



The GCEA News

August 2016

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THE PRESIDENT'S MESSAGE

The year 2016 marks the coming into office of a new Council to steer affairs of the Ghana Consulting Engineers Association (GCEA). We are all expectant to see the GCEA grow to become a vibrant, influential and referral Association in all matters pertaining to the practice of consulting engineering in Ghana.

The transformation of Ghana into a "higher income" country would be through the development of safe, sustainable, resilient and good-value infrastructure.

GCEA, comprising member firms and individuals, is a key player in the delivery of such infrastructure. However, the GCEA is confronted by factors that inhibit the growth and establishment of well-resourced Consulting Engineering industry in Ghana. We shall collectively work assiduously towards the following goals;

- Pressure on government departments and agencies for fair and competitive procurement of consulting engineering services;

- Co-operate with the Engineering Council of Ghana to sanitize and regulate the practice of consulting engineering in Ghana.
- Application of clause 2.4 of FIDIC Model Services Agreement to ensure adequate provision by clients to pay for consulting engineering services;
- Collectively engage government departments and agencies to minimise delays in payment for consulting engineering services;
- Establishment of a minimum fees scale threshold to guarantee good quality work which will also serve the interests of both Client and Consultant;
- Capacity building of member firms and knowledge sharing on statutory requirements and soft skills;

I am therefore throwing an open invitation to all engineers who are practising Consulting engineering in Ghana, or who intend to do so in the future, to join us to collectively strive for an enduring legacy.

GCEA Holds Annual General Meeting

On the 2nd of December 2015, GCEA held its Annual General Meeting for the first time at the Secretariat to discuss matters concerning the Association.

The Annual General Meeting report was presented by the outgoing Chair, Ing. K. Asare-Yeboah and his administration on their achievements, Accounts of the Association, Budget and outstanding activities.

In his presentation, Ing. Asare-Yeboah explained that the tenure of the immediate past administration started with re-registration of the Association at the Registrar General's Department with the support of some of the founding fathers i.e. Ings. Michael Asafo-Boakye and Adam Baba Alargi who magnanimously transferred authority to the Interim Executives.

GAMA Conference

During the period, GCEA hosted one of the most

GCEA Holds Annual General Meeting

Successful Conferences ever in April 2015.

Finances

All arrears of debts owed to FIDIC and GAMA were paid.

New Constitution

One major milestone that was achieved was the drafting of a new Constitution for the Association which was unanimously adopted by the entire membership in 2013.

Establishment of Secretariat

The interim executive also managed to establish a secretariat and engaged Mrs. Elaine Asare as the Administrative Officer.

Membership

One of the most challenging issues was getting member firms to fully participate in the activities of the association. The interim executive was happy to report that as of 2nd December 2015, GCEA had a total number of 42 firms registered, though only 10 of them are very active.

MOU

Other key achievements included the establishment of Memorandum of Understanding with the Ghana Institution of Engineers, which led to the latter giving an office space to the Association at the

Engineer's Centre.

YPF

The Young Professionals Forum of the Association was launched during the tenure of the interim executive. The YPF seeks to bring together young professionals of the member Firms to discuss matters that affect their interests.

Outreach Programme

Ing. Asare-Yeboah's administration also embarked on an outreach program to various ministries to engage relevant sector Ministers to discuss matters of mutual benefit; the Ministries of Roads & Highways and Communications were visited.

FIDIC Training Programme

With the active support of FIDIC, the Association was able to organize FIDIC Training courses especially in Modules 1,2,3 and 4. Proceeds from the training program have considerably improved the revenue base of the Association.

Membership Certificate

One other key milestone achieved was the issuance of Membership Certificates to all member firms.

Election of New Executives

During the AGM, Elections were held to elect new executive to oversee the running of the

Association for 2016 / 2017.

Members elected were as follows;

1. Ing. A. A. Ogyiri — President
 2. Ing. Isaac Addai—Vice President
 3. Ing. J. N. Okyere, Treasurer
 4. Ing. W.D. Albert Viala, Honorary Secretary.
- Councillors;

- Ing. Mrs. Nana Akua Brenya Boateng
- Ing. Kwaku Adu-Gyamfi
- Ing. S. M. Asiedu
- Ing. K. Osafo Affum

They took over from the immediate past administration in January 2016.

