

Land Administration as a Tool for Good Governance: The AGIS Way

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Key words: good governance, land administration, geo-information, spatial data infrastructure

SUMMARY

It is a well recognised fact, that providing a stable Land Administration is an important step in the strive for Good Governance in developing countries.

With the Abuja Geographic Information Systems (AGIS) the administration of the capital of Nigeria started the computerization of land related departments and implemented a comprehensive and sustainable Geo Information System for decision support, planning and development of the city and the territory.

AGIS takes the idea of a Computerized Land Administration way beyond cadastral and land registry and includes all land related infrastructures and services.
This presentation outlines the components and success factors of this ambitious project.

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GOOD GOVERNANCE AND LAND ADMINISTRATION

The role of “Good Governance”, “Land Administration” and “Spatial Data Infrastructure“ in the development of any society has not only been recognised but is also reflected in a multitude of international development projects.

A concise definition is given by Prof Donald M Grant, AM, the Surveyor-General of New South Wales in the “1st International Seminar on Cadastral System, Land Administration and Sustainable Development, 3-5th May 2000”:

“An information-starved society is limited in its social and economic development. It follows that a society which is not geographically aware or “spatially enabled” is deprived of the ability to effectively plan. The need for accurate spatial information for planning and monitoring of present activities and ensuring sustainable future development has led to the concept and development of spatial data infrastructures.

Spatial planning, made possible through a spatial data infrastructure, is a device for bringing, or augmenting order to the cultural landscape. In adopting this approach the institutional envelope in which the land administration agencies and co-ordination initiatives reside is being reshaped by the sharing of responsibilities between the private and public sectors and the re-engineering of the bureaucracy.”

At the same time Wikipedia, the free encyclopedia defines “Good Governance” as follows:

“The terms governance and good governance are being increasingly used in development literature. Governance describes the process of decision-making and the process by which decisions are implemented (or not implemented). Hereby, public institutions conduct public affairs, manage public resources, and guarantee the realization of human rights. Good governance accomplishes this in a manner essentially free of abuse and corruption, and with due regard for the rule of law.

Good governance defines an ideal which is difficult to achieve in its totality. However, to ensure sustainable human development, actions must be taken to work towards this ideal. Major donors and international financial institutions, like the IMF or World Bank, are increasingly basing their aid and loans on the condition that reforms ensuring good governance are undertaken.”

Computerization of certain important data repositories and workflows is an important step in the strive for "Good Governance", not because we need to save on staff, but because we have to make the key components safe, tamper proof and transparent. Land Administration certainly is one of those key components.

COMPUTERIZED LAND ADMINISTRATION

A computerization of land administration should include:

Landed Properties

Plots (Cadastral maps)

Land Ownership, Titles to land & Transactions (Leases, Subleases, Assignments, Mortgages, Devolution, etc.)

Land Use

Master Plan, General Land use Plan, Detailed Land use Plan

Purpose Clause in Land Title, Real Land use, detection of misuse

Land Related Administration

Planning, Survey and Mapping

Land Registry, Resettlement

Development Control

Engineering Services, Water Board

Health, Education, Parks & Recreation

Land Revenue

Ground rent, transaction fees

Land Related Infrastructure

Roads, Water, Electricity, Communication

Land Related Services

Sanitation, Health, Education, Transportation, Safety

Computerization components and success factors

For a successful IT implementation concept we have to address the following components, individually and with their dependencies:

Tasks

Organizational Structure, Workflows, People

Data, Tools, Information Products

Infrastructure

The actual implementation should include

Consulting

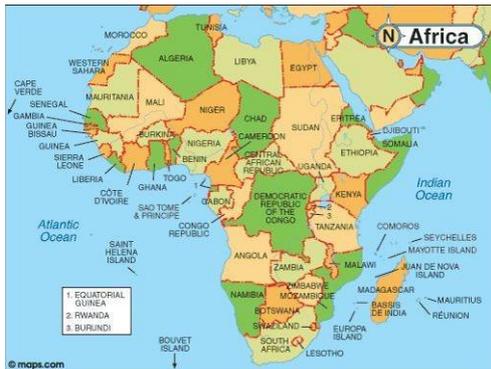
Project Management

Capacity building.

