

**SPEECH AT THE OFFICIAL OPENING CEREMONY OF THE 27<sup>TH</sup> FIG  
(WORKING WEEK) INTERNATIONAL SURVEYING CONGRESS AT  
INTERNATIONAL CONFERENCE CENTER (ICC) CENTRAL BUSINESS  
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**BY**

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**PROTOCOLS**

I feel particularly pleased to be in your midst today to address this International gathering of Surveyors holding on Nigerian soil. In line with the profound culture of hospitality of the Nigerian people, I warmly welcome you all from your long journeys from different parts of the world. The Federal Government and indeed the people of Nigeria particularly appreciate the International Federation of Surveyors for choosing Abuja, the Centre of Unity in Nigeria as venue for this 2013 summit of FIG.

The theme of the International Federation of Surveyors (FIG) Working Week 2013, "Environment for Sustainability" is quite apt. There could not have been a more appropriate theme than this at a time when Nigeria and indeed the whole world is facing serious challenges in various sectors of environment such as climate change, desert encroachment, flooding, gulley erosion, water pollution, food insecurity etc.

Considering the recent national discourse of these phenomena in our country, following the spate of flooding we experienced in many parts of our country in 2012, and the scourge of gulley erosion in the South and desert encroachment in the North, I assure you of the appropriateness of your choice of Nigeria as an excellent place to come together, network and exchange ideas, innovations and expertise in this highly dynamic and technologically challenging field of endeavour, with the aim of confronting these environmental challenges that threaten humanity at this time and age. .

As a profession that has succeeded in indelibly engraving itself on the psyche of our nation, no leader in Nigeria can afford to loose interest in the activities and importance of surveying and mapping in national development. It has not only been recognised as an indispensable factor in achieving the goals and objectives of government policies, but has in recent times been involved in effectively and responsively driving the realization of the targets of our Transformation Agenda through Vision 20: 2020, Millennium Development Goal (MDG) and other good governance programmes. I have come to admit that Surveying is indeed the bedrock of national physical development. My government expects to derive benefits from its role in natural resource exploration, exploitation, management and conservation.

The contributions of Surveying and Mapping in the history and socio-economic development of Nigeria are legion. A few highlights of these contributions in the past include:-

- (i.) Tracing of major River courses and definition of the limits of territorial border of Nigeria in the Pre-colonial Era occasioned by the Berlin Declaration, which stipulated that territorial claims by colonies be confirmed only on the basis of sphere of influence of their effective occupation of such territories. Also during the pre-colonial as well as the colonial era, the Royal Engineering Corps demarcated not only the boundary between the Northern and Southern Protectorates but also delineated and demarcated some of the provincial and divisional jurisdictions in our country.
  
- (ii.) During the Colonial period, surveyors from the Royal Engineers Corp were involved in the design and establishment of a Network of Geodetic Controls chains along axis such as the 12<sup>th</sup> Parallel chain; the Jos – Nasarawa – Enugu chain; the Enugu – Lokoja – Minna chain; and the Abeokuta – Ilorin – Gusau chain. These 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> order controls were generated by triangulation and trigonometrical levelling methods involving triangular base establishment through scaling (distance) and orientation (angular) measurements and computations as well as sporadic Laplace checks largely for purposes of



topographic mapping of isolated mineral rich areas and particularly for the open highlands of the North and Central parts of Nigeria.

- (iii) During the Nigerian Civil War, indigenous Surveyors at the defunct Federal Surveys Department (now Office of The Surveyor General of the Federation) provided cartographic intelligence assistance to Federal Troops to prosecute their war plans and operations. The post civil war era was dominated by series of military regimes who superintended a steady decline in surveying and mapping activities until 1999 when some glimpse of hope started returning to the sector as a result of a new democratic aspiration to deliver dividends of democracy.
  
- (iv) From the 1990s, the Federal Surveys Department (now OSGOF) embarked upon aggressive GPS campaign using Dual Frequency Real-Time equipment/receivers and other digital technologies like Satellite Imageries, Digital Elevation Models, Geographic Information Systems, Total stations and Digital Levels for fast and more accurate survey & mapping operations.

### **Surveying and Mapping in Nigeria:**

The office of the Surveyor-General of the Federation is saddled with the production of maps in Nigeria at different scales. The

Office of the Surveyor-General of the Federation is fully equipped to conduct research in data acquisition, storage and management. The funding of Surveying and Mapping has improved tremendously thereby increasing the tempo of mapping activities in the country. The Federal Government in 2012 approved the acquisition of 20m Digital Elevation model (DEM) of the entire country for topographic mapping, flood mapping etc.