GCEA Meeting Dates

At the first Council Meeting held on 24th February 2016, the Council fixed and agreed on the following dates for meetings of GCEA.

1. AGM— Last week of November or first week of December
2. Council Meeting—3rd Tuesday of every month
3. General Meeting—Last month of every quarter

The first General Meeting was held in April 2016.

First Council Meeting of GCEA New Executive

The first Council Meeting of the New GCEA Executive was held on 24th February, 2016. The meeting discussed the handing over notes prepared by the immediate past president, Ing. K. Asare-Yeboah.

It was agreed that Ing. Mrs. Jane Tetteh-Anowie be part of the Council to represent the Young Professionals.

The meeting also took the opportunity to set up committees with council members as chair persons.

In attendance were;

1. Ing. K. Asare-Yeboah, Immediate past Chair
2. Ing. A. A. Ogyiri, President
3. Ing. Isaac Addai, Vice Prez
4. Ing Joseph N. Okyere
5. Ing W.D. Albert Viala
6. Ing. S.M. Asiedu, Counsellor
7. Ing. K. Osafo-Affum,
8. Ing. K. Adu-Gyamfi,
9. Ing. Mrs. Nana Akua Brenya Boateng,
10. Ing. Mrs. Jane Naki Tetteh-Anowie, YP Rep.

Membership of the Committees;

1. Ing. Isaac Addai, Membership Committee

Ing K. Adu-Gyamfi,

2. Ing Joseph Okyere, Finance Committee, Chair

3. Ing S.M. Asiedu, Professional Practice/Ethics Committee Chair

4. Ing K. Osafo-Affum, Publications Committee Chair

5. Ing Nana Akua Brenyah Boateng, Training Committee Chair

6. Ing K. Adu-Gyamfi, Outreach Committee Chair

7. Ing Jane Naki Tetteh-Anowie, Young Professionals representative.

FIDIC Training Programmes 2016

This year's FIDIC Contracts Training Courses Modules 1 & 2 were held on 27th to 30th June 2016.

The Training saw 35 delegates participating. Participants were from the Ministry of Roads and Highways, Ministry of Justice, Members of the Ghana Bar Association, Ghana Airports Company Ltd., Queiroz Galvao, Volta River Authority, Selhorn and member firms. The Trainer was Mr. Bogdan Oprea, a FIDIC Accredited Trainer from Romania.

The Modules 3 & 4 will be

held in November 1-4, 2016. The Training will be handled

by Mr. Simon. R. Worley from the United Kingdom. He is also a FIDIC Accredited Trainer.

Also to be held is the FIDIC EPC/Turnkey Contracts Training Course on October 24-25, 2016.

Other Training Programmes envisaged for the future will be in the areas of ;

1. Managing Consulting Firms
2. Communications Skills/People Management
3. Safety on site
4. Technical and Business Reporting
5. Projects Planning, Scheduling and Control
6. Handling Projects in Consulting Engineering Practice
7. Project Planning, Scheduling and Control

FIDIC Publications for Sale

The secretariat has for sale the following FIDIC Books.

1. Red Book
2. 2. Yellow Book
3. Pink Book
4. 4. FIDIC Guide
5. Silver Book
6. 6. White Book
7. Gold Book
8. 8. Green Book
9. Procurement Guide

MARRAKESH 2016 CONFERENCE

This year's FIDIC Conference was held in Marrakesh, Morocco, from 25th to 27th of September 2016. About 26 Ghanaian delegates including accompanying persons and Young Professionals attended the conference.

Ing. Asare-Yeboah, the immediate past Chair of GCEA was inaugurated as the new GAMA Chair for 2016 and 2017.

GCEA VISITS ASSOCIATION OF BUILDING & CIVIL ENGINEERING CONTRACTORS GHANA (ABCECG)



On the 12th of May 2016, a three member delegation led by the President, Ing Albert A. Ogyiri, visited the offices of the Association of Building & Civil Engineering Contractors for further briefing on the up-coming FIDIC Training Courses Modules 1 & 2 was to held in June 2016.