Nigeria

Nigeria is the most populous nation in Africa. It has a population 140 million people. It is situated in the West African region and lies between longitudes 3 degrees and 14 degrees and

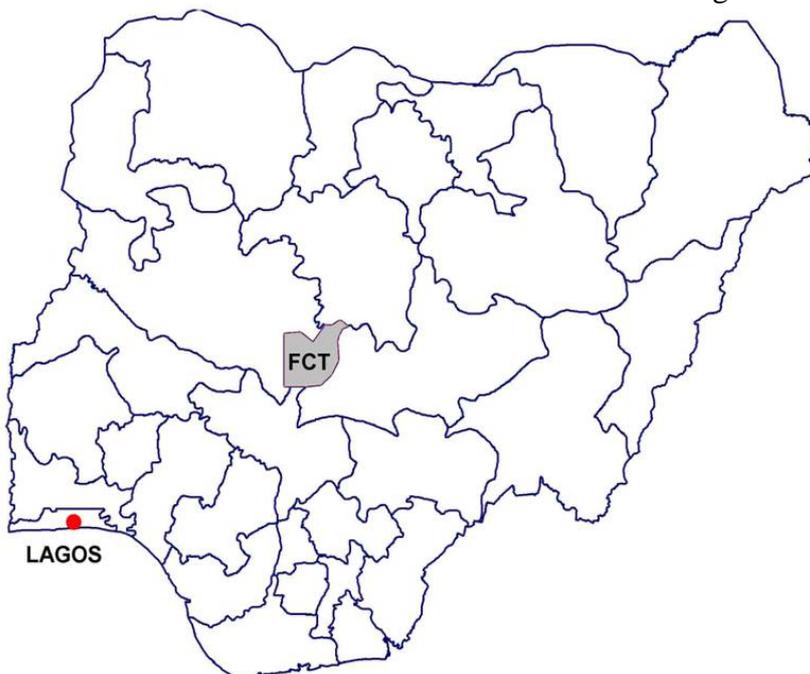
latitudes 4 degrees and 140 degrees. It has a land mass of 923,768 squared kilometre. It is bordered to the north by the Republics of Niger and Tchad. It shares borders to the west with the Republic of Benin, while the Republic of Cameroun shares the eastern borders right down to the shores of the Atlantic Ocean which forms the southern limits of Nigerian Territory. The about 800km of coastline confers on the country the potentials of a maritime power. Land is in abundance in Nigeria for agricultural, industrial and commercial activities.



Africa



Nigeria



The Federal Capital Territory (FCT) in the heart of Nigeria

FEDERAL CAPITAL TERRITORY

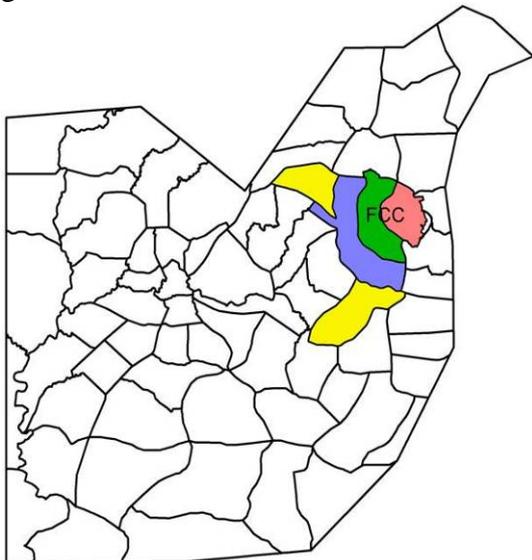
Abuja the new capital of Nigeria came into existence by virtue of the Federal Capital Territory Act, of 1976. The Territory covers a total land area of approximately 8,000 square

kilometers, while the City proper is to cover a total land area of 250 square kilometers. A Master Plan for the City and the Territory was designed by the International Planning Associates, (IPA) and accepted/approved by Government in 1979.

Construction work started in the early 1980s, while the seat of the Federal Government finally shifted from Lagos to Abuja in 1991. Efficient control, administration and management of the entire FCT landmass became the key to successful implementation of the Abuja Master Plan and the orderly development of a “City-beautiful” envisaged by the Master Plan itself. This cannot be achieved successfully without a reliable and up to date cadastral and land records.

