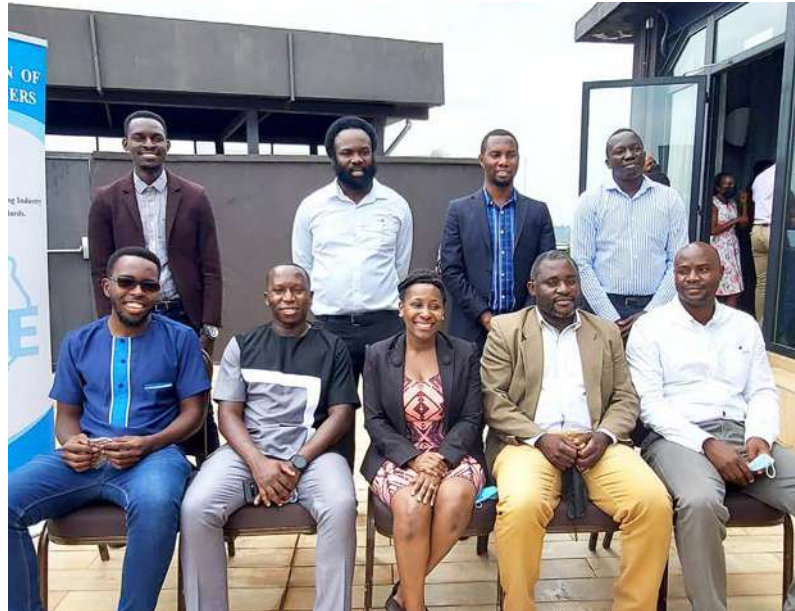
UACE FUTURE LEADERS 3rd ANNUAL GENERAL MEETING

This meeting was held on the 9th of December, 2021 and 26 UACE Member firms were represented by about 50 participants.



▲ UACE Vice President giving key note presentation at the AGM

► Some of the past Committee members with the Vice President



The Future Leaders elected a new Steering Committee from the firms below;

1. Air Water Earth Ltd
2. Prome Consultants Ltd
3. M&E Associates Ltd
4. Centre for Infrastructure Consulting Ltd
5. Seka Associates Ltd
6. KOM Consults Ltd
7. Multi-Konsults Ltd
8. Professional Engineering Consultants Ltd
9. Proess Ltd
10. MBW Consulting Ltd

Participants are yet to be nominated from the above mentioned firms.

► Photo moment for the UACE Secretariat during the AGM

▼ UACE Council with some of the participants of the AGM



EPC, OPRC, DBO, PPP & The Consulting Engineer

Output and Performance Based Road Contracts (OPRC)

as a mode of contracting is to a large extent similar to Design, Build, Maintain, Operate and Transfer (DBMOT) model of contracts. Payment is based on achieving the specified service levels for a pre-agreed lump sum monthly fee. The Contractor is responsible for designing and executing the works, services and actions he believes are necessary in order to achieve and maintain the service levels in the contract. Service levels are defined from the road user perspective i.e riding comfort, safety features, residual strength etc. Payment is based on achieving the specified service levels for a pre-agreed lump sum monthly fee. The Contractor must have good management capacity to optimize and carry out on a timely basis the requisite physical interventions. The Engineer/Consultant can be involved in two ways:

1. As the Contractor's Designer or;
2. PMM-Consultant (Project Manager)-appointed by the Employer with quasi-arbitral role.

Design, Build and Operate (DBO) is similar to OPRC. The Contractor Designs, executes the works and thereafter operates. Conditions of Contract are based on FIDIC Gold Book. Two Party Contract, Three Tier Execution;

- Employer;
- Contractor; and
- Employer's Representative (Employed by the Employer, impartial quasi-arbitral role during contract execution)

The Engineer/Consultant can be involved in two ways:

1. As the Contractor's Designer/Project Manager or;
2. Employer's Representative.

Engineering, Procurement and Construction Contract (EPC/TURNKEY)

The Contractor takes full responsibility for design, supply, installation, and construction. Conditions of Contract are based on FIDIC Silver Book and it's a Two Party Contract, Two Tier Execution;

1. Employer; and
2. Contractor.

Less day-to-day employer involvement during progress of works. The Engineer/Consultant can only be involved as the Contractor's Designer/Project Manager.

Public Private Partnership Contracts

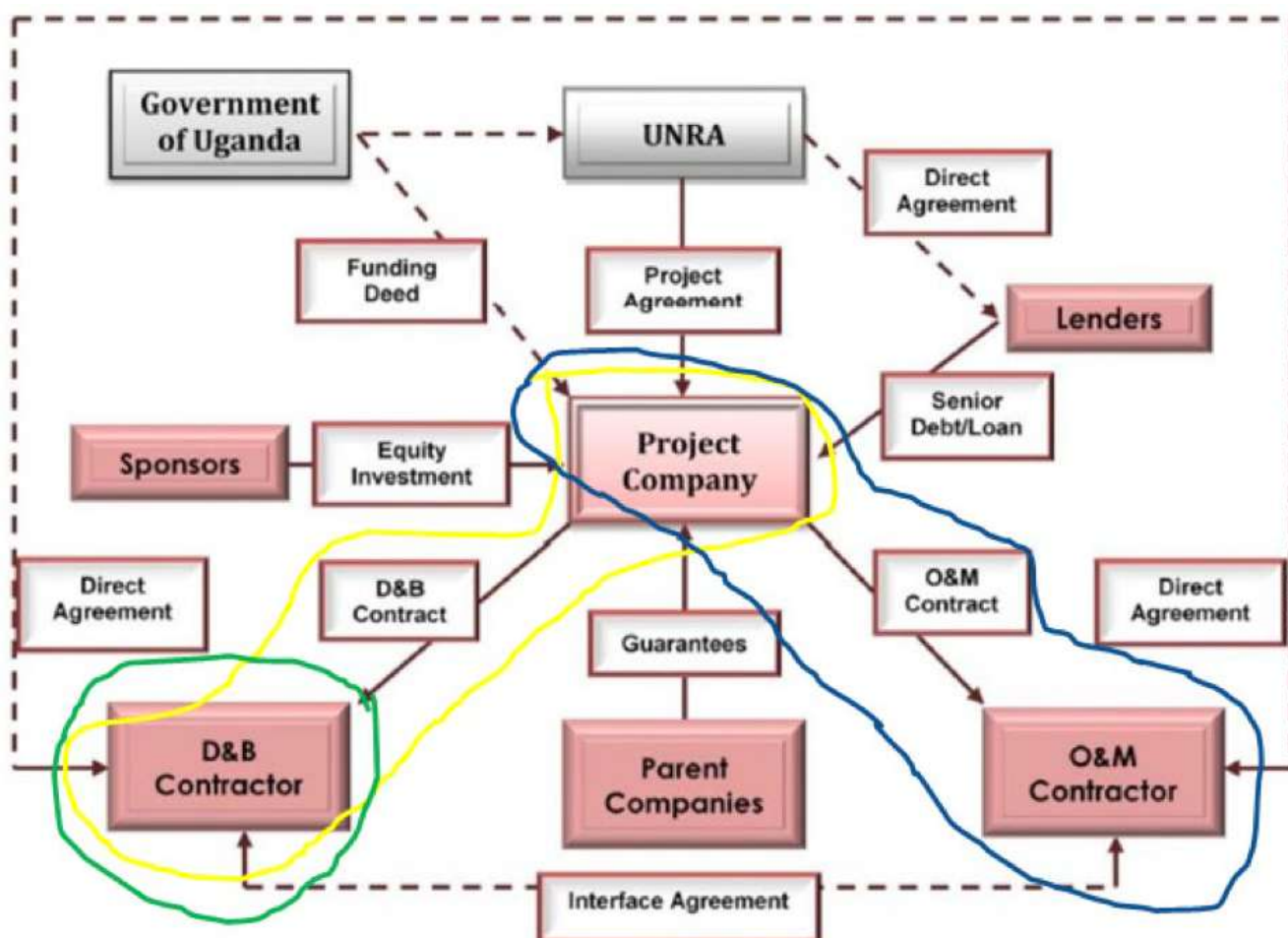
The Contractor takes full responsibility for design, supply, installation, construction and financing. Conditions of Contract are based on FIDIC Silver Book. It is a Two Party Contract, Two tier execution;

1. Employer; and
2. Contractor

Less day-to-day employer involvement during progress of works. The Engineer/Consultant can only be as the Contractor's Designer/Project Manager.

In Uganda, the PPP Act,2015 mentions the following PPP agreements;

- Concession;
- Operation and Maintenance Agreement;
- Lease, Develop and Operate Agreement;
- Build, Own and Maintain Agreement;
- Build, Own, Operate and Transfer Agreement;
- Design, Build, Finance and Operate Agreement;
- Build Own and Operate Agreement;



The outline in yellow, blue and green show relations that Engineering Consultants focus on. It is important to be involved in all the other relations.

In all 4 Contracts the Consulting Engineer is impacted on;

- Strategy,
- Resources
 - » Technology update
 - (AI's)
 - Hardware
 - Software
- » Technical – Professional Team (to seek clarification in ambiguities in Contract documents and Specifications)
 - Managing the design process
- » Professional liability (Capping the liability)
- » Legal (Agreements, liability) (PPP Agreements between partners /developers) (Warranty of the designs) – Knowledge and understanding the implications
- » Financial
- » Management Skills – case of Prime Contract owner with the developer

New updated FIDIC Green Book short form contract launched



The much-anticipated 2021 update of the FIDIC Green Book has been launched today.

The updated *Short Form of Contract* meets the current demand of the international construction industry for projects where the perceived level of risk is low and/or where construction parties need a contract form that is simple to use and doesn't require significant contract administration and management resources.

The *Green Book 2nd Edition* continues FIDIC's key principles of balanced risk sharing while seeking to build on the substantial experience gained from the original Green Book's use over the past 22 years. The updated contract captures the essential rights and obligations of the parties and is used as an alternative to the 2017 Red and Yellow Books, resulting in FIDIC providing for a fully-fledged range of contract solutions to meet different project specificities.

The *Green Book 2nd Edition* includes provisions for employer's or contractor's design of the works, appointment of an engineer to administer the contract, wide range of valuation methods, simplified contract machinery, two distinct contractual routes to handle claims and variations, tabulated insurance requirements, use of liquidated damages provisions for delay, omission of work and termination events for a faster and easier management of damages flowing from such events, early appointment of an adjudicator who can provide dispute avoidance services on top of her/his regular dispute resolution services, to name a few.

The Green Book also includes some brand-new features such as the prolongation cost (PGC) mechanism, a tabulated summary of contractor's entitlement for employer's risks, the use of an insurance certificate to be signed by an insurer or broker, user-friendly flow charts and 40 communication forms provided as guidance for practitioners.

Commenting on the launch of the new Green Book, FIDIC contracts committee chair and principal drafter of the new Green Book, Vincent Leloup, said:

“We are delighted to bring the latest edition of the FIDIC Green Book Short Form of Contract to market. The inclusion of new features and essential updates will make for an even more relevant and user-friendly document that builds on FIDIC's tradition of providing contract forms that are fair to all parties and which advocate balanced risk sharing. I am confident that the updated Green Book will be seen as the natural alternative to a 2017 Red or Yellow Book and warmly welcomed by users around the world.”

Hard copies of the *FIDIC Green Book* will be available from late January 2022.

TRANSFORMATIVE CLIMATE CHANGE CHARTER

LAUNCHED FOR GLOBAL INFRASTRUCTURE SECTOR

International engineering federation FIDIC (the International Federation of Consulting Engineers) has launched a transformative plan of action for the global engineering industry to decarbonise as it sets about turning COP26 climate change ambitions into outcomes on the ground.

The engineers who design and deliver the world's infrastructure and built environment have a key strategic role in ensuring the world tackles climate change and achieves net zero by 2050. So FIDIC has launched a Climate Change Charter that sets out specific actions to be taken by individual engineers, companies, member associations and project teams and is calling on the engineering, construction and infrastructure industry to step up and commit to the charter.