During the discussion the National President of ABCECG, Mr. Martins Nnuro and two members of the executive agreed to give GCEA a slot to do a presentation at their 8th Annual Convention which was to be held on Friday 27th May 2016, at Trade Fair Site.

ACEZ CELEBRATES 50TH ANNIVERSARY



The Association of Consulting Engineers Zambia (ACEZ), celebrated its Golden Jubilee (50 yrs Anniversary) in Lusaka, Zambia, on 18th March 2016. At their invitation, the GCEA was represented by the Vice President, Ing. Isaac Addai and his spouse, Mrs Mercy Addai.

They presented a gift of a framed Kente and Citation on behalf of GCEA.

GCEA INAUGURATES NEW COUNCIL—2016/2017



The President taking the oath of office

Ing. Albert A. Ogyiri, FGhIE, was inaugurated as President of the Ghana Consulting Engineers Association on July 12, 2016, at the Engineers Centre.

In attendance were over 85 participants including the Minister of State, for Public-Private Partnerships, Hon. Rashid Pelpuo, representatives from the Ministries and Government Agencies, the Managing Director of Ghana Water Company and the members and pioneers of the Association.

Ing. Kofi Asare-Yeboah, the Immediate Past President, administered the oath of office of the new President and members of the New Council.

The President in his address, stated that the sustainable development of any country can only be spearheaded by the indigenous trained manpower to meet the socio-economic and environmental needs of the country and Ghana is no exception

He said that “the transformation of Ghana into a ‘Higher Income’ country would be through the development of safe, sustainable, resilient and good value infrastructure.

The GCEA, comprising member firms and individuals, is a key player in the delivery of such infrastructure. The member firms of GCEA provide consulting engineering services in the provision of infrastructure in the areas of Information and Communication Technology, Roads and Railways, Building Management Services, Water Supply and Sanitation, Drainage and Structural Engineering and Industrial Buildings, Electrical Power Supply, Transmission and Distribution, Manufacturing and Processing Plants, etc.

The GCEA is therefore a necessary partner to both Government and the Private Sector in the pursuit of the national developmental agenda”.

The President proposed the following measures public recognition of the services provided by member firms.

1. Strengthen Individual Firms

- Pressure government departments and agencies for fair and competitive procurement of consulting engineering services
- Establishment of a minimum fee scale threshold to guarantee good quality work which will also serve the interests of both Client and Consultant;
- Collective pressure to bear on government departments and agencies to minimise delays in payment for consulting engineering services;
- Capacity building of member firms and knowledge sharing on statutory requirements and soft skills;

CONTINUATION OF INAUGURAL ADDRESS

2. Increase Membership

- Membership drive to register practicing consulting engineering firms and individuals as members of the Association;
- Organize training courses for members to add value to their expertise;
- Develop working partnerships among members.

3. Statutory Recognition

- Co-operation with the Engineering Council of Ghana to sanitize and regulate the practice of consulting engineering in the country;
- Maintain its status as the sole accredited country member of FIDIC and GAMA.

In accordance with the register of firms with our parent Institution, the GhIE, approximately 100 firms and individuals have been registered as consulting engineering firms practicing in Ghana. Out of this number 46 have registered with GCEA but only 18 have been active.

Furthermore, due to financial difficulties as well as socio-cultural challenges encountered by practicing firms, many partnerships have been dissolved and more engineers now practice as individual consultants. Numerically, the larger firms are downsizing and narrowing their scope of expertise.

The result of this is that as the need for engineering consulting services grows in the demand by the complexity and magnitude of the necessary infrastructure to transform Ghana into a higher income bracket, the country is shifting towards the importation of expatriate consulting engineering services.

The effect of this in the immediate term is lack of job opportunities, inadequate relevant training of our young engineers and in the long term our lack of capacity to maintain and sustain our infrastructure.

Therefore, in order to resource the GCEA members to capture the commanding heights of the consulting engineering industry in Ghana, we have to collectively work assiduously towards the goals of strengthening our firms, increasing our membership and pursuing statutory recognition of the Association and its members.

At the end of his address the President invited all engineers who are practising consulting engineering in Ghana, or who intend to do so in the future, to join the GCEA to collectively strive for an enduring legacy.