The Land Use Act of 1978 is the principal law guiding land acquisition, resettlement, and its allocation to all eligible Nigerians; Private, Government Organizations and None Governmental Organizations. It provides for the Government to hold land in trust for the use and common benefit of all Nigerians, for the realization of equity, fairness and justice in the control and management of land, resettlement and compensation purposes. This ideal cannot be achieved without adequate and efficient land administration tools. One of those tools of course is a reliable and up-to-date land records.

All the Land related departments of the Federal Capital Development Authority (FCDA) and the Federal Capital Territory Administration (FCTA) have been maintaining manual record keeping right from inception (about 29 years). This system is prone to a lot of problems such as, Multiple allocations of plots, Land Use Abuses, Encroachments, Inefficient system of Revenue Generation, Proliferation of Unplanned/Squatter Settlements, The use of obsolete Survey Equipment, Rampant subdivisions and redesign of plots and Extensions beyond the Federal Capital City Master Plan limits. This has been a serious limitation on good governance within the FCT.



The Federal Capital City (FCC) within FCT

ABUJA GEOGRAPHIC INFORMATION SYSTEMS (AGIS)

The bold decision taken by Government of the Federation in the year 2003 to embark on complete computerization of the cadastral and land registry of the FCT led to the establishment of an agency – known as Abuja Geographic Information Systems - AGIS. The out come of this project is the subject of this presentation. Within three years of its establishment the project was able to revolutionizing the entire operations of the Land Administration and other land related departments of the FCT. Decision concerning land can now be taken from an informed position with a reliable and up to date data. AGIS has become a symbol of transparency and good governance within not only the Federal Capital Territory alone but within the entire Federation of Nigeria.

The acronym AGIS stands for "Abuja Geographic Information Systems". The AGIS project includes the introduction of SDI (Spatial Data Infrastructure) for F.C.T., the computerization of spatially related workflows in selected FCDA departments and agencies and the build up of the AGIS Resource Centre.

AGIS also is the new FCDA (Federal Capital Development Agency) department for computerized land administration.

The "AGIS Resource Centre" is going to be a service company for:spatially related data and services for F.C.T. and a computerized front & back office ("one stop shop") for FCDA departments.

The AGIS projects ambitious objective is to establish AGIS as an independant service provider and as the only official source for Geospatial Data on FCT, covering all of FCT: Provide a Comprehensive, All-Inclusive, state-of-the-Art, Foolproof, Computerized, Geospatial Data Infrastructure for the FCT.

Computerize the Cadastral and Land Registry for the FCC(Federal Capital City), the Area Councils and the and Satellite Towns of the Federal Capital Territory (FCT)

The AGIS Resource Centre is operating: in the AGIS Building, as an independent service provider, as a professional GIS/LIS Resource Centre, as the only official source for Geospatial Data on FCT, covering all of FCT, with revenues (additional revenues, not existing ones shifted to AGIS).

AGIS should guarantee: Continuity, Scalability, Flexibility, Consistency, Sustainability, Reliability, Replicatability.

AGIS STAKEHOLDERS

AGIS has a long list of stakeholders with service levels that range from service provider over primary users and data provider to occasional users.

FCTA (Federal Capital Territory Administration)

Departments	Mandate Secretariats	Parastatals	Area Councils	Ministers Office
Planning	Agriculture & Rural Developm.	AEPB	Abaji	AMMA
Land Administration	Transport	Water Board	AMAC	ATV
Survey & Mapping	Education	STDA	Bwari	FEEDS
Development Control	Health	AIPDC	Gwagwalada	NEPAD
Engineering Services	Social Services	Dir. of Muslim Pilgrim Affairs	Kuje	PPP
Parks & Recreation		Action Committee on AIDS	Kwali	...
Resettlement & Compensation		Board of Internal Revenue		
Public Building		Dir. of Christian Pilgrim Affairs		AGIS
Administration & Supplies		Area Council Staff Pension B.		
Finance & Account	Internal Audit	Area Council Service Com.		
Maintenance	Legal Services			

Federal Ministries

Culture & Tourism	Communications
Works	Housing
Solid Minerals	Water Resources
Boundary Commission	Population Commission
Transport	