Tony Barry, president of FIDIC, commented: "The world has been too slow to reduce climate change emissions. Even going into COP26, global leaders were still not yet in agreement about what needs to be done and how fast it can be done. As engineers, we work across the globe and we have the

collective responsibility to inform and implement decarbonisation solutions and reduce other greenhouse emissions. This charter is a clear roadmap for ensuring we do that while eliminating our own climate impact during the process. I urge all organisations in the global engineering, construction and infrastructure sector to sign up to the charter."

Dr Nelson Ogunshakin OBE, chief executive of FIDIC, added: "Climate change is an existential threat to nature, to the built environment and to the future direction of human civilisation. The engineers that design and build the human world will be more crucial than any other sector to shaping the world's response and making a success of ending climate change and tackling the consequences of it. So, we have to lead by example."

The *Climate Change Charter* represents a significant new call to action by FIDIC, the global consulting engineering industry body which represents over 40,000 companies and more than one million professional engineers and consultants operating in over 100 countries around the world. It sets out clear commitments and actions for reducing and eventually eliminating carbon and

other climate emissions from the sector and has been drawn up with the support of experts from around the world.

FIDIC itself is also taking a lead in this process, including its own commitments in the charter.

Dr Ogunshakin also said: "FIDIC has been working to decarbonise its own operations for some time and we are committing through this charter to upgrade our own internal activities, to take a science-based approach to reducing carbon and other greenhouse gas emissions further and to engage with best-in-class offset programmes to address residual operational emissions. We are also committing to annual reporting of scope 1, 2 and 3 emissions and we are proud to be leading this change and proving what is possible."

The charter sets out specific roadmaps for each part of the industry so that individuals, companies, member associations and project owners have a dedicated plan to sign up to and implement. FIDIC sees this as vital to recognise the important differences in what each part of the industry needs to do as it sets about delivering a net zero infrastructure and built environment around the world.





CONSULTING OPPORTUNITIES IN THE ELECTRICITY SECTOR

By Paul Sagala PhD RE (U)

Air Water Earth Engineers / Energy and Climate Health

BACKGROUND

Energy sector activities in generation, transmission and distribution of electricity used to be integrated and a preserve of government until changes from Electricity Act of 1999 were implemented in the unbundling of the sector. The then Uganda Electricity Board (UEB) was created in the fifties to play a monopoly role, thereby stifling local private sector participation and development.

The liberalization of the sector saw the unbundling of the sector to different entities in generation, transmission and distribution, along with the introduction of a regulatory authority, beside others like a tribunal to handle disputes.

This opened opportunities to the private sector to develop largely small 1-10MW hydropower projects, and, opening the way for ventures in non-conventional power sources as Solar PV.

Many of the engineering professionals formerly with UEB have since retired, creating part of the nucleus offering consultancy services in the said activities in the sector.

Some of these opportunities are early studies, feasibility studies, design, construction and supervision. These are nonetheless limited to participation of local professionals, largely owing to lack training and experience, a result of practices from the pre-liberalization days. I will look at a few in the sectors of hydropower and solar energy.

HYDROPOWER

This is a wide ranging area, with players in the water, geotechnical, environmental, civil / structural, electrical and mechanical engineering beside other areas.

Let us look at how the local consulting fraternity has

participated since the liberalization of the sector to-date, and, the opportunities that abound.

Water Sector

The starting point is often to obtain water flow patterns over a period of 30-years or so, determination of the most suitable site for the dam, bearing in mind the nature of construction that is largely dictated by the terrain. This role however is often played by the responsible department under the Ministry of Water and Environment.

Geotechnical Investigations

These are to determine geological conditions to determine not only the most suitable site but the necessary designs required to meet the anticipated dam to be constructed. The requirement for prior experience in the activities involved have often precluded participation of local firms.

Civil/Structural Engineering

The design of dam structures requires knowledge and experience in a number of specialized areas, including but not limited to dams, gates and water retaining structures. These vary depending on terrain, whether water flows from a large reservoir as a lake as for Nalubaale hydropower project (HPP) or whether pipe structures are to be used to deliver the water as at Kakaka HPP or other considerations.

This area of activity still remains a preserve of foreign firms with the requisite experience, and to the best of my knowledge of the situation on the ground, there has been limited participation of Ugandan consultants in such designs.

Environmental Investigations

These activities span obtaining a baseline, assessments, efficient use of resources, pollution risks and their mitigation, waste management, health and safety considerations, land issues, biodiversity conservation and sustainability of resources, cultural heritage issues and the like. In this area, we are beginning to see greater participation of local consultants, moving from small plants toward larger projects.

Electrical Engineering

These roles are widespread across design, testing, supervision manufacturing of turbine components, machinery controls, lighting and wiring, generators, communications systems, switchgear and electricity transmission systems beside others.

Again, the non-participation of entrepreneurs in the sector in

the formative years of Uganda's hydropower sector have meant that many engineers are still on the learning curve, if and only if they are selected and participate with foreign firms. Our experience in this area has been less than satisfactory, especially with the ambush of the sector by Chinese firms. Many deserving professionals have not often been given any opportunity to participate!

Transmission and Distribution

Ugandans have been involved in this area for smaller transmission and more so distribution projects. There have been contracts awards to local consulting engineers in the construction of substations, distribution and transmission projects. While larger transmission projects have largely been a preserve of international firms, we have seen greater participation in rural electrification with the Rural Electrification Agency (REA).

Mechanical Engineering

Roles largely involve overseeing assembly and installation, testing of equipment, designing tools and handling equipment beside others. Again, little opportunity has been given to local professionals, nor participation of deserving practitioners in most of the development projects in the sector to-date.

Project Promotion

Amongst developers of small hydropower schemes, there have been a few instances where local professionals have been involved. Cases in point include 5.4MW Lubilia HPP, and, 4.5MW Kakaka HPP in which two professional engineers are involved in the latter as founding shareholders and developers.

SOLAR PV

Save for the standalone design activities undertaken by a number of professionals, Uganda has now acquired four (4) grid-connected Solar PV plants. These are:

- 10MWp Solar Plant in Soroti commissioned in 2016,
- 10MWp Solar Plant in Tororo commissioned in 2017,
- 20MWp Kabulasoke Solar Plant commissioned in 2018, and,
- 10MWp Bufulubi Solar Plant commissioned in 2019.

Unfortunately, there seems to have been very little participation of local professionals in these projects if any. To my knowledge, there has not been any!

Ugandan professionals are quickly picking up requisite skills to participate in such projects, one such professional having come back from UK where he has been involved in the development of innovative solar PV installations there, taking advantage of favourable conditions set by the government out there.

Participation in Large Hydropower Projects Lacking

The past two decades have seen a strong growth in 50MW+ plus projects as government took the decision to participate in projects of the order of 20MW or higher, based on the difficulties small power project developers have experienced with projects of such size. These include:

- Upgrading of Nalubaale HPP from 150MW to 180MW,
- 200MW Kiira HPP in parallel to Nalubaale HPP,
- 250MW Bujagali HPP downstream of Nalubaale HPP,
- 183MW Isimba HPP, and,
- 600MW Karuma HPP, nearing completion.

‘While the hydropower sector has seen much of the potential developed to local consultants’ exclusion, it is not too late to make amends.’

I can say that the local engineering consulting fraternity has had a raw deal in literally all these projects, even as partners for capacity building purposes. As we all know, the Chinese have dominated these projects, in particular 183MW Isimba HPP and 600MW Karuma HPP after the experience with 250MW Bujagali Energy Ltd HPP that resulted in prohibitive tariff adjustments to the detriment of the user community.

We can also observe that procurement processes as per Public Procurement and Disposal of Public Assets Authority (PPDA) expectations were often sidelined, denying local opportunities to a fair playing field.

Concluding Remarks

Recent experience has shown that despite the substantial development of the hydropower sector, there have been serious irregularities to the detriment of the Ugandan consulting engineering fraternity. This has

denied UACE the opportunity not only to participate but also in-access to important capacity building opportunities.

Although there has been limited participation in grid-fed solar PV generation to-date, this area is one with a lot of promise, especially for off-grid projects that are increasingly seen as amongst the best routes to enhancing electricity access in rural areas.

While the hydropower sector has seen much of the potential developed to local consultants’ exclusion, it is not too late to make amends. There remain both big prospects in Ayago and the controversial Murchison Falls sites at the large scale level, with other smaller opportunities also still available. The solar PV area is one to embrace, given the many prospects and the enthusiasm in donor support.

UACE needs to spearhead the quest for better participation modalities in times to come.





UGANDA STANDS AT 20.8%

REVEALS THE FIRST INFRASTRUCTURE TRANSPARENCY INDEX BY COST UGANDA

By Olive Kabatwairwe, CoST Coordinator, Uganda

On 3rd December 2021 CoST Uganda launched results from its 1st Infrastructure Transparency Index (ITI) at the Kabira Country Club hotel, Kampala. The event that attracted 60 stakeholders was aimed at disseminating results of the first Infrastructure Transparency Index in Uganda. The index ran across 30 entities assessing 60 selected infrastructure projects and evaluating critical aspects of the national conditions for delivering public infrastructure projects. As part of this Index, CoST Uganda launched an ITI dashboard which presents live results of the Index.

The ITI's mission is to review the transparency and accountability of public infrastructure continuously.

The ITI's objectives are as follows:

to assess the state of infrastructure transparency and the capacity of procuring entities to improve transparency in the country; to track and encourage progress and facilitate peer learning, all while assisting in holding procuring entities accountable; and to raise awareness of transparency while building on existing data standards such as the CoST IDS and the OC4IDS.

The index was guided by a methodology designed in the CoST International ITI Manual, which provides four dimensions: enabling environment, capacities and processes, citizen participation, and information disclosure. Each dimension is assessed against a list of standard indicators and sub-indicators under which each entity, project and dimension are measured and interpreted. In the first Index, the data collection process took a total of 88 days with the whole Index taking seven months, indicating the need to strengthen the appreciation of transparency in the sector. The major limitations the Index encountered was the COVID-19 pandemic and its associated challenges, the low levels of disclosure of infrastructure data and slow uptake of the index by public officials.

The index results reveal that the national ITI score in 2021 stands at 20.8%, representing the national enabling conditions and 60 projects and 30 entities across various sectors. Uganda's performance in the enabling environment dimension is at 41.4%, information disclosure at 18.4%, citizen participation at 13.8% and capacities and processes at 13.5%. Local Governments performed least in the first Index with nearly all the thirteen assessed scoring less than 15%.

Three entities, including Kampala Capital City Authority (KCCA), Uganda National Roads Authority

(UNRA) and Office of the Prime Minister (OPM), emerged the best performing across the various dimensions in the first Index with scores 62%, 58%, and 48%, respectively. There are notable inconsistencies with data published across the official public access to information platforms such as the Government Procurement Portal (GPP) and respective entity websites. Only one out of every five entities discloses infrastructure data proactively. Public officials lack capacity to disclose data, but also, lack capacity on the legal and policy framework in relation to transparency and accountability.

The index presents a framework for improving the enabling conditions for delivering infrastructure projects, calling on Government through its respective line entities to demonstrate a stronger political commitment to enhance infrastructure transparency, revealing itself in bold actions and implementing sanctions and incentives for non-compliance with the legal and policy framework across the entities. Strengthen citizen engagement (barazas) and make them mandatory across all projects, train public officials on disclosure and the legal framework, enhance institutional capacity and human resources across Local Governments, standardize disclosure and recognize the Index as an annual national performance indicator in the sector.





CoST Uganda invests in public policy engagements to enhance transparency

As the country grappled with managing the effects of COVID-19, there were unanswered questions relating to **infrastructure transparency and accountability**. At this critical moment, access to every information by citizens was key in the delivery of every service. The experience of the health sector where access to information on the prevention measures of the pandemic, in addition, the demand for better health and water sector infrastructure were a hot cake demonstrates the need to enhance the efficiency and performance of public infrastructure projects across the health, education, water and energy.

The construction industry was challenged in these times, especially as the pandemic occurred during the rainy season associated with floods that affected road and water transport as well as existing infrastructure such as hospitals, schools and construction sites. This coupled with floods and increased water levels of Lake Victoria escalated the situation. Lack of access to quality infrastructure affects access to key livelihood services like health which was critical during the period.