The new council taking the oath of office



A section of Guests

ADDRESS BY ING K ASARE YEBOAH (IPP) AT THE INAUGURATION OF THE NEW COUNCIL



Ing Kofi Asare-Yeboah, FGhIE, delivering his speech Distinguished Guest Speaker, Ing Kwesi Abbey-Sam, Hon. Minister of State in charge of Public Private Partnership, Hon. Rashid Pelpuo, representative of the Minister of Petroleum, Mr. Lawrence Apaalse, President of the Ghana Institution of Engineers, Past Executives and Colleague Members of the Ghana Consulting Engineers Association (GCEA), Chairman of the Engineering Council, Presidents of the Professional Bodies of the Built Environment, Invited Guests, Members of the Press, Ladies and Gentlemen, I wish on behalf of the Ghana Consulting Engineers Association (GCEA) to welcome you to the First Presidential Inauguration of the Association.

HISTORICAL PERSPECTIVES

Today indeed is a special day for us. In view of that, I would like to share with you a few historical perspectives as well as the current state of the Ghana Consulting Engineers Association (GCEA).

As most of us are no doubt aware, advances in engineering have been central to human progress. Over the past century and more, engineering and technology have transformed the world we live in, contributing significantly to longer life expectancy and enhanced quality of life.

Yet the engineering benefits of improved healthcare, housing, transport, communication, energy, and many others are distributed unevenly throughout the world, Ghana not being an exception. Quite a sizable proportion of the world population do not have good drinking water, proper sanitation, and access to quality education, to name but a few. These shortcomings indicate the level of deficiency in infrastructure development in the areas mentioned.

Ghana, since independence, has had a development agenda to improve the quality of life for its diverse population. The late sixties and early seventies saw the emergence of indigenous consulting firms on the scene as players in the infrastructure development. This led as a natural consequence to the formation of the Ghana Consulting Engineers Association (GCEA).

The GCEA was incorporated in 1973. The objects and purpose of the Association were to promote consulting engineering practice in Ghana; to act in the professional interest of its members by creating an enabling environment for the practice and delivery of quality and sustainable products and services to clients and the nation at large; and to assist its members to achieve high professional, business and economic standards. The original directors were:

Ing M. Asafo-Boakye	Ing A. Baba-Alargi
Ing E. Agbettor	Ing W. F. Hammond
Ing Dr. A. M. Ansah	Ing K. A. K. Attobrah
Ing F. S. B. Jacobson	Ing P Adumuah

ADDRESS BY ING K ASARE YEBOAH (IPP) cont'd

At its inception, the Association did not have a formal office. Meetings were normally held in the offices of the executives holding office at any particular time. This limitation tended to hamper its smooth operation. That notwithstanding, the Association was vibrant in its early years, but became dormant for a period of time when the member firms were experiencing challenges in their businesses. The Association played a key role in the formation of the Ghana Association of Consultants (GAC), the umbrella body for all consulting firms in Ghana.

CURRENT STATE OF THE ASSOCIATION

The GCEA was re-registered in 2012 with new directors to run the affairs of the Association. The new directors, who also formed the Executive Council, are:

Ing F. Asare-Yeboah, Chairman (President)

Ing A. Ogyiri, Vice Chairman (Vice President)

Ing J. N. Okyere, Treasurer

Ing Benedicta Acherekoh (Mrs.), Secretary

On assumption of office, the Council took steps to grow the Association and get it firmly established. A few of the measures taken are:

Constitution

A new constitution and bye-laws were promulgated in 2013 to guide the affairs of the Association.

MoU with GhIE

In year 2013, the Association signed a Memorandum of Understanding (MoU) with the Ghana Institution of Engineers (GhIE).

The main objective of MoU is for the two bodies to collaborate in achieving joint goals.

The main objective of the MoU is for the two bodies to collaborate in achieving joint goals.

The GCEA Secretariat

An official place of business was established for the Association at the Engineers Centre, 13 Continental Road, Roman Ridge, Accra. The office was fully furnished and an Administrative Officer was employed and trained to man the secretariat. The secretariat coordinates all the programmes of the Association including facilitating the attendance of FIDIC and GAMA Conferences by its members. A **website** for the Association, **www.gcea.org.gh**, was also set up.