On the 27<sup>th</sup> of September 2003, the first Nigerian satellite – NigeriaSat-1, a micro-satellite with 32m spatial resolution, was successfully launched into low earth orbit. The launch of NigeriaSat-1 remains a watershed and a major breakthrough in the history of space application and space technology development in Nigeria and the West Africa sub-region. Since this historic achievement, the Nigerian stakeholders and users of satellite data have shown greater interest in Nigeria's space agenda, taking into account the reality of direct access to affordable real-time and reliable space-derived data for use in geoinformation acquisition and socio-economic development.

Following on the success of NigeriaSat-1 and recognizing that a functional Information Communication Technology (ICT) as a driving force behind most development activities, particularly in the capture, processing, storage, management and communication or sharing of geospatial dataset, as part of

the comprehensive benefits of a communication satellite, Nigeria also launched a communication satellite - NigComSat-1R. The satellite will provide the bandwidth requirement to address the telephony, broadcasting and broadband needs of the country.

The large expanse area of Nigeria and various biodiversity nature of the country have made conventional monitoring and management of the nation's economic resources and environmental challenges extremely difficult. This led to the launch of NigeriaSat-2 and NigeriaSat-X Earth Observation satellite in August 2011. NigeriaSat-2 is a sophisticated Earth-Observation satellite with 2.5m panchromatic, 5m multi-spectral and 32m (medium resolution), multi-spectral of NigeriaSat-1 to ensure data continuity. The NigeriaSat-X, a 22m spatial resolution satellite was fully designed, assembled and tested by Nigerian Engineers using Surrey Satellite Limited's facilities. These satellites have certainly revolutionized data gathering in Africa in particular and the World at large.

The applications of NigeriaSat-2 and X imagery will ensure food security through precision agricultural mapping as well as many applications which are vital to the development of various sectors of the economy such as petroleum, solid minerals, forestry, agriculture and food security, land administration, transport and aviation, environment, security



and defence, tourism, land reform, cadastral mapping, Urban Planning, Census, Health and Water resources.

Nigeria has over 35 Tertiary Institutions running programmes in Surveying and Geo-informatics to meet the dearth of professionals in the various fields. Nigeria has also put in place a regulatory body (Surveyors Council of Nigeria – SURCON) under the supervision of the Honourable Minister of Works, to register qualified surveyors at professional level and regulate the practice of the profession of Surveying and Geoinformatics and ensure that practitioners adhere to the code of professional practice.

The policy trust of my government as entrenched in the Transformation Agenda as well as the Vision 20:2020, the global Millennium Development Goals (MDG's) and Land Reform Programmes are expected to receive impetus from the sustainable, fast, reliable and effective service delivery on the part of Surveying and Mapping sector through efficient acquisition, storage, processing and management of geo-spatial data and responsive dissemination of geo-information. These contributions are critical to solving numerous contemporary challenges facing Nigeria today including:

- a.) Security through location of suspicious changes on the landscape using high resolution imageries such as Geo-Eye, Quick Bird, Ikonos or Digital Globe.

- b.) Flood mapping for delineation of flood plains and inventory of all susceptible features within them.
- c.) Wealth creation/revenue generation through effective land administration practices by using improved delineation and identification of properties for taxation/tenement purposes using urban aerial photo derivatives.
- d.) Erosion monitoring and control using high accuracy Digital Elevation Models (DEMs).
- e.) Coastal Encroachment Monitoring using Laser-based imageries to overcome constraints arising from cloud cover and forest cover as part of disaster and emergency management of ocean related hazards.
- f.) Infrastructure Planning, Design, Development and Conservation through Route Surveys, Right-of -way (ROW) Surveys, Hydrographic position fixing, Bathymetric charting, underwater surveillance, etc.

However, it is unfortunate that Nigeria as a maritime oil producing nation lacks technical and human capacity in hydrographic surveying in particular due to the lack of any approved course recognized by FIG/International hydrographic Organization Advisory Board at Category A or B in the West African sub-region or even in Africa as a whole.



**I wish to therefore use this opportunity to request that FIG should help to establish and develop or select and upgrade existing training facilities to a center of excellence in Hydrography.**

**It will also be appreciated if FIG can advocate that relevant donor agencies like the International Oceanographic Commission should assist Nigeria in establishing a Network of Real-Time Disaster Ready Tidal Stations for monitoring and early warning services in case of marine hazards or related emergencies.**

Nigeria is on course in various areas of human endeavour and will continue to contribute its quota to world peace and environmental sustainability.

I sincerely commend FIG for choosing Nigeria for this year's working week. Nigeria, my country, my pride, is endowed with natural resources and a truly hospitable people. Please, create time in the course of this working week to exploit the tourist potentials of our great country. I wish you a very successful working week.

Thank you and God bless.