Limited disclosure - associated with dramatically increased demand for goods and services, limited compliance with value for money standards and political influence, influence peddling and corruption risks in procurement were candidates in the sector since Uganda lacked clear guidelines around emergency procurement, or acquisition of services during crisis situations. To promote transparency in the sector, CoST Uganda issued a statement ¹ and conducted media engagements calling on the Government to put in place measures to ensure there is transparency and accountability in infrastructure investments during this or any future pandemic. This can be done by putting in place measures to ensure procurement is done in accordance with the law, and where possible, policy provisions such as guidelines should be put in place to ensure compliance and performance. This call was further strengthened by other stakeholders in various sectors.

Government has been responsive to stakeholder concerns, the call for transparency as well.

¹ <https://www.cost.or.ug/download/a-call-for-infrastructure-transparency-and-accountability-during-the-covid-19-pandemic/>

“As the lockdown continued, procurement of infrastructure projects and construction works continued, but the public was not aware of the projects being procured and constructed, this affected private sector participation and citizens monitoring of public projects. The “work from home” aspect made public officials more secretive in sharing information and this was exacerbated by the lack of equipment’s and poor internet connectivity to upload information”

Olive Kabatwairwe, Programme Coordinator, CoST Uganda.





stakeholder calls to action on creating a level playing field for procurement in crisis situations, Government established a process to develop Emergency Procurement Guidelines. Ministry of Finance, Planning and Economic Development (MoFPED) and PPDA invited CoST Uganda to share ideas on what could constitute the guidelines. CoST Uganda submitted 20 concerns of which 7 were taken on in the guidelines. The Emergency Procurement Guidelines will contribute to transparency, fairness and openness by the PEs to the private sector in engaging in procurement during difficult times.

PPDA revises bidding documents to promote transparency;

Since the setup of the Business Integrity Initiative, influencing reforms in infrastructure delivery processes has been one of the core objectives. Following the fair business practices learning and reflection² meeting conducted on 13th August 2020, stakeholders expressed concern that Local Governments had not been highly engaged in the Business Integrity Initiative and yet, took a large share of investments /budget in public infrastructure procurement. It was also noted that, while using

the Direct Procurement method, local governments did not comply with procurement regulations and safety, social or environmental safeguards, and there was scarcity of providers within these entities. As such, the sector was exposed to monopoly from a few providers and became a zone for influence peddling and patronage, straining and or leading to poor delivery of infrastructure projects. Local Governments also had funding constraints where unused funds from previous quarters would be required to be sent back to the treasury. These issues were further affirmed in the policy awareness webinar in September 2020 organized by CoST Uganda where the stakeholders raised concerns regarding the lack of fairness and transparency within Local Governments, and the inadequate capacity of Local Governments to attract and sustain credible firms. The private sector also recommended that, PPDA should standardize the bidding documents to favor all bidders at Local and Central Government levels. PPDA revised the standard bidding document as a guideline for procurement of works under the Open Bidding for Local Governments on 15th September 2020. In the guidelines, PPDA stresses that Government revised the standard bidding document for the procurement of works under the open bidding methods for the use by the Local Governments with immediate effect.

Rewarding most transparent entities in the Assurance process.³

To enhance transparency, CoST Uganda through its Champion Ministry of Works and Transport recognized entities that performed best in the 4th Assurance Process. The Uganda National Roads Authority scooped the award for the overall winner in disclosure because they disclosed the highest number of data points, populated public platforms with data, and used official platforms to disclose information while PPDA, the regulator was awarded for promoting Fair Business practices in Uganda, and Ministry of Works and Transport was awarded for its stewardship and promoting the CoST agenda in Uganda. UNRA has obtained Accreditation from PPDA for reservation of selected feasibility study and detailed engineering consultancy services for road upgrading projects to local consultancy firms. Improved dissemination of the performance of the implementation of local content by the Authority and also the available opportunities. This includes the use of the Executive Director's Pressers, adverts in newspapers, UNRA website and participation in public engagements with industry stakeholders (UNABCEC, UACE, UIPE, and ERB among others).

² <https://www.cost.or.ug/government-through-ppda-to-scale-up-cost-ugandas-award-process-to-recognize-most-transparent-mdas-and-local-governments-starting-october-2020/>

³ <https://www.cost.or.ug/cost-uganda-launches-the-4th-assurance-report-the-office-of-the-prime-minister-commits-to-take-action-on-the-findings-and-recommendations/>

Standardization of guidelines and procedures will provide for compliance, enhanced performance and safety of workers and site users. It will also provide for effective preparations of the private sector in procurement. Following the advocacy for transparency, some steps have been taken by Government to put in place reforms, in addition PPDA **revised guidelines** for of procurement guidelines for Local Governments,

the Authority also **adopted a rewarding process** for most transparent entities, as an incentive for disclosure by Procurement Entities that shall be done annually. Reviewed bidding documents to include considerations for inclusion of women and young people, health, safety and environmental safeguards. And provision for participation/consultations between central and Local Governments on

centrally procured infrastructure projects. Developed guidelines for emergency procurements. CoST Uganda made input into the guideline that is under consideration by the Solicitor General of Government, and; strengthened its capacity building of PE officials on disclosure to focus on infrastructure projects and awareness raising on procurement processes among others.

All is not done yet, for the sector to flourish, we call on Government to take action on the following recommendations to enhance transparency in infrastructure delivery processes.

1. PPDA is encouraged to review of reporting templates for procurement entities to include missing data points in the CoST IDS, and drafting a policy on data management and issuing regulations for infrastructure projects.
2. Ministry of Works & Transport and PPDA should update the national providers register for contractors and consulting engineers. PPDA updated the register to include women-led companies, however, a focus on infrastructure needs to be made.
3. PPDA should consider incorporating the OC4IDS into the E-GP to standardize disclosure
4. MoWT and the MoFPED should establish a credit facility/guarantee fund for the private sector to access credit at lower interest rates and;
5. Making key critical sector issues such as disclosure of infrastructure data, local content, and inclusion as part of the performance indicators for the accounting officers in MDAs and Local Governments.
6. Turn Local content, joint ventures and reservation and preference schemes guidelines into Regulations to provide for sanctions for noncompliance.
7. PPDA should strengthen awareness-raising and training of public officials and private sector on procurement guidelines, taxation and local content provisions.
8. Government through MoFPED should establish alliances and business hubs at the regional level with line sector Associations, lobby for members on issues such as taxation, global application of tax requirements.
9. National Name and fame criteria of MDAs on compliance with the law – on key parameters such as delays in payments, disclosure, overruns, stakeholder engagement, inclusion, local content among others.

About CoST; CoST – the Infrastructure Transparency Initiative is the leading global initiative improving transparency and accountability in public infrastructure. CoST Uganda is a national chapter of CoST International, a charity based in the United Kingdom. CoST works with government⁴, private sector and civil society⁵ to promote the

disclosure and validation of data from infrastructure projects. This helps to inform and empower citizens and enables them to hold decision-makers to account. Our experience indicates that informed citizens and responsive public institutions help drive reforms that reduce mismanagement, inefficiency, corruption and the risks posed to the public from poor quality infrastructure. The vision of CoST is to contribute towards Quality infrastructure, stronger

economies and better lives; and the mission is to; Enable a multi-stakeholder approach in the disclosure, validation and use of infrastructure data. This improves transparency, participation and accountability and contributes to quality infrastructure that meets people's needs. Visit our website to learn about the 1st, 2nd, and 3rd Assurance process in Uganda.

⁴ <http://infrastructuretransparency.org/our-approach/cost-feature-multi-stakeholder/government/>

⁵ <http://infrastructuretransparency.org/our-approach/cost-feature-multi-stakeholder/civil-society/>

DE-CARBONIZING KAMPALA CITY'S TRANSPORT SYSTEM:

A Key to the Desired Sustainable City

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Introduction

Kampala, the capital city of Uganda, is 196 km² with a resident population 1.5 million and a typical day population of close to 4 million people. Kampala's commercial and industrial activities contribute significantly to the GDP of the country and hence Kampala is regarded as the engine of economic growth of Uganda. The transport sector is an important component of any country's economy and a common tool for development (Rodrigue & Notteboom, 2020). Globally, economic opportunities are increasingly related to the mobility of people and freight of goods. Consequently, the quality of the available transport infrastructure

is a key predictor of the level of economic development. Cities with efficient transportation systems are able to offer their inhabitants economic and social opportunities that create positive multiplier effects including market, education, health care and other services accessibility.

Whereas transportation systems in cities are a necessity that spurs economic development, non-climate resilient planning the of the same is likely to cause significant negative impacts on the Climate. In the recent past, for instance, 70% of the total global energy carbon dioxide (CO₂) emissions have been associated with cities (Neij, et al., 2014). As such, cities are now well recognized key drivers of climate



Figure 1: Some of the likely Impacts of climate change and climate feedback to our cities as a result of increased GHG emissions



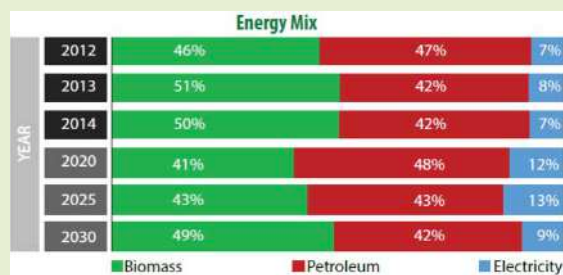
Figure 2: Sights of Flash floods in Kampala City (Source: Monitor Online)



change and global environmental degradation. Within the cities themselves, the transport sector contributes a significant amount (23%) of the energy related CO₂ emissions. Fossil fuels like diesel and petrol used in motorized vehicular transport is responsible for 40% of the world's black carbon, a potent climate forcing agent. To the detriment of City dwellers and the environment, the impacts of climate change are already being felt in our cities as evidenced by temperature rises, changed frequency of rainfall, prolonged periods of droughts, rising lake levels, distorted seasonality, and increase in respiratory diseases as a result of deteriorated air quality among others (see figure 1 below). Nationally, there is now a recognized need for vehicular emissions reduction and ensure that transport infrastructure is climate resilient in Uganda (National Climate Change Policy 2015).

Energy demand projections and Green House Gas (GHG) emissions data for Kampala city

The energy demand for Kampala has been growing over the years due to population growth and the deliberate industrialization drive by government. The energy supply is dominated, however, by fossil fuels (Petrol and Diesel) and biomass, and the presumed cleaner hydroelectricity had been projected to contribute a maximum of 13% in 2025 (Fig. 2). Over 80% of Kampala's energy demand for the period 2012 – 2020 has been met by GHG producing fossil fuels and biomass. Moreover, this situation is likely to remain unchanged for the next 10 years up to 2030 unless feasible alternatives are provided (Kampala Capital City Authority, 2016).



Energy related emissions estimates as done by the Global protocol for Community scale Greenhouse gas

emissions (GPC) indicate a per capita GHG generation rate of 2.5 tCO₂-e for each Kampala resident whereas the national average is at 1.4 tCO₂-e. If the current trends continue unabated, it is projected that, these emissions are likely to increase by 55% between the year 2020-2030. Some of the required interventions could be in line with policy as a significant amount of the GHG emissions is induced by key administrative decisions taken by City Authorities in regards to physical planning, mobility, transport and waste management. For instance, it is estimated that 65% of the vehicles in Uganda are operating within the Greater Kampala Metropolitan Area (GKMA). Consequently, the demand for fossil fuels has been exacerbated by congestion, reliance on small omni-buses for public transport and rapid motorization and any deliberate policy decision to decongest GKMA is likely to cause the much needed paradigm shift in the transport system for Kampala to achieve the desired reduction in GHG emissions.

Proposed Decarbonization Strategies for Kampala's Transport System

In order to achieve the desired reduction in GHG emissions and to align better with achievement of Sustainable Development Goal (SDG) No. 11, Cities like Kampala need to adopt the following de-carbonization strategies;

- Mass Public Transport and adoption of alternative fuels such as Liquefied Natural Gas (LNG), biofuels and electric powered vehicles.**

The traffic congestion challenge in Kampala is exacerbated by reliance on low capacity 14-seater omni-busses and private cars. Kampala Capital City Authority (KCCA) is undertaking plans to introduce high capacity public transport vehicles in form of eco-city busses and train services. Plans are also underway to upgrade the road infrastructure to accommodate exclusive bus lanes and bus stop facilities. This is aimed at promoting a shift from private cars and the 14-seater omni-buses to high capacity public transport means such as buses. It is envisaged that this mode shift will significantly reduce peak period traffic congestion analogous to the illustration below and lead to a CO₂ emissions reduction of around 20%.