GCEA Bank Accounts

To ensure prudent fiscal management of the Association, both local and foreign currency accounts were opened with Ecobank Ghana Limited.

FIDIC Membership

In September 2012, the GCEA took over Ghana's membership of the International Federation of Consulting Engineers (FIDIC) from the Ghana Association of Consultants. Founded in 1913, FIDIC's main objective is the promotion of the interests of consulting engineering firms worldwide. It has over 100 member associations globally. FIDIC is best known for its range of standard conditions of contract for construction, plant and equipment, design-build and other suite of documents which are widely used all over the world. The GCEA is also a member of **GAMA**, the Group of Africa

ADDRESS BY ING K ASARE YEBOAH (IPP) cont'd

the Group of Africa Member Associations of FIDIC with its secretariat in Dar-es Salam, Tanzania. intensive seven months on-line training course in consulting engineering practice.

2015 FIDIC-GAMA ANNUAL CONFERENCE

The GCEA successfully organized the 2015 FIDIC-GAMA Annual Conference in Accra in April 2015. The complete Conference Report has been submitted and accepted by the EXCO of GAMA.

FIDIC Training Programmes

As part of its activities, the Association has for the past two (2) years been organizing training programmes in the country using FIDIC accredited trainers. The programmes are held twice a year, usually in June/July and October/November. The target group for the training are construction companies, engineers, architects, quantity surveyors, project managers, procurement personnel of corporations, lawyers and judges, etc.

The aim of the Association in running the programmes is to upgrade the knowledge base of participants in the different types of construction contracts currently in use. It is also to generate income to support the activities of the Association. The Secretariat of the GCEA has in stock for purchase the different FIDIC publications. Of special interest are the different types of FIDIC Conditions of Contract.

The FIDIC Young Professionals Management Training Programme

The Association has over the last few years encouraged its young professionals to register for the FIDIC Young Professionals Management Training Programme (YPMTP). The YPMTP is an

The programme runs from February to September annually. To date, about 15 young professionals have benefitted from the programme.

The Association has also promoted **FIDIC Training of Trainers**, and **FIDIC Contract Users Training Programme** among its members.

Local Training Programmes

In addition to the FIDIC training programmes, the Association has put in place plans to undertake a wide range of local training programmes in consultancy practice. Areas to be covered include technical courses, project management, bidding processes, office management, language proficiency, etc.

GCEA YPF

The future of the Association is highly dependent on the active participation of young professionals in its programmes. In this regard, therefore, the GCEA has formed and on February 19, 2014 inaugurated the **GCEA Young Professionals Forum (YPF)**. This group played a significant role in the organization of the 2015 FIDIC-GAMA Annual Conference here in Accra.

Outreach Programme

Distinguished Ladies and Gentlemen, our consulting engineering industry is faced with a number of challenges which the Association must lead in finding solutions. The Association should:

ADDRESS BY ING K ASARE YEBOAH (IPP) cont'd

Encourage member firms to Initiate-
changes to their corporate governance to
retain trained personnel;

Assist in formulating policies for collabora-
tion among member firms for effective
use of available talent;

Continue to promote the development of
young professionals as a means of sus-
taining the growth of the industry;

Sensitize clients on the need for timely pay-
ment of consultancy fees due member
firms for work done.

In furtherance to the issues enumerated above,
the Association in 2014 and 2015 undertook an
outreach programme to Ghana Highway
Authority, Ministry of Roads and Highways,
Ministry of Communication, and Ministry of
Finance to sensitize them on the need for Gha-
na to use local consulting firms in the execu-
tion of its infrastructure projects.

GCEA Newsletter

The Association published its first newsletter,
“**The GCEA News**”, in December 2015. The
newsletter is a quarterly publication to capture
events concerning the Association and its mem-
bers.

