

**KEYNOTE ADDRESS BY**  
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## **PROTOCOLS**

Distinguished Colleagues, Ladies and Gentlemen.

I am delighted to be here, at the 2020 Annual conference and AGM of ACEN to once again deliver the keynote address. ACEN is my home and it is my pleasure to be home once again. The theme for this year's event titled "**Engineering Consulting and Infrastructural Development in a Recovering Economy**" has been a recurring subject. And is quite apt considering the current disruption to national economies by the coronavirus global pandemic. Consequently, I will focus on specific thoughts on the role of the consulting engineering industry in infrastructural development and facilitating economic recovery.

## **CONTEXT**

Infrastructure underpins economic and social and development. Nigeria's increasing population and urbanization demand a scale-up in infrastructure spending on housing, transportation (roads, rail, air, and water), health, education, energy (power, oil and gas) and social amenities to address the country's infrastructure deficit. Unfortunately, the current infrastructure gap is likely to continue to worsen if adequate measures are not taken to check the economic slowdown that today is further exacerbated by the impact of the coronavirus global pandemic, and to stimulate growth required for economic recovery. Rapid infrastructure development is pivotal to Nigeria's economic recovery, and it requires new thinking and new approach in the planning, financing, development, and maintenance of existing infrastructure facilities. As key stakeholders in the infrastructure space, Consulting Engineers are challenged to review and articulate their role in a recovering economy.

## OVERVIEW OF NIGERIA'S INFRASTRUCTURE GAP

The Federal Government of Nigeria Economic Recovery and Growth Plan (ERGP) recognizes poor infrastructure as a critical challenge to Nigerian business. The Nigeria Integrated Infrastructure Master Plan (NIIMP, 2013) projected that Nigeria required approximately **₦3** trillion over three decades [2014 – 2043] for building world class infrastructure that would guarantee sustainable economic growth for the country.

The African Development Bank (AfDB) in its 2015 Report titled “An Infrastructure Action Plan for Nigeria; Closing the Infrastructure Gap and Accelerating Economic Transformation” noted that plugging the infrastructure gap in Nigeria over a 15-year period (between 2015 and 2030) would require:

- Spending about \$710 billion in the transport sector to build new infrastructure in roads, railways, ports, shipping, inland waters ways, civil aviation, gas transport, and urban transport sector.
- A proposed expenditure of \$40.9 billion during the period 2011-2020 (Vision 2020) for upgrading grid infrastructure for electricity transmission and rural electrification to support adequate power generation, transmission, and distribution.
- A proposed expenditure of \$101 billion for water resources, water supply and sanitation, which would be utilized in developing infrastructure for irrigation of agricultural farmlands, and water supply to support lives and improve sanitation.
- Spending about \$3.5 billion for expanding and building ICT infrastructure for telecoms and internet services in the growing urban centres; for better tele-density; for improved internet resources for online education and research institutions; as well as establishment of a national digital library and promotions of e- application, e-learning, e-governance and e-commerce.
- Using about \$50 billion in Nigeria to build soft infrastructure involving support for production of physical infrastructure outputs - research, enabling legislation, project preparation and capacity building among others.

In yet another assessment, the Institute of Appraisals and Cost Engineers (A division of the Nigerian Society of Engineers) projected in 2013 that about **USD 2.9 trillion** investment is needed in the infrastructure space to close the existing gap in the country.

Recent economic shocks experienced by the Nigerian economy are likely to revise upwards previous estimates of funding requirement to address the infrastructure gap and realize Nigeria's aspirations for a dynamic and competitive economy.

## **RETHINKING INFRASTRUCTURE DEVELOPMENT IN A RECOVERING ECONOMY**

Going forward, it is my fervent view that economic recovery can only be achieved with sustainable growth in infrastructure which historically has been significant in catalysing economic growth. Sustainable infrastructure must be economically, socially, and technologically conceived in order to truly meet the moment and endure well beyond it. This will be shaped by the way we plan, design, finance, construct, and maintain infrastructure. In this context, four key objectives are suggested:

**i. Maximizing the utility from existing infrastructure; accelerating shovel-ready projects**

Engineering consultants can also advise Government on shovel-ready infrastructure projects. These are projects ready to be offered to the market for implementation based on completed feasibility studies and detailed designs - to get economic activities going and attracting investments; projects that could immediately boost the economy. Projects such as road construction could be accelerated by the Government by fast tracking procurement, streamlining environmental assessment and signing off on projects with committed funding.

**ii. Creating a long-term infrastructure plan of new projects pipeline**

Consulting engineers in collaboration with Government can revisit and tailor infrastructure development plans to adapt to emerging trends. For example, the Covid\_19 global pandemic crisis has changed how people move, live, and work. Infrastructure priorities should therefore be focused on new ways of working (such as remote working or e-commerce) and digital technologies.

### iii. **Leveraging alternate financing sources**

As key players in infrastructure development, consulting Engineers need to get more creative by suggesting to Government and other clients to adopt innovative finance solutions to unlock capital to the right projects. Such solutions would include

- blended finance (strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier market),
- sustainable innovation funds, and
- green bonds (fixed-income instrument that is specifically earmarked to raise money for *climate* and environmental projects).

Available options include: use of local markets, joint ventures with state owned enterprises and leveraging local bank financing; using multilateral bodies to pre-fund parts of the debt of identified priority projects before it is offered to the market, and lastly adopting the Public Private Partnership (PPP) model on appropriate projects, in order to free scarce public funds for other social development initiatives which are not suited to private sector funding.

### iv. **Leveraging on technology and innovation**

The advent of smart technologies such as IOT (the internet of things) and Robotics Process Automation (RPA) for remote monitoring and response as well as digital tools (data analytics, advanced metering infrastructure) for load planning, predictive maintenance and similar activities have defined tomorrow's infrastructure. Emerging markets such as Nigeria will benefit greatly from these technological innovations, grab the opportunity for leapfrogging development for efficient service delivery, given the low cost and absence of legacy systems that may impede new infrastructure creation. Existing infrastructure, such as power plants and water projects can be upgraded with best-in-class technology, while simultaneously creating smart urban social infrastructure projects in areas of building, land management, environment, government and citizen centric services among others.

## CONCLUSION

I would like to conclude my remarks by emphasizing that every challenge has its opportunities, thus the prevailing situation demands purposeful leadership and decisive action at every level. As Engineering Consultants, we should view it as an opportunity to lead in building a better, more competitive, resilient, and sustainable world.

The uncertainty created by the Covid-19 has necessitated collaboration, connectivity, risk sharing, investment and a deep alignment with the needs of evolving societies. Furthermore, addressing current concerns about the impact of this crisis on inequality - can help ensure that infrastructure not only keeps the lights on, but paves the way for societies that are reinforced by sustainable and resilient growth.

Fellows and colleagues, I believe this is the time to transit from Government being the principal actor in building critical national infrastructure to more private sector participation through workable Public Private Partnerships (PPP) models for the development of public infrastructure in Nigeria. This approach has the potential to unleash private capital, but also private sector efficiency and expertise for the development of public infrastructure.

Adopting technology and innovation, developing forward-looking and recovery-boosting infrastructure stimulus will help in putting the country on the right path to economic recovery.

I would like to thank the ACEN Exco, led by our President Engr. George Okoroma FNSE, JP and the organisers of this event for finding me worthy to deliver the keynote address, and I wish you all fruitful deliberations.

Thank you and God bless.

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