Here are 200 people in 177 cars



on 3 buses

Figure 4: Mitigation of Congestion by adoption of Mass public transport (Source: International Sustainability Commuter Toolkit Poster)

The CO₂ emissions could be further cut by making use of alternative fuels such as electricity and biofuels.



Figure 4: Prototype of the Kayoola solar electric busses recently introduced in Kampala city

Additionally, greater strides towards decarbonization could be made by developing and promoting use of Railway transport in Cities (Fig. 4). A study carried out on the Asian development bank projects revealed that Railways and Bus Rapid Transport (BRT) offer the highest savings in terms of tonnes of carbon dioxide saved per kilometer per year (Asian Development Bank, 2010). On the contrary, the development of express and by-pass ways as is seemingly the direction being taken for Kampala would lead to net CO₂ emissions and air quality deterioration.

ii) Adoption of Non-Motorized Transport (NMT) with significant urban greening.

In 2012, the Ministry of Works and Transport published a stand-alone NMT policy with the assistance of the United Nations Environment Programme (UNEP). The Uganda National Road Safety Policy and National Urban Policy both propose the implementation of exclusive and safe pedestrian and cyclist infrastructure. Improving the city's NMT infrastructure and implementing its NMT Policy is not only key for road safety but also a good first step towards achieving Uganda's nationally determined contributions (NDCs) in regards to reductions in greenhouse gas emissions under the United Nations Framework Convention on Climate Change (UNFCCC).

A significant number of commuters to and within the city move on foot and this number could be greater if the necessary NMT facilities were present. A Pilot NMT infrastructure project has been implemented in Kampala starting at Namirembe Road through Luwum Street to Entebbe Road. Through such pilot projects, walking and cycling (i.e. NMT) can be promoted in the city. Adoption of walking and cycling would reduce motorized traffic on the roads and thus reduce GHG emissions. The environmental benefits accrued from NMT infrastructure development can be reinforced by implementing significant urban greening in terms of grassing and tree planting which would further improve atmospheric air quality and contribute to carbon sequestration.

CO₂ tonnes saved per km per year

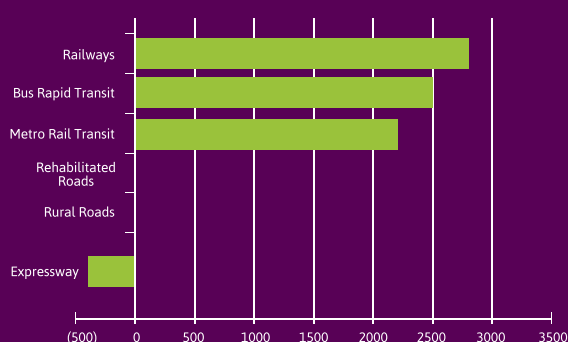


Figure 5: CO₂ tonnes saved per kilometer per year (Source: Asian Development Bank)

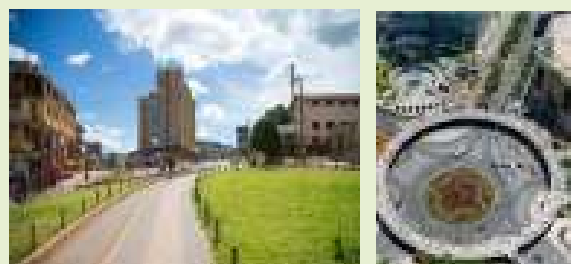


Figure 6: NMT Infrastructure with significant urban greening planned and being developed in Kampala City

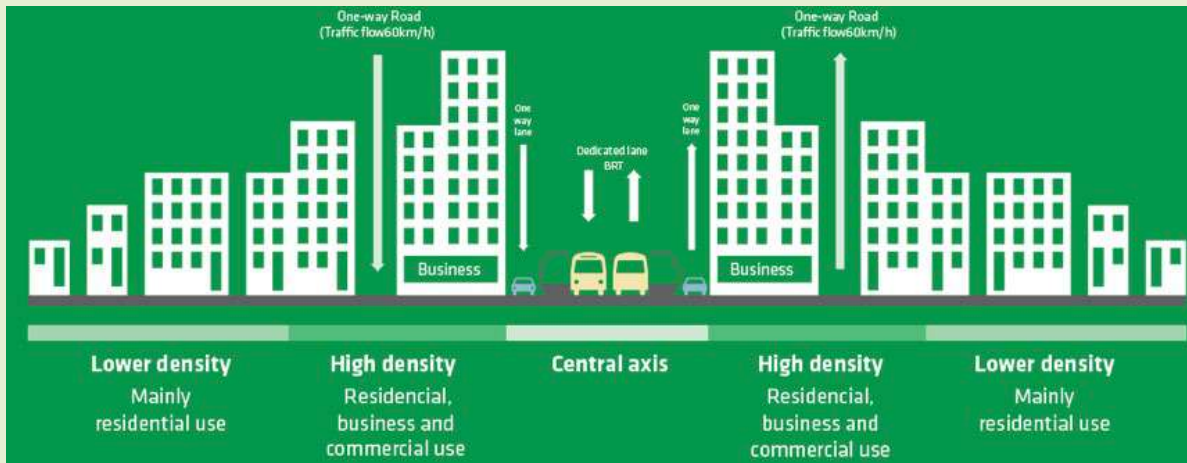


Figure 7: Conceptual illustration of the principle of Transit Oriented Development (TOD)

iii) Transit Oriented Development (TOD) and Development of Human Resource Capacity in Low Emissions and Climate Resilient Development

Expansion of cities as a result of economic development has generated a high dependency on private cars. Urban development policies have not taken into account mobility leading to significant environmental costs resulting from urban expansion. Under Transit oriented development, high-density mixed-use developments within a walking distance to public transport stations are created with a goal of increasing the number of people living and working near public transport stations (Fig. 6). Urban planning should be modified with sustainable mobility as a guiding principle. Intelligent urban growth planning strategies that include densification of cities whilst ensuring proximity to public transport will promote NMT and Public transport use (Arku, 2009; Bibri et al., 2020). In order to undertake all the above-mentioned strategies, there is clear need for development of human resource capacity. Authorities are obliged to develop and implement educational programs on climate change and its effects (UNFCCC Article 6).

The Uganda climate change policy and the East African Community climate change policy both prioritize capacity development, information sharing and research as important elements of climate resilient development.

Conclusions and Recommendations

In line with the above discussions, to have a decarbonized city many considerations and challenges to the status-quo accepted. Amongst considerations could be changes to existing policies and willingness to adopt to new ways of doing business around cities. The following would need to be considered;

- i) There is need to build a culture of innovation and experimentation in cities.

- ii) Cities should establish or make use of intermediary organizations. For instance, FIDIC member organizations could brokerage between political, economic and social interests whilst creating a platform of dialogue on proposed interventions.
- iii) Cities should undertake strategic, collaborative and communicative planning while creating dialogue between city authorities, transportation experts, communities and other key stakeholders on challenges and opportunities of de-carbonization interventions in the transport sector.
- iv) There is need to develop and ensure integrated planning and management of transport and other physical infrastructure that encompasses climate predictions.
- v) Our decisions and actions in regards to mitigation and adaptation to climate change will determine the success or failure of de-carbonization transitions.
- vi) Response to climate change should not be just a matter of setting targets but should be seen as an important way of achieving resilience, security, well-being and new forms of economic development.

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DETERMINATION OF CONSTRUCTION CLAIMS

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Traditionally, in Uganda, claims within the construction industry were handled by the parties at project level. The contractor's quantity surveyor, for example, would compile the claim and the Architect (Building projects) or Engineer (Roads & water projects) would respond with support from the client's Quantity surveyor.

However, the objective of a claim is to demonstrate that the claimant has entitlement to compensation and to demonstrate the amount of compensation. It is an assertion of a party's right under the terms of a contract or at law.

These days claims are common within the industry and whether a claim consists of a relatively straight-forward claim brought by a contractor to establish entitlement to payment for a variation, or a complicated claim for an extension of time and payment for associated prolongation costs, for it to succeed and for it to be dealt with a timely manner, the claim needs to be prepared and determined in a professional and proper way.

In determination of a Contractor's claim, it is incumbent on the Engineer (Commonly known as the Project Manager in Uganda) to review and award the claim in a fair manner so that it does not develop into a dispute. According to FIDIC clause 20.1 [Contractor's Claims]

'.....Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments.....'

Most contracts will provide a time bar to the Engineer to provide a determination to a Contractor's claim. Therefore as Project Managers, we should always deliver our decisions to contractors in time.

Even where a Contractor submits a poor (non-professional) claim, the Engineer is under obligation to produce a fair determination. A professional claim should clearly demonstrate 4 key elements and these are; CAUSE, EFFECT, ENTITLEMENT AND

SUBSTANTIATION. A professional response/determination should be based under the 4 elements above. FIDIC further states under clause 3.5 [Determinations] that

'Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regards of all relevant circumstances.'

Simply put, the cause is what happened (could be Late or restricted access to the site Instruction to carry out additional work, Late drawings, instructions or information, Instruction to suspend the work, Instruction to accelerate the work, Exceptionally adverse climatic conditions etc.) and the effect is the consequences of the cause to the claimant. The effect could give rise to entitlement to an extension of time, additional payment or both,



“

The analysis of cause and effect is one of the most important parts of a claim or response and if not dealt with properly in a claim for an extension of time, the claim will undoubtedly fail.

but in order to prove that it does, it is necessary to establish that there is a direct link between the cause and the effect. The analysis of cause and effect is one of the most important parts of a claim or response and if not dealt with properly in a claim for an extension of time, the claim will undoubtedly fail.

Where the effect is a delay to complete the project, one must establish that the delay events actually affected the Time for Completion, which is something that is necessary for an extension of time award to be warranted. In order to demonstrate this, it is necessary to carry out some form of DELAY ANALYSIS (Several types depending on the event).

Determination needs to deal with the necessity of establishing the contractual or legal entitlement to the claimed payment or time and to demonstrate the elements of ENTITLEMENT.

RECORDS on the project are a major determining factor to evaluate SUBSTANTIATION of the Contractor's claim and these should be preferably kept in a chronological order.

It is therefore important that our members begin to engage PROFESSIONAL CLAIMS SPECIALISTS to save on time and budget in approval of these claims but also to ensure that the claim does not escalate to a dispute.

Women in Engineering

Young Women Professionals in Leading Roles of Engineering in a Male Dominated Profession



Prossy Atolere is an exceptionally, hardworking and talented engineer. She has achieved great goals in her life due to her focus, determination and hard work.

The mother of four has been married for 9 years, and being the first born of eight children, this means that her life is very demanding and she has to set very high goals for her siblings. This she has done and exceeded the expectations. She calls this "intentional living".

She attended Kasese Primary school, scored aggregate 7, then joined Mary Hill in Mbarara for her ordinary level, and later joined Gayaza High School for her Advanced level.

While in senior one, she wrote on her wooden desk 'Eng' an abbreviation for Engineer, little did she know that this action of faith would come to reality 10 years later. But this wasn't an easy journey for her as she had to work hard in order to get admitted at the university for an engineering course.

By Mrs Gloria Kemigisha Mwebaze, MBW Consulting LTD
UACE FL SC Chairperson

I spoke to two young professional women engineers' and I was able to get their take on the engineering profession, what it took to achieve the engineering dream, why they choose it, the challenges faced if any and how they managed to get to such great positions being female in a male dominated profession.

In her first two terms in high school she failed Mathematics terribly, but she was determined and decided she needed a mentor to help her in this area of struggle. Prossy and her mentor studied together and this helped her get the scores she was aiming for and she was given Bachelor of Science in civil engineering course on government scholarship.

At the university, her engineering class consisted of 100 students with only 14 female students. But this didn't stop her from graduating with a first class degree in 2010.