Election of New Council

The Executive Council, having successfully re-
suscitated the Association, organized the elec-
tion of a new council in December 2015. The
following were elected:

Ing Albert A. Ogyiri—President

Ing Isaac Addai—Vice President

Ing W.D. Albert Viala—Hon. Secretary

Ing. Joseph N.kum Okyere—Treasurer

Ing (Mrs) Nana Akua Brenya Boateng—
Council Member

Ing Adu –Gyamfi— Council Member

Ing Kwaku Osafo Affum—Council Member

Ing Samuel Magnus Asiedu—Council Member

Ing Jane Naki Tetteh-Anowie was appointed to
serve on the Council as the representative of
YPF.

Ing F. Asare-Yeboah, being the Immediate Past
President, remains on Council.

CONCLUSION

In conclusion, distinguished Guest Speaker,
Hon. Ministers of State, President of the Gha-
na Institution of Engineers, Past Execu-
tives and Colleague Members of the Ghana
Consulting Engineers Association (GCEA), Invit-
ed Guests, Members of the Press, Ladies and
Gentlemen, I have given you a short overview
of what the Ghana Consulting Engineers Asso-
ciation is all about. It is our wish that we
would as a nation support the continued sus-
tenance and growth of the GCEA to enable it
play its role in promoting consulting en-
gineering practice in Ghana.

May I emphasize also that the effectiveness of
our Association depends on active
participation of all member firms in its
activities and programmes.

I therefore encourage all members to attend
meetings and give the new executives the
needed support to carry out their mandate.

ACKNOWLEDGEMENT

I end this address by thanking the Pioneers
who established this Association.

My tribute goes to the Interim Executive
Council and the general membership

ADDRESS BY ING K ASARE YEBOAH (IPP) cont'd

of the GCEA who have worked tirelessly to resuscitate and revitalize the Association.

I am grateful to the LOC of 2015 FIDIC-GAMA Conference, the volunteers, the Secretariat of the Association for organizing a very successful and memorable conference.

My thanks also go to the Management and Staff of Associated Consultants, for providing financial and administrative support for the Association to stand on its feet.

I wish to express my sincere thanks to my dear wife, Mary, for always being a pillar of support and strength to me throughout the period that I have served the Association as an executive member and leader.

Finally, I am grateful to the Almighty God for His abundant grace on the GCEA and for the gift of life.

Ladies & gentlemen, thank you for your kind attention.

ADDRESS BY ING K ABBEY-SAM GUEST SPEAKER AT THE INAUGURATION



The Guest Speaker, Ing. Kwesi Abbey-Sam, addressing the audience

I am moved and at the same time humbled to be invited as a Guest Speaker for this great occasion:

The first Presidential Inauguration of the Ghana Consulting Engineers Association.

As I reflected on the theme, I decided to look closely at your name and some key definitions of your constitution:

Ghana Consulting Engineers Association

Persons and Firms based in Ghana

Even though individuals and firms belonging to the Association could come from any nationality, the majority of the members are likely to be Ghanaians; patriotic citizens filled with love for the nation and dedicated to its development. That is a people with Indigenous Engineering capacity

An Association of People and Firms who have a Common Interest and have willingly come together to render some service

People who have observed birds flying confirm that a flock of birds fly at a higher speed than birds flying individually. I therefore believe that the formation of the Association provides the enabling environment for greater service to the community.

On Consulting Engineers

Let's examine three (3) definitions from your constitution and reflect on some key words:

Item 9 & 10 combined

"Consulting Engineer/Firm" - Means a person or firm **possessing the necessary qualifications and experience** and who devotes himself to **providing consulting engineering services** in one or more of the various branches of engineering.

Item 8

"Consulting Engineering" - It is a professional service that **provides independent engineering services** to government, corporate bodies and private sector organizations.

ADDRESS BY ING K ABBEY-SAM cont'd

Item 6

“Engineering” - Means the **discipline, art, skill and profession** of the application of mathematical principles and economic, social and practical knowledge in order to **conceive, design, implement, commission, supervise, maintain** and decommission structures, machines, devices, systems, materials and processes to **safely realize improvement in the life of people**.

These definitions will form the foundation for the discussion of our theme: “Development of Ghana’s Infrastructure—Effective Use of Indigenous Engineers”.

Ghana’s Infrastructure Development can be seen in several areas: Electric Power, Telecommunications, Transport, etc. My discussion will however be based on Road Transport Infrastructure, the sector I have been associated with since 1965.