Her first job was with MBW Consulting Ltd immediately after graduation. While at MBW she Learnt that one could engage in all kinds of engineering fields with no exclusion. Here she was trained in AUTOCAD drafting skills, field supervision and design of different infrastructure. She then enrolled for a master's degree in civil engineering while still working.

In March 2013, she joined Uganda Revenue Authority as a civil engineer officer and in 2015 she was promoted to supervisor Estates and utilities.

She is the Team Leader of Estates and utilities and is currently responsible for planning, development and maintenance of the organization's infrastructure. She serves with a team of eight people, where she is the only lady. This entails her to make travels almost every month. She has been able to pursue her career with the help of her supportive husband who encourages and enables her to reach for the skies.

Prossy says "The culture at URA is so rich that you never feel inferior or intimidated while working in the engineering field that is male dominated."

She has learnt that the strength is in working as a team in order to deliver on any given task.

Her personal values of professionalism, hard work, integrity and agility have enabled her to stand proud as a female engineer.

She advises all the young ladies to value the things they believe in because "being a female engineer doesn't make you less of an engineer, rather the values you stand for as you execute your duties".

"Don't let anyone rob you of your imagination, your creativity, or your curiosity. It's your place in the world; it's your life. Go on and do all you can with it, and make it the life you want to live."

- Mae Jemison



Eng. Brenda Umutoni is a reserved, intelligent, very dedicated and passionate person. She endeavours to do her best at all times. I think it is the reason she is in the position she is in right now.

She is a registered Engineer, married with two children. She studied at Buganda Road primary school, then joined Mt. St. Mary's College Namagunga for Ordinary level and thereafter joined Makerere College for her Advanced level education.

As a child, she had never thought about becoming an engineer but was encouraged by her parents and siblings who saw her potential.

She joined Makerere University to pursue a Bachelor of Science degree in Civil Engineering. Immediately after graduation she was hired at MBW Consulting Ltd, where she acquired a great number of skills in different areas of engineering. She

was employed there for 5 years and during that time she pursued a Master's degree in Business Administration.

In 2016 she joined UNRA (Uganda National Roads Authority) as a Pavement Engineer. Brenda has enjoyed the engineering field. She has great work colleagues and she has not met many challenges in her work place. This is what she has to say "I love my job and the work that I do and it has been and still is an awesome journey of growth."

The main challenge that she faces is that she sometimes travels away for work and has to spend some time away from her family. The reward is in seeing the designs she does come to life. As a pavement engineer, Brenda has designed a number of roads.

Brenda says "I have never thought about quitting because I love what I do"

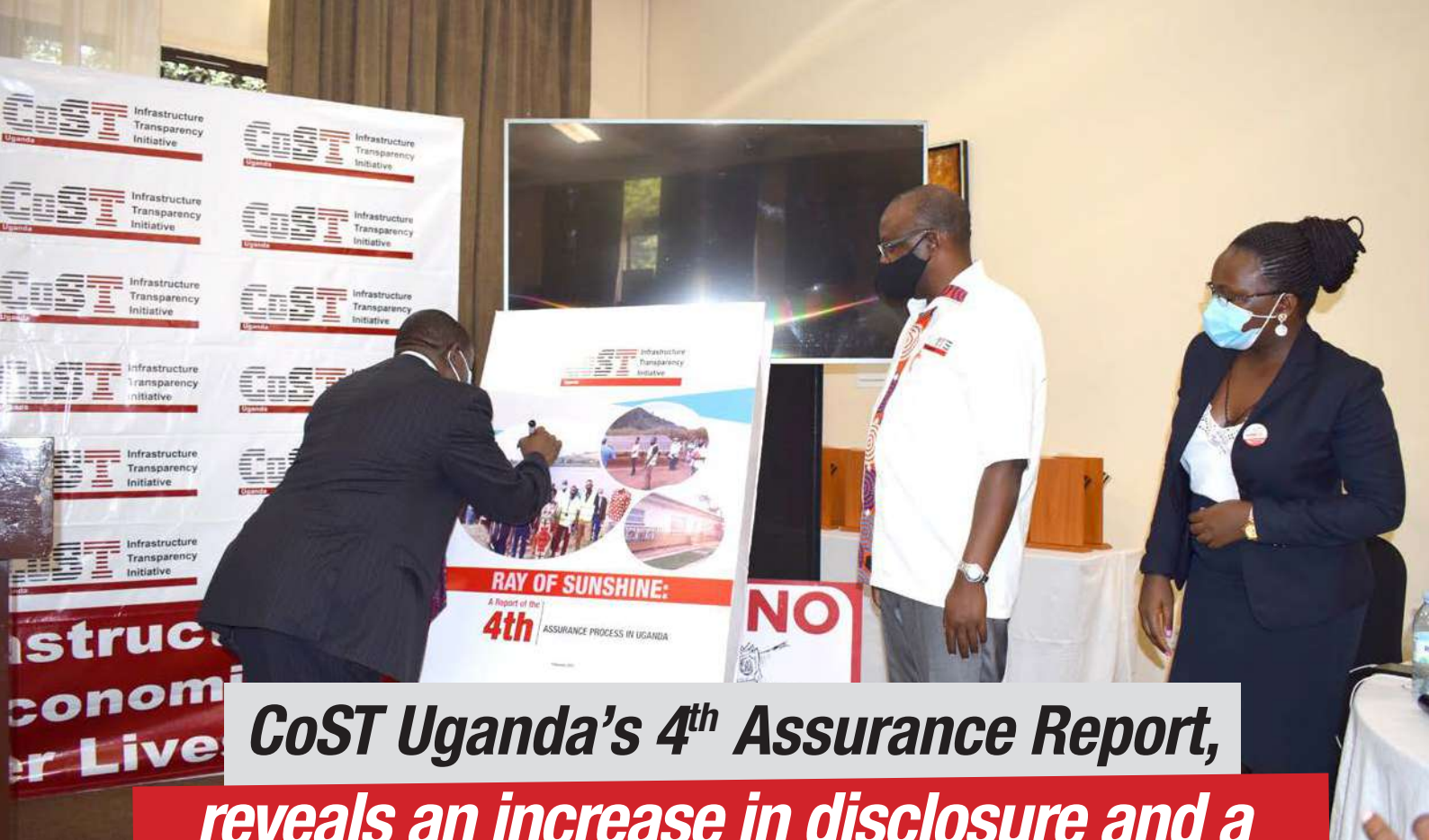
"All sorts of things can happen when you're open to new ideas and playing around with things."

— Stephanie Kwolek

"Science is not a boy's game, it's not a girl's game. It's everyone's game...."

— Nichelle Nichols





CoST Uganda's 4th Assurance Report, reveals an increase in disclosure and a slow progress on Local content

CoST Uganda published its 4th Assurance Report titled Ray of Sunshine, A Report of the 4th Assurance Process in Uganda on, 10th February 2021. The 4th Assurance process focused on 23 public infrastructure projects from eight Procurement Entities. The Assurance process was spread through the sectors of Education, Health, Water and Environment, Works and Transport. From the 4th Assurance process, we note that, the culture of transparency is taking root in the country, with the CoST Assurance process working as a learning tool to consolidate disclosure practices. Although involving different entities in each process, the global average levels of disclosure have improved in the year 2020.

Disclosure across the 23 projects was at an average of 61.5% an increase of 19.5% from the 3rd Assurance process which was at 42%. In regards to disclosure trends, Proactive disclosure increased from 43 to 54% whereas reactive disclosure tremendously increased from 42% to 69%. Twenty two of the Assured projects cost approximately Uganda shillings 4.6 Trillion this is USD 1,272 Million. Loans taken were 62%, whereas GoU contributed 25% and grants amounted to 12%.

Despite the increase in disclosure at other phases of project delivery, transparency on tendering information is still low with 52% of the data to establish participation of local consultants and 43% for contractors was not disclosed. Of the 23 projects,

supervising contracts given to local firms were 9% whereas 30% went to foreign firms and 9% were joint ventures. On the works contracts, 35% went to local contractors while 22% went to foreign firms and there were no joint ventures. From these findings, the performance of the local businesses in infrastructure delivery needs to be enhanced in the interest of promoting local content.

The 4th Assurance report was launched by the Minister of Works and Transport Gen. Edward Katumba Wamala, who is also the Champion of CoST Uganda. In a speech read for him by the Engineer In Chief, Eng. Samson Bagonza, the Minister recommitted the Ministry's stake and interest in seeing more businesses engaging with integrity, and that more assessments on public infrastructure projects kept the Government focused on delivering better value infrastructure. The Minister also indicated that the Ministry attached a lot of importance to CoST Uganda's findings and recommendations and committed to doing everything possible, within the Ministry's means, to make improvements in the planning, design, procurement and management of infrastructure projects by promoting the Open Contracting for Infrastructure Data Standard (OC4IDS).

In a statement of action on the 4th Assurance recommendations, the Office of the Prime Minister

as the leader of Government business in Parliament and Coordinator of Government programmes and policies, noted the concerns and received the recommendations from the 4th Assurance Report, and expressed commitment to take action on the recommendations. The OPM expressed concern that, until now, Public officials still conceal the otherwise regarded public information, that is meant to inform various stakeholders to guide in policy decisions. This is despite global and national efforts and measures to push for easier and faster access to public information. And that despite the available legal frameworks within Government, and the invested efforts in monitoring, evaluation and learning across the various sectors, it has been found that Government has continued to record massive delays in procurement, cost overruns, challenges in construction quality management etc. And the application of the ESHS requirements is still low.

Does increased disclosure in the 4th Assurance process mean more opportunities for the private sector?

There is progressive improvement in the level of disclosure for project and contract information on public infrastructure projects. Disclosure has improved from 12 to 20 data points since the 2017 Scoping Study¹ in the CoST Infrastructure Data Standard (IDS) using various open data platforms, and more projects are disclosed quarterly, with at least 449 projects disclosed in 2020 rising from 149 in the year 2019. The national disclosure levels for public infrastructure projects are progressively increasing as observed in the 4th Assurance Process where disclosure increased from 42% in 2019 to 61.5% in the year 2020 across the 23 sampled projects from eight high spending PDEs. The 23 projects were worth 4.6 Trillion Uganda shillings. More disclosure enables the private sector to know existing opportunities to engage in, prepare bankable bids and enables the general public to engage in monitoring delivery of projects.

Disclosure has improved, and this is a good sign for Uganda with regards to transparency in public infrastructure procurement processes. This means that progressively more business opportunities are opening up for the private sector, although trends in disclosure levels do change at certain periods of the financial year, a factor that needs to be addressed to inform access to information and participation. Disclosure tends to be high towards the end of the financial year and reporting quarters, and sharply lowers at the start of the financial year. This scenario could be attributed to two factors: a general lack of incentives or interest from public officials to publish

"My Ministry will work with CoST Uganda and all other stakeholders to close the gaps identified in the projects assured. The NRM Government fully supports the principles of fair business practices and transparency when handling matters that concern the public and indeed public resources. There is no doubt therefore that the entire Government leadership up to the highest level is in support of independent monitoring of public infrastructure projects, as long as the findings and recommendations are used for purposes of continuous improvement."

Hon. General Katumba Wamala, MoWT Affirming the relevance of the Assurance process.

data, or that there are no projects in procurement at these times to be disclosed. This calls for concerted efforts by all stakeholders, especially oversight bodies, to ensure compliance with timely and consistent disclosure.

In his remarks at the launch of the 4th Assurance report, Gilbert Sendugwa, the Senior Regional Manager for Africa, CoST International, who is also the Executive Director, AFIC noted that disclosure has been one of the main challenges in the Assurance process. He noted CoST International's support towards efforts in regards to putting in place measures for disclosure such as; an Infrastructure Transparency Portal or establishing a Formal Disclosure Requirement, to address the challenges of infrastructure data categorisation; issues of cost and time overruns, challenges in procurement transparency, stakeholder engagement, quality control, safety concerns on project sites, the general challenge of planning are not new, we have observed such concerns in previous reports, it is our hope and prayer that Government through the line Ministries, Agencies and Departments finds lasting solutions to addressing these issues.

In his remarks, Engineer in Chief, Eng. Samson Bagonza asked CoST to prepare annual reports on the sector in regards to transparency and these would be discussed across all sector review meetings. CoST assurance activities have not only improved the disclosure of construction project information but also brought forward construction industry issues

¹ <https://www.cost.or.ug/download/scoping-study-full-report-july-2017/>

that need to be addressed if the construction industry is to be strengthened and developed. CoST Uganda should prepare annual reports for circulation among key stakeholders and also present the reports at

relevant Annual Sector Review Workshops. Engineer In Chief, MoWT, Samson Bagonza at the Launch of the Assurance report.

What does CoST Uganda recommend from the 4th Assurance Report?

- 1.** Government through Public Procurement and Disposal of Public Assets Authority (PPDA) is encouraged to issue a standard disclosure template of key activities undertaken in infrastructure projects and it should be implemented by all PDEs. This should be accompanied with associated guidelines on how infrastructure data should be disclosed. The CoST Infrastructure Data Standard (IDS) and the Open Contracting for Infrastructure Data Standard (OC4IDS) provides for such a standard.
- 2.** PDEs should ensure, regular updates of the public disclosure platforms and establish internal data management and retrieval systems for infrastructure data. NITA – U should assist PDEs to put up robust systems to address this.
- 3.** Ministry of Finance, Planning and Economic Development and PPDA are encouraged to fast track alignment of the Electronic Procurement Portal (E-GP) and the Government Procurement Portal (GPP) to the OC4IDS to enable full disclosure and categorization of procurement data.
- 4.** PPDA should amend the Standard Notice of Best Evaluated Bidder to provide for the estimated value of the works made by the Accounting Officer at the initiation of the procurement. This is important for confirmation that the contract price of the Best Evaluated Bidder is below the Accounting Officer's estimate in accordance with the PPDA Act, 2003.
- 5.** PPDA and the Local Content Monitoring Committee are encouraged to conduct quarterly monitoring of the implementation of the local content and reservation schemes in accordance with the Local Content Guidelines. In addition, these guidelines should be turned into regulations and provide sanctions on noncompliance. PPDA and MoFPED should assess the efficacy of the guidelines annually.
- 6.** The Accounting Officers should ensure that the monthly and quarterly contract reports to be submitted by the Contract / Project Manager and the Procurement and Disposal Unit respectively as provided for under the PPDA (Contracts) Regulations, 2014, are appropriately furnished and assessed.
- 7.** PPDA should require PDEs to publish the contract management plans on the PDEs websites and in related media so that the public and civil society can effectively follow up on the progress of projects. In addition, PDUs should ensure that they monitor the progress of contracts in accordance with the PPDA (Contracts) Regulations, 2014.
- 8.** PDEs, PPDA, MoWT, OPM and MoFPED should reinforce joint stakeholder Monitoring and Evaluation efforts for infrastructure projects with other stakeholders such as CoST Uganda to ensure compliance with national legislation and best practices in a bid to promote value for money.
- 9.** PDEs should recommend to PPDA for suspension the contractors that substantially breach their contractual obligations in accordance with the PPDA Act, 2003. This will curtail cases of contractors successfully participating in tenders in different PDEs while having a poor performance track record.
- 10.** PPDA should conduct awareness raising workshops for PDEs and contractors on the application of the ESHS requirements in the revised Standard Bidding Document for works, and ensure that all projects have established provision of GRC (Grievance Redress Committees)
- 11.** PPDA is encouraged to review the procurement guidelines to provide for considerations of PWDs in infrastructure planning and implementation, participation of women, youth and PWDs and should require PDEs to report on such considerations.



GRADUATE SKILLS DEVELOPMENT

GOVERNMENT SUPPORT NEEDED



By Elizabeth Muhebwa,
Executive Director of UNABCEC.

The rate of youth unemployment in Uganda today is so high and a wide range of research shows that access to adequate livelihood opportunities is one of the most critical issues that youths face and finding the first employment plays an important role in their transition to adulthood. Uganda's construction industry on the other hand continues to grapple with the skills gap in fresh graduates from various universities and technical colleges versus what is expected of them in actual construction works/world of work.

It is to this regard that Uganda National Association of Building and Civil Engineering Contractors initiated a Graduate Training Program under her Construction Industry Advancement Program to offer training opportunities to the final year students and/or fresh graduates of construction and engineering related fields in Uganda. The program was initiated with an aim of empowering tomorrow's contractors and building the future for the construction industry. At UNABCEC, we believe that these early experiences give the graduates an important stepping stone into their career and also help to produce the right professionals needed for growth and development of the construction industry.

After a successful completion of the pilot intake in 2019 that saw 51.9% of the applicants taken on and trained by UNABCEC member companies, the second intake has been rolled out with 165 shortlisted applicants. The list consists of Degree and Diploma holders in the following fields;

1. Building and Civil Engineering,
2. Construction Management,
3. Quantity Surveying/ Building Economics,
4. Water Engineering,
5. Mechanical Engineering,
6. Automotive and Power Engineering,
7. Electrical Engineering, &
8. Land Surveying.

Relevance of the Program to Employers

Besides bringing potential employees closer to employers to save them from the burden of advertising jobs for their companies, the UNABCEC Graduate Training program also helps employers tap into the benefits inherent to the young person, such as greater flexibility and willingness to learn, innovation and energy, higher skills and a greater optimism at no recruitment cost. There are

other benefits of the program connected to workforce development and growing own workforce, such as enhanced loyalty, reduced turnover, shared organizational culture, attracting talent and preparing for the future as well as benefits that occur through greater workforce diversity, such as insights and connections to the market and customer base.

I appeal to all contractors, consulting firms and other employers in construction industry to support the program by offering graduate training opportunities to these graduates.

The database of the shortlisted applicants is available and regularly updated by the Secretariat and it can also be accessed on the Association's website (www.unabcec.co.ug). Contact us today and make a difference.

The role of government

There is a strong link between lack of adequate skills and the limited participation and contribution to quality infrastructure in the country. There is an evident need therefore for a deliberate government training strategy of tertiary institutions and university fresh graduates to ensure they have the knowledge, skills and competences to manage work, and increase their productivity on job sites.

Government through Public Procurement and Disposal of Public Assets (PPDA) should entrench mandatory placement of graduate trainees of all Engineering and Construction related courses in all construction companies operating in Uganda. To have a buy in of such a program and its subsequent success, the following proposals can be considered;

- i. Award points to contractors and consulting firms for every graduate trained. These cumulative points would be an added advantage at evaluation stage in the bidding process.

“

There is an evident need therefore for a deliberate government training strategy of tertiary institutions and university fresh graduates to ensure they have the knowledge, skills and competences to manage work, and increase their productivity on job sites.”

- ii. Set a “National graduate skills development goal” meaning the head count of graduate skills development opportunities that the provider can provide in relation to work directly related to the contract. For instance, two (2) graduates for every UGX 1Bn worth of contract. A Procuring and Disposing Entity would thus require a successful provider to attain or exceed the national graduate skills development goal in the performance of the works contract.

With a deliberate skills development strategy, the construction industry will have more skilled project and site managers, engineers, foremen and women, plant operators, plant mechanics among others translating to a positive trickle-down effect on employment creation, high productivity and delivery of quality infrastructure.



ENGINEERING SUSTAINABLE DEVELOPMENT

LESSONS FROM THE WORLD ENGINEERING DAY CELEBRATIONS

Compiled by Kigozi Joseph (PROME Consultants Limited)

The World Engineering day was celebrated in Uganda on 4th of March 2021 at Hotel Africana, Kampala. The celebrations were jointly organized by The Engineers Registration Board (ERB) and the Uganda Institution of Professional Engineers (UIPE). The Engineering day was attended physically by 60 invitees, from UIPE: 10 UIPE Council members, 8 Board members, 4 Secretariat staff, ERB: 8 from the secretariat and 23 service providers. In addition, 615 virtual participants actively followed on line. In total, 728 participants attended the World Engineering day in Kampala, Uganda.

The theme of this year's celebrations was; "World Engineering Day for Sustainable Development" which is very appropriate and in line with the 17 UN Global Sustainable Development Goals (SDGs). Engineers all over the world through various projects are playing a crucial role in pushing the world towards achieving the targets set under the SDGs. The world is seeing active participation of Engineers in projects that preserve natural resources, are cost effective, and support both human and natural environments. Engineers are also playing leadership roles with the objective to overcome global challenges such as depletion of resources, environmental pollution, rapid population growth and damage to ecosystems. In Uganda's case the theme for the World Engineering day, 2021 has a direct linkage with Uganda's National Development Plan (NDP III) and vision 2040 focused on transforming Uganda into a prosperous country. The engineering profession will contribute to implementation of 11 programs out of the 18 and ensure that the infrastructure contributes to increase of household income and quality of life for Ugandans. Suffice to mention that all the strategies in NDP III can be achieved through good engineering practice and thus Engineers can harness the various opportunities enshrined in these programmes.

The Engineering fraternity plays a key role in the development of the economy and thus there is need for a well-managed and regulated Engineering practice. This desire requires that the fraternity undertakes the following actions;

- i) Registration with the Engineer's Registration board;
- ii) Uphold Professional Ethics;
- iii) Skilling of engineers and artisans – so they contribute to development;
- iv) Enhancing the regulation of engineering businesses – this has not been well regulated and managed;
- v) Regulation of technicians, artisans;
- vi) Promotion of local content and innovation;
- vii) Increasing the number of registered engineers; and
- viii) Encouragement of the participation of women.

The government recognizes the contribution of Engineers and as such is committed to ensure that they are trained and well remunerated. The government is also working towards, among others;

- i) Strengthening the National Building Review Board
- ii) Enforcement of Building Control
- iii) Strengthening Research
- iv) Promotion of dialogue among key stakeholders

In this day and age Information Communication Technology (ICT) is critical and relevant in fostering sustainable development by supporting the work of Engineers. For economic development, ICT can foster innovation, productivity, efficiency and financial inclusion; socially, ICTs can be used for up-scaling education, healthcare, agriculture, commerce and inclusion; and for environmental sustainability, ICTs can be used in gathering data to mitigate climate change, energy efficiency, reduction of carbon emissions and recycling.

It goes without mention that there is need to build resilience in the construction industry so as to ensure future prosperity and development. Infrastructure is the foundation of modern-day civilization and as such the call to ensure efficiency and effectiveness on infrastructure projects as well as the commitment to address Environment, Social, Occupational Health and Safety issues should be heard. The answer to

this call should be through Research & Development, Innovation, Regulation of the Industry, Partnerships, Associations & Joint Ventures, Embracing/ Adapting to Change, Human Capital Investment and Bridging the Infrastructure Investment Gap.

As part of the Celebrations for this year, the ERB five-year strategic plan (2020/2021 – 2024/25) was officially launched by the State Minister for Transport and Works, Hon. Lokeris.



The Minister of Works and Transport, Hon. Lokeris, officially launching the ERB Strategic Plan (2021-2025)



The Minister of Works and Transport, Hon. Lokeris, officially launching the ERB Strategic Plan (2021-2025)

It is now time for the Engineers to join hands and put the best foot forward in order to build resilience, adapt to the changes in the business environment and innovate solutions thereby staying relevant and creating jobs and develop systems that provide solutions for the benefit of our communities and the country at large.

As we usher in a new government following the completion of the electoral process there isn't a better time for all the actors in the business; UACE, UIPE, UNABCEC, ERB to come together in one forum and build the sector in terms of; lobbying for a better operating climate and building companies that are able to compete favorably in terms of resources and quality of services.