CONCEPTION

We must have a clear vision of what type of road transport infrastructure will move people and goods most efficiently, safely, pleasantly and yet be provided at least cost. In the past we have left the conception of such systems to politicians and Public Sector Personnel. I however believe that with your training, experience over time, art and skill, your local knowledge blended with international practice should help you to actively participate in the development of such conceptual ideas. Concepts that will ensure that the lives of our people surely improve.

PLANNING

Any good road transport infrastructure needs to be planned. An efficient system will usually be made up of a network of local roads,

collectors and arterial roads. In countries with well developed road transport infrastructure, local roads constitute about 60% of the total length of the network. They provide access to communities, individual houses, farms and manufacturing areas. The primary function of a local road is to provide access with less emphasis on mobility.

Before Independence and just after Independence Ghana developed such roads where virtually every building had access. Examples can be seen at Chorkor, Mamprobi, Kaneshie, Dansoman, etc. These were considered as low-cost areas yet had local roads providing access. In recent times we seem to have lost track of such planned development. There are several areas with very expensive buildings but with inadequate local roads. Where a few exist, the right-of-way has been encroached on and few tracks are left. In some areas fire tenders have difficulty moving in case of fire. Yet in a few areas, some estate developers using experts as yourselves and planners have developed residential areas with adequate distribution of local roads.

In between local and higher classes of roads we have collectors. Again in well developed areas collectors constitute about 30% of the road network. They balance out accessibility and mobility so that volumes of traffic may be moved from lower classes to higher classes.

The higher class of roads are the arterials constituting about 10% of the road network. Such roads provide maximum mobility with little accessibility. As a result they move very large volumes of traffic at high speed.

Unfortunately in Ghana there is lack of adequate planning and our Arterial Roads serve as glorified local roads.

Every hamlet or kiosk wants direct access to our arterial roads rendering them ineffective. The disruptions are so great that a short journey of about 65km can take two hours or more, e.g.

ADDRESS BY ING K ABBEY-SAM cont'd

Accra-Winneba Road.

It is in areas such as this that members of your Association could work with other professionals to ensure that our network is well planned and developed for the effective growth of our nation.

4. DESIGN

This is the most common area where consulting services are awarded and where your members could make the greatest impact. The key areas for most road infrastructure design include Geometric Design, Pavement Design and Drainage Design. The life or durability of the roadway will depend on the quality of such designs. For geometric designs, we depend predominantly on design manuals such as AASHTO. Even though there is some local manual it has not been developed as the Certified Ghana Standard Design Manual. In a recent discussion, right in this very place, it was suggested that the Ghana Standards Authority, the Road Agencies and the GhIE could work together to develop a certified manual that could be used for our designs. Your association could definitely play a role here.

The quality of any design also depends on the quality data collected. For example if one has poor survey data, you could have a computer aided design looking good on paper but meaningless in the field. As indigenous consulting engineers it is vital that you insist on quality throughout the processes of design so that your products can stand the test of time.

One of the greatest problems we face in design in this country is drainage. Our roads flood so easily with rains. I am aware that in recent times GhIE have been organizing some courses in drainage design in order to improve our performance in this area. Let me however comment on some observations

which may be addressed in an effort to solving this problem. Our gully openings are so small that they choke easily resulting in water flowing on the road

surface instead and entering the drainage system. In places where the systems work, we have gully openings of say 1,000mm x 150mm. In Ghana, several gully openings are 300mm x 100mm and with the quality of road cleaning, they clog easily. The situation is worsened where at some intersections (e.g. Tetteh Quarshie Interchange) drains covered with metal grills are deformed and the drains are filled with broken blocks and stones to enable vehicles move. This worsens the drainage problem. Definitely we have a role here to ensure simple, effective systems that work and stand the test of time.

CONSTRUCTION

On completing our designs, proper bidding documents have to be prepared to ensure an effective procurement system. Quality documents are vital for this process and it is our responsibility to ensure that such documents are prepared with the right conditions, standards and specifications.

The default of the Public Procurement Act is Competitive Bidding. The process is expected to come out with the most competent contractor with the least cost. The greatest role of the Engineer in this process is the evaluation. We must be thorough in our evaluation to ensure that contractors selected have the resources and the expertise to execute the works.