UACE MEMBER'S DIRECTORY

ASSOCIATED ENGINEERING SERVICES (AES) – CLASS B



Plot 8-10 Kampala Road. Suite 5.10, Second floor-Uganda House | P.O. Box 23931, Kampala
Tel: +256 772 461012 / 256 703009210 | Email: stephenkawuma25@gmail.com
Contact person: Eng. Kawuma Stephen

Areas of specialization

- Structural Engineering \design
- Civil/ Structural engineering design-Roads and Bridges
- Supervision
- Project planning and management
- Feasibility studies
- Geotechnical Assessment of Ground Condition for Foundation designs

ARMSTRONG CONSULTING ENGINEERS LTD – CLASS B



Plot 13-14 Katana Close - Bugolobi, Maria House, 3rd Floor
Tel: +256772120836 | Email: armstrong@armstrong.co.ug
www.armstrong.co.ug | Contact person: Eng. Kenneth Magembe

Areas of specialization

- Structural Engineering – (design, documentation and supervision) of reinforced, pre-stressed concrete, steel, masonry, prefabricated, composite and timber structures
- Bridges and Dams Structural Engineering
- Geotechnical Engineering
- Foundation analysis and Design
- Grading and other soil improvement methods
- Slope stability analysis including that for Earthquakes
- Deep foundations and designs
- Retaining and Flood walls, sub-surface investigations
- Underpinning Piling

ASTER INTEGRAL PRIVATE LIMITED (ASTER INTEGRAL) - CLASS B



2nd Floor, Bulindo Plaza, Plot 1951 Kira-Bulindo Road, Kira Municipality | P.O Box 35468, Kampala Uganda | Tel: +256-414-255-672/ +256-784-009-487
Email: wycliff.jagwe@aster-integral.com /wjagwe@gmail.com
www.aster-integral.com | Contact person: Eng. Wycliff Jagwe

Areas of specialization

- Power Generation (Solar, Hydro, Biomass, Diesel Generators)
- Power Transmission (HV-Transmission lines and substations)
- Power Distribution (MV/LV power lines and Rural Electrification)
- Mini-grid systems
- Piped water supply schemes
- Solar Water Pumping schemes
- Hydrogeological investigations, siting of wells and production wells
- Environment and social impacts assessments
- Environment audits
- Resettlement Action plans
- Feasibility studies
- Project planning and management
- Tender and contract documentation
- Construction supervision and management
- Engineering audits
- Geological studies
- Land surveying and topographic surveys

CENTRE FOR INFRASTRUCTURE CONSULTING LIMITED - CLASS A



1st Floor, Wildlife Tower | Plot 31 Kanjokya Str, Kololo P.O. Box 240, Ntinda Kampala Uganda
Tel: +256-414-599095 / +256-414-672466 | Mobile: +256-705-341782
Email: info@cic.co.ug | http:cic.co.ug | Contact person: Eng. Ggingo Kizito

Areas of specialization

- Energy and climate change services
- Planning and Design of water services
- Design and rehabilitation of civil engineering structure
- Traffic and transportation engineering
- Design and Rehabilitation of road works , parking facilities and runways
- District, town council/urban Centre services
- Drainage design
- Surveys, site investigations, materials and geotechnical investigations
- Management services

COWI (U) LTD - CLASS A



Plot 3 Portal Avenue, 2nd Floor Crusader House | P. O. Box 10591, Kampala Uganda
Tel: +256-414-343045 | Mobile: +256-788 64 00 63
Email: frgo@cowi.com | www.cowi.com | Contact person: Eng. Frank Gottlieb

Areas of specialization

- Technical Assistance
- Design
- Development Planning
- Supervision and contract management
- Programme formulation
- Training, capacity building and human resources development
- Master planning and feasibility studies
- Monitoring and evaluation
- Financial and organisational analyses

CREEK CONSULT LTD – CLASS B



Plot 1499 Lubowa Estate | P.O. Box 26600 Kampala
Tel: +256-414-572021 | Mobile: +256-414-572021
Email: info@creekconsult.com | Contact person: Eng. Patrick Rusongoza

Areas of specialization

- Technical Audits / Value for Money Assessments for on-going and completed infrastructure projects;
- Project / Programme Reviews (both Mid-Term and End-Term Evaluations);
- Conducting Technical Evaluation of bids and tenders;
- Undertaking Administrative Reviews on behalf of Procurement bodies;
- People Advisory Services (Training in Engineering audit for non-engineering personnel such as financial accountants), job evaluations, recruitment of personnel, development, review of HR Manuals etc.);
- Local Governance Capacity assessments, training / mentoring

EMSULT ENGINEERS LTD – CLASS B



Plot 2129 Moyo Close, Bukoto | P.O. Box 11915, Kampala, Uganda
Tel: +256 392 599 200/74 | Email: info@emsult.com | www.emsult.com | Contact person: Eng. Nelson Mukwaya

Areas of specialization

- Energy consultancy
- Electrical engineering consultancy
- Power distribution and supply systems
- Access control, alarm and lightning protection systems
- Solar systems
- Audio-visual and Voice and data systems
- Mechanical engineering consultancy
- Sewerage, Water supply and waste water systems
- Air conditioning, gas supply and fire-fighting systems
- Lifts, hoists and escalators

ENG. NSIMBE JOSEPH - INDIVIDUAL

P.O. Box 10666, Kampala Uganda | Tel: +256 787 727240 | Email: jnsimbe@gmail.com

Areas of specialization

- Project management and supervision
- Contract administration/management
- Transportation engineering and design
- Procurement/tender preparation
- Infrastructure inventories and condition assessments
- Mentorship and trainings for engineering students, graduate engineers and technicians.

ENG. PETER J. MAGAMBO - INDIVIDUAL

Plot 2 Bandali Rise, Bugolobi | P.O. Box 6583, Kampala Uganda
Tel: +256-414-220279 | Mobile: +256 782 961487 | Email: p.magambo@kaggapartners.com
www.kaggapartners.com

Areas of specialization

- Urban and Rural Water Supply
- Water Resource Management
- Roads – trunk, urban and rural
- Hydro-power Generation and Water for Production Dams
- Power transmission and distribution lines
- Storm Water Drainage
- Waste Water Management
- Solid Waste Management
- Structural and Foundation engineering
- Institutional Building Structures
- Infrastructure for housing and industrial estates
- Institutional strengthening and restructuring
- Technical Auditing
- Policy and Guidelines formulation

FBW UGANDA LIMITED – CLASS A



Plot 1834 White House Close, Muyenga | P.O Box 24843, Kampala Uganda
Tel: +256 393 260138 | Mobile: +256 772 508462 | Email: j.debuni@fbwgroup.com
Contact person: Eng. Joseph Debuni

Areas of specialization

- Surveying
- Architectural services
- Engineering services
- Project management
- Telecommunication
- Consultancy services

UACE MEMBER'S DIRECTORY

FENCON CONSULTING ENGINEERS LTD – CLASS A



Plot 89, Block 266, Sseguku, 2nd Floor Regnol Building | P.O Box 24922, Kampala Uganda
Tel: +256 414-660228/ 0392-002374 | Mobile: +256 772-988313 | Email: info@fenconconsulting.com | www.fenconconsulting.com | Contact person: Eng. G.B Fataki

Areas of specialization

- Architecture and engineering design and construction supervision.
- Project management and advisory services
- Quantity surveying and land surveying
- Physical planning and development - master planning
- Water supply system design, wastewater management sanitation engineering
- Tendering and procurement services
- Environmental studies and management
- Real estate development
- Roads and bridges
- High ways and transportation

GAUFF CONSULTANTS (U) LTD – CLASS A



Plot 53, Upper Kololo Terrace | P. O. Box 201, Kampala Uganda
Tel: +256-414-236798 / +256-312-266799 | Mobile: +256-41-259508
Email: jbgkla@starcom.co.ug | www.gauff.com/uganda / www.gauff.co.ug
Contact person: Eng. Francis X. Kasendwa

Areas of specialization

- Transport, Roads and Railways
- Water Supply and Sanitation
- Town and Regional Planning
- Agriculture and Rural Development
- Environment
- Industrial Engineering and Architectural Design
- Signaling and Telecommunication

IMK ENGINEERING COMPANY LTD – CLASS B



Plot 66 Valley Drive, Minister's Village, Ntinda | P.O. Box 16587 Kampala, Uganda
Tel: 0392 178 089 | Mobile: +256 782 793 581 | +256 782 885 759
Email: imkeng.ltd@gmail.com | www.imkeng.ug | Contact person: Eng. Samuel Isoke

Areas of specialization

- Building Services Engineering
- Energy Systems
- Information & Communication Technology
- Project Management

INFRASTRUCTURE PROJECTS LIMITED (IPL) – CLASS A



2nd Floor, Eseza House, UMA Show Grounds, Lugogo | P.O Box 33224, Kampala Uganda
Tel: +256-312 515262 / +256-312 262728 | Mobile: +256 772491640 | Email: info@ipluganda.com | www.ipluganda.com | Contact person: Eng. Kagyina Karuma

Areas of specialization

- Structural engineering
- Civil engineering
- Bridges
- Geotechnical investigations,
- Materials testing
- Project planning and management
- Tender and contract documentation
- Construction supervision and management
- Engineering audits

INTERFACE CONSULTING LTD – CLASS A



Plot 64 Kanjokya Street, Kololo | P.O. Box 24701 Kampala, Uganda
Tel: +256393262434 | Mobile: +256772748308 | Email: victormale@interface.co.ug; interface@interface.co.ug | www.interface.co.ug | Contact person: Eng. Victor Male

Areas of specialization

- Water supply and sanitation infrastructure development (urban and rural)
- Market infrastructure development
- Hydropower infrastructure maintenance
- Infrastructure programme review development and management
- Institutional development and capacity building (for relevant sector agencies)

KAGGA & PARTNERS LTD – CLASS A



Plot 2 Bandali Rise, Bugolobi | P. O. Box 6583, Kampala Uganda
Tel: +256-414-220279 | Business Fax: +256-414-220208 | Mobile: +256 782 961487
Email: mail@kaggapartners.com | www.kaggapartners.com | Contact person: Eng. Peter Magambo

Areas of specialization

- Urban and Rural Water Supply
- Water Resource Management
- Hydro-power Generation and Irrigation Dams
- Waste Water Management
- Solid Waste Management
- Roads - trunk, urban and rural
- Structural and Foundation engineering
- Infrastructure for housing and industrial estates
- Institutional strengthening and restructuring

KAIZEN AFRICA LIMITED – CLASS B



Uganda Bankers' Association Building, Nyangweso Road, Muyenga | P.O Box 35177 Kampala, Uganda | Tel: +256-414-692406 | Mobile: +256-779-544388
Email: frank@kaizenafrica.com | Contact person: Mr. Frank Magoba

Areas of specialization

- Operational Excellence
- Engineering
- Sustainability
- Project Management
- Research

KKATT CONSULT LIMITED – CLASS B



KKATT HOUSE Plot 3301, Ggaba Road, (Opposite KIU), Kansanga | P. O. Box 25999 Kampala, Uganda | Tel: +256 414 690800 / 0392901247
Email: mail@kkattconsult.com | www.kkattconsult.com | Contact person: Eng. Mary Rwaboona

Areas of specialization

- Transportation Engineering
- Water Engineering
- Sanitation Engineering
- Power Engineering
- Oil and Gas
- Architectural and Structural Engineering
- Safeguards Management
- Engineering Investigations and Surveys
- Procurement, Financial and Technical Auditing
- Asset Management
- Project Management

KOM CONSULT LTD – CLASS A



Plot 7 Kome Crescent, Luzira, Kampala | P.O Box 40108 Kampala Uganda
Tel: +256-414-323666 | Mobile: +256 772 468356
Email: info@komconsult.co.ug | www.komconsult.co.ug | Contact person: Eng. Betty Nakamya

Areas of specialization

- Roads and highways
- Structures and Buildings
- Water Supply and Public Health
- Environmental and Social Sciences
- Geo-technical and Hydrological Engineering

MBW CONSULTING LIMITED – CLASS A



Plot 107 Kiira Road | P. O. Box 8493, Kampala | Tel: +256-393 740800 | Mobile: +256-701 740800
Email: mbw@mbw.co.ug / mutenga@mbw.co.ug | www.mbw.co.ug | Contact person: Eng. Patrick Batumbya

Areas of specialization

- Engineering Infrastructure Development
- Strategic planning
- Institutional Development and Capacity Building
- Social-Economic and Governance Studies
- Structural and Civil Design and Construction Supervision
- Energy Development and Environmental Impact Studies
- Water Supply System Design and Sanitation Engineering
- Highways and Transportation
- Project Management
- Environmental Engineering
- Master plan preparation for Infrastructure Development including Community Mobilization
- Management of Expectations in Infrastructure Development
- Project Formulation

UACE MEMBER'S DIRECTORY

MEIR ENGINEERING & RESEARCH LTD – CLASS A



No. C24, Plot 936, Victoria Loop, Luboowa | P.O. Box 3701, Kampala
Tel: +256 393 193 231 | Mobile: +256 752 258 089
Email: smugume@meir.co.ug | www.meir.co.ug | Contact person: Eng. Dr. Seith Mugume