The other key area under construction where the engineer's role is most vital is supervision. We have to ensure that the contractor executes the work in accordance with standards and specifications. The presence of your staff at site to ensure that laid down processes are followed and specified tests are carried out ensures that the road

ADDRESS BY ING K ABBEY-SAM cont'd

will stand the test of time. As Indigenous Engineers, we will continue to live in this country and regularly see the road we supervised. Would you with pride, point out the work you did to your children and grandchildren as it stands under trying conditions. Or would you with shame bow down your head, unable to stand out that that road project was designed and supervised by you. Foreigners depart on completion of their works and nobody may remember to associate them with the quality of work done; but your work will always serve as a testimony of your contribution to the improvement of the lives of our people.

MAINTENANCE

Any road, irrespective of the material used in constructing it, will deteriorate with time from the effects of the weather and traffic. The objective of road maintenance therefore is to preserve, repair and restore a system of roadways with its elements to its designed or accepted configuration.

In the past it had been assumed that maintenance could not be planned and work was done only when a failure was observed. This philosophy started changing towards the end of the 1960s. Ghana developed and installed a Road Maintenance Management System in 1974/75.

The system allowed for **PLANNING, ORGANISING, DIRECTING** and **CONTROLLING** maintenance. Maintenance works were carried out by direct force gangs of the road agencies. The Maintenance Management Systems allowed for evaluating work and improving procedures so that the condition of roads would Systematically improve. Over the past twenty years, force account gangs have been reduced while maintenance works are carried out by contract.

Over the years, modern tools have been

developed including the Highway Development and Management Tool (HDM 4) which should have helped us to improve our maintenance systems and therefore condition of roads. Unfortunately we seem to be drifting back to the old tradition of not planning maintenance but tackling failures as and when they were observed. Priority in Road Management also seem to be drifting towards major construction works as compared to maintenance. Fortunately, with the enhancement of the Road Fund over the past few months, we are in a position to revive planned maintenance so that the condition of roads in Ghana would be improved considerably for the growth of the economy and the comfort of the people.

In the past, the role of the consultant engineer seems to have been limited to feasibility studies, designs, procurement processes and construction supervision. I believe it is time your Association worked with Public Sector organizations to improve all aspects of engineering including maintenance. Services in Planning, Programming, Supervision and Monitoring of Maintenance works could be farmed out to consulting firms to support Road Sector Agencies to improve on their performance.

CONCLUSION

Item 10 under your constitution states, "A Consulting Engineering Firm" *means a professional practice providing engineering services for clients on a fee basis.* The Association should therefore create the environment which gives assurance to the client that the use of the Indigenous Engineer yields the maximum benefits to the appropriate agency and to the nation as a whole. I make the following suggestions for ensuring that the Indigenous firms will be preferred over and above firms from elsewhere: Your members must seek for excellence at all the stages of providing engineering services:

ADDRESS BY ING K ABBEY-SAM cont'd

Conceptual ideas

Planning

Design

Procurement Process and

Construction Supervision

Maintenance Management

The Association must encourage healthy competition among its members and encourage firms to team up for complex projects

The Association should ensure that rates of fees paid by clients are at reasonable levels to enable firms adequately pay expert staff and invest in quality facilities without pricing themselves out in competition with international consulting firms.

I WISH YOU A WONDERFUL PRESIDENTIAL INAUGURATION AND PRAY THAT DURING YOUR TERM AND BEYOND THE PRACTICE OF CONSULTING ENGINEERING WILL BE SO HIGH THAT WE WILL NOT ONLY HAVE THE BEST INFRASTRUCTURE IN ALL SECTORS OF THE ECONOMY BUT YOU WILL BE A DYNAMIC FORCE IN THE GROWTH OF THE ECONOMY OF THIS NATION.



The MC at the Inauguration Ceremony



Ghana Dance Ensemble entertaining the guests

OBTUARY



The late Ing Togbi Kpoku III died on November 26, 2016 after a short illness. He was the Managing Director of Conterra Ghana Ltd., and a Member of the Ghana Consulting Engineers Association.

Inauguration in Pictures



The New President Delivering his Address