Areas of specialization

- Water resources and hydraulic engineering
- Urban water management
- Drainage & flood risk management
- Dams & hydropower engineering
- Waste & wastewater treatment process design
- Structural/bridge and transportation engineering

M & E ASSOCIATES LTD – CLASS A



Rofra House, 2nd Floor | Ggaba Road, Kansanga | P.O. Box 4052, Kampala
Tel: +256-392 175604 | Business Fax: +256-772 746371 | Email: meassoc@meassoc.com
www.meassoc.com | Contact person: Eng. Ssentongo Samuel

Areas of specialization

- Water resources and hydraulic engineering
- Electrical Engineering (Building Services - Electrical Installations, Fire Alarms, Security Alarms, Communication Systems, Computer Networks, Audio and Visual Systems etc.)
- Mechanical Engineering
- Domestic, Industrial, Institutional and Commercial (Air conditioning, Ventilation, Refrigeration, Plumbing, Drainage systems, Water supply, Firefighting, Lifts, and Kitchen equipment and all related services).
- Civil and Structural Engineering
- Water Resources and Environmental Engineering

MULTI-KONSULTS LIMITED – CLASS A



Plot 29 Clement Hill Road | P. O. Box 5390, Kampala Uganda
Tel: +256-414-341321 / +256-414-232836 | Mobile: +256-772 741321
Email: mkvolts@imul.com, multikonsults@multikonsults.com | www.multikonsults.com
Contact person: Eng. Stephen Kangwamu

Areas of specialization

- Electrical and Mechanical Engineering Building Services
- Energy Studies
- Agriculture Schemes
- Environment Studies
- Electric Power Systems Planning and Load Studies

MULTIPLAN CONSULTING ENGINEERS – CLASS B



Plot 668 block 8, Kamanya road Mackay zone - Mengo | P. O. Box 12557, Kampala Uganda
Tel: +256-414-596624 | Mobile: +256-772-406291 | Email: multiplan@autlonline.co.ug
www.multipanug.net | Contact person: Eng. Albert Muloiti

Areas of specialization

- Water Supply
- Roads and Infrastructure
- Bridges and Structures
- Sewerage and Waste Water Treatment

NEWPLAN LIMITED – CLASS A



1st Floor, Crusader House, Plot No. 3, Portal Avenue | P.O Box 7544, Kampala Uganda
Tel: +256-414-340244 / +256 312261149 | Mobile: +256-772-406291
Email: info@newplangroup.com | newplangroup.com | Contact person: Eng. Isaac Serukenya

Areas of specialization

- Oil and Gas Engineering Services
- Energy Engineering Services
- Architecture and Building Services
- Highways and Transport
- Engineering Surveys
- Cadastral Surveys
- Valuation Surveys
- Environment and Social Services
- H3SE
- Logistics
- Legal Services
- Project Management and Training

PROESS LTD – CLASS B



Nosep House Plot 104 – Semawata Rd | P. O. Box 9363, Kampala, Uganda
Tel: +256 392 178 690 | Mobile: +256 782 819688 | Email: info@proess.ug | Contact person: Eng. Daka Michael

Areas of specialization

- Feasibility studies and detailed engineering design
- Tender administration
- Contract management
- Resettlement action planning
- Environment and social impact assessment
- Dispute avoidance and resolution
- Survey works (topographical surveys, cadastral survey, engineering surveying, hydrographic surveying, etc.)
- Geotechnical and material investigations
- Training in occupational health and safety
- Internal bid evaluations
- Independent parallel bid evaluations
- Technical staff recruitment
- Quality assurance
- Project and programme reviews
- Technical auditing

PROFESSIONAL ENGINEERING CONSULTANTS LTD – CLASS A



Plot 9 Makajja Close (off Ntinda II Rd), Naguru | P. O. Box 9529, Kampala, Uganda
Tel: +256 393 513 038 or +256 393 513 019 | Email: pec@pec.co.ug or pecuganda@gmail.com | www.pec.co.ug | Contact person: Mr. Bonnie Kalanzi Nsambu

Areas of specialization

- Transport Engineering
- Water and waste water engineering
- Geotechnical and materials engineering
- Surveying, mapping and GIS
- Environmental engineering
- Structural engineering

PROMAN CONSULT LTD – CLASS A



Plot 799 Kabusu Rd, Rubaga | P. O. Box 7810, Kampala, Uganda
Tel: +256 392-778211 | Mobile: +256 772 778211
Email: proman@proman.co.ug OR jmuchiri@proman.co.ug | www.proman.co.ug
Contact person: Eng. John Muchiri

Areas of specialization

- Project Development and Management
- Project design and management
- Construction supervision
- Feasibility and economic studies
- Provision of professional engineering advice
- Planning studies

PROME CONSULTANTS LIMITED – CLASS A



Innovations House, Plot 7B Acacia Avenue | P. O. Box 24934, Kampala Uganda
Tel: +256-414-345543/4 | Email: prome@promeconsult.com | www.promeconsult.com
Contact person: Eng. Hubert Robert Kibuuka

Areas of specialization

- Project Development and Management
- Project Management
- Water Supply and Sanitation Engineering
- Highways Engineering
- Civil and Structural Engineering
- Transportation Planning and Designing
- Electrical and Mechanical Industrial Engineering
- Quality Assurance
- Environmental Engineering
- Geotechnical Engineering
- Surveying and Mapping
- Institutional and Individual Industrial Capacity Development

QUEENSLAND & LEEDS CONSULTING ENGINEERS LTD – CLASS A



Plot 23, Kabalenga Crescent, Luzira, Kampala | P.O. Box 22428, Kampala
Tel: +256 782580480 | Mobile: +256 782580480 | Email: l.kajubi@gmail.com
Contact person: Eng. Lammeck Kajubi

Areas of specialization

- Water & Sanitation
- Environment & Sustainability
- Transport & Infrastructure
- Social Development
- Energy & Climate Health
- Architecture and Green Design

UACE MEMBER'S DIRECTORY

SEGAMU 14 CONSULTS LTD – ASSOCIATE



Plot 2758, Odur Lane, Ntinda-Kigowa | P.O Box 36306, Kampala Uganda
Tel: +256 (0)-782129014 / +256 (0) 785777996 | Email: info@segamu14consults.co.ug, smusa@segamu14consults.co.ug | www.segamu14consults.co.ug
Contact person: Mr. Musa Ssegaabwe

Areas of specialization

- Feasibility Studies
- Engineering Designs
- Architectural Designs
- Construction supervision
- Tender Assistance
- Monitoring and Evaluation
- Baseline Surveys
- Feasibility studies
- Detailed Design
- Construction Supervision
- Water Transmission Mains
- Water Sources Investigation and Sitting
- Tender Assessment
- Hydrological Studies
- Monitoring and Evaluation
- Baseline Study
- Environmental & Social Impact Assessment
- Environmental Audits
- Environmental Management and Monitoring Plans
- Monitoring and Compliance
- Occupational Health and Safety
- Strategic Environmental Assessment
- Resettlement Action Planning
- HIV/AIDS Awareness & Sensitization
- Monitoring and Evaluation
- Baseline Surveys
- Social Impact Assessments
- Social Research

SEKA ASSOCIATES CONSULTING ENGINEERS LTD – CLASS A



SURE House, Bombo Road | P. O. Box 1354, Kampala Uganda
Tel: +256-414-256455 | Business Fax: +256-414-342729 | Email: sekag@sekaassociates.com, seka@sekaassociates.com, jsenfuma@gmail.com | Contact person: Eng. John Senfuma

Areas of specialization

- Project Management and Planning
- Civil and Structural Engineering
- Site and Service Schemes
- Highways and Transportation Engineering
- Water Supply and Waste Disposal
- Geotechnical Services
- Materials Testing
- Architectural, Quantity Surveying and Electrical Engineering (in close association with other firms)

TB3 GLOBAL LTD – CLASS A



Plot 102 Sir Apollo Kaggwa rd Makerere-Kikoni | P.O Box 6780, Kampala Uganda
Tel: +256-783 102941 | Mobile: +256 782 952470 | Email: table3ms@gmail.com | www.tb3.co.uk
Contact person: Eng. Michael Ojok

Areas of specialization

- Institutional Development and capacity Building
- social-Economic and Governance studies
- Architectural, Structural and civil Design and Construction Supervision
- Energy Development and Environment Impact Studies
- Water supply system design and sanitation engineering
- Highways and transportation
- Project management
- Health, safety and environment engineering
- Master plan preparation for general infrastructure development including
- Management of expectations in infrastructure development
- Project Formulation
- Land surveying mapping
- Geotechnical surveys

TECHNOLOGY CONSULTS LIMITED – CLASS A



1st Floor, room 200 CEDAT Old Building, Makerere University | P. O. Box 26690, Kampala Uganda
Tel: +256-414-540618 | Mobile: +256-782 979459 | Email: techcons@teco.co.ug | www.teco.co.ug | Contact person: Mr. Emmanuel M. Kirumira

Areas of specialization

- Building Consultancy Services
- Land Surveying
- Information Technology
- Civil Works
- Expert Technical Services
- Project Management

TEQ CONSULTS LIMITED – CLASS A



Plot 752 Hill rise Bunamwaya, Off Zana | P. O. Box 9771, Kampala Uganda
Tel: +256-794-754-579 / +256 777 096606 | Mobile: +256-782 979459 | Email: info@teqconsult.net | www.teqconsult.net | Contact person: Eng. Peter L. Otteskov

Areas of specialization

- Project Management
- Contract management
- Claims management
- Cost control management
- Technical assistance in development of Contract Documents
- Master plans and feasibility case studies
- Valued Engineering

TRIO CONSULTANTS LIMITED – CLASS A



Trio House Plot 1683, Kisugu - Mbogo Rd | P. O. Box 10256, Kampala Uganda
Tel: +256-414-664242 | Mobile: +256-782 979459 | Mobile: +256-772-420502 | Email: info@trioconsultants.com | www.trioconsultants.com | Contact person: Eng. Dr. J. Mwakali

Areas of specialization

- Development and management of road
- Building and water projects
- Training/capacity building
- Infrastructure Planning
- Feasibility studies
- Preliminary engineering designs
- Detailed engineering designs
- Supervision of engineering works
- Geotechnical investigations
- Structural health monitoring
- Engineering surveys
- Forensic engineering
- Traffic studies
- Tender and procurement assistance

UB CONSULTING ENGINEERS LTD – CLASS A



Plot 3, Nasuuna lane, Masanafu, Lugala – Rubaga division | P. O. Box 22509, Kampala, Uganda
Tel: +256 (0) 200908255 or +256 (0) 414-581938 | Email: ub@ubconsulting.co.ug | www.ubconsulting.co.ug | Contact person: Eng. Dr. Mwesige Godfrey

Areas of specialization

- Materials and Geo technical Engineering
- Structural & Bridge Engineering
- Highways Engineering
- Hydrology and Hydraulics
- Sociology

ZUTARI UGANDA LIMITED – CLASS A



3rd Floor C/O KTA ADVOCATES, PLOT 9 Hannington Road | P.O Box 37366, Kampala Uganda
Tel: +254 799 744 843 / +254 723 546711 Mob: +254 799 744 843 | Email: uganda@zutari.com
Contact person: Eng. Alastair Bush

Areas of specialization

- Asset management
- Asset transformation
- Bridges and civil structures
- Building structures and Building services
- Strategic infrastructure advisory
- Water resources management
- Programme and Project management
- Dams and Hydropower
- Roads, transport planning and ITS
- Rail and mass transit
- Airports and aviation
- Ground and pavement engineering
- Geospatial information
- Environment and climate resilience
- Food and beverage infrastructure
- Midstream and Downstream infrastructures
- Asset Digitisation
- Water, waste, and industrial treatment
- Bulk conveyance and distribution
- Urban planning
- Creative technology and interactive technology



Representing the professional concerns and general business interests of its members in the field of consulting engineering.

The Secretariat, Uganda Association of Consulting Engineers

📍 Plot 17 Martyrs' Way, Ministers' Village, Ntinda
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