Professionals

Planners
Surveyors
Architects
Engineers
Estate Valuers

Industries

Power
Communication
Building
Logistics

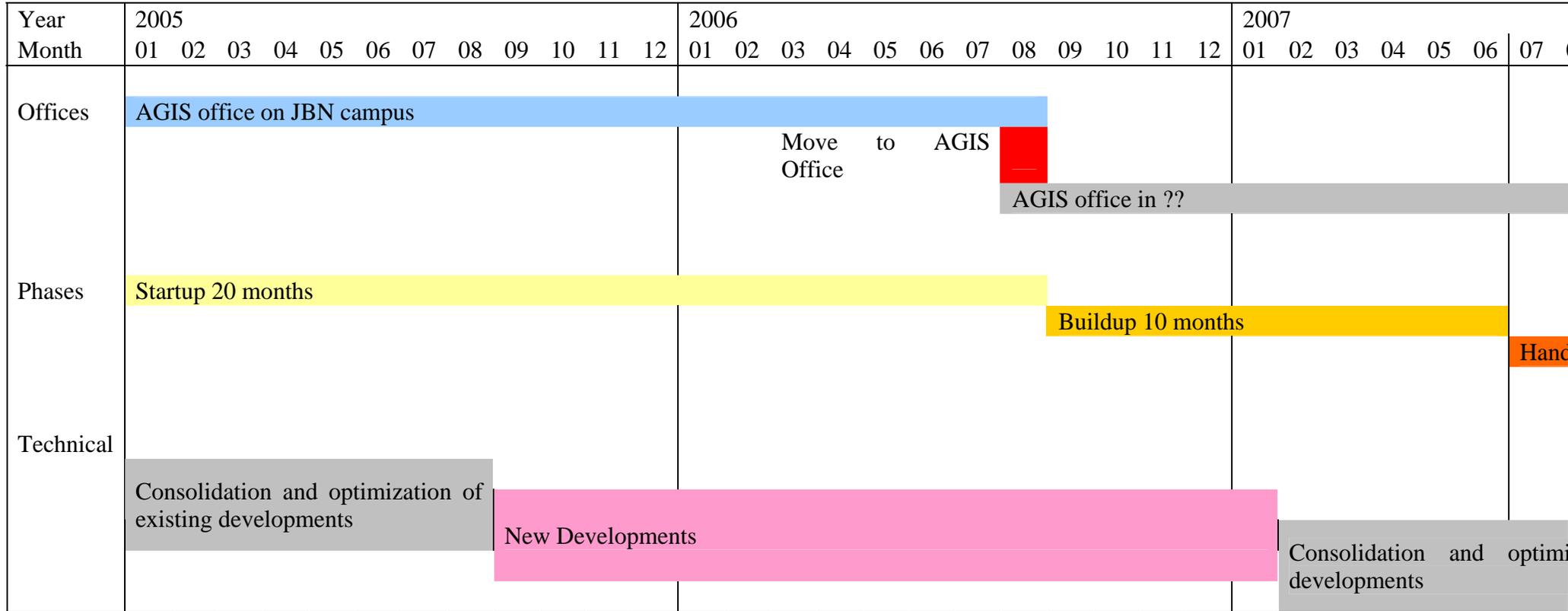


AGIS Service Levels

Service Provider
Primary User
Secondary User
Tertiary User
Occasional User

AGIS Implementation Plan

The AGIS project includes a three phased implementation plan:



AGIS COMPONENTS

The main AGIS project components or "Success Factors" are:

AGIS Capacity building

For Departments and Parastatals: Train representative of each department/parastatal as super users, doers, end users and viewers.

For AGIS appreciation: Identify additional person(s) to help complete AGIS appreciation in Government, in Professional bodies, in Academia, evaluate prior knowledge and do additional training.

AGIS Data

For all the IT-Applications: FCT Administration, Planning, Survey & Mapping, Land Administration, Development Control, Satellite Towns and Area Councils, Engineering Services, Environmental Board, School Boards, Police, Fire Brigade, Points of Interest, Land titles (R-of-O, TDP, C-of-O), Addressing, etc.

AGIS Information Products

Screen Products

Paper products with printing and plotting services, for the departments that don't have their own facilities, for developers, citizens etc. who need maps

Digital products for departments, developers etc. who can use digital data

AGIS Infrastructure

Office, Equipment, Water & Electricity, AC, Communication, Consumables, Transportation

AGIS IT-APPLICATIONS

The GIS applications (workflows, data, products) in the AGIS implementation include:

Computerizations of FCDA Units

Urban & Regional Planning

Survey & Mapping

Land Administration

Development Control

Engineering Services

Water Board

AEPB

Parks & Recreation

Transportation

Administration

School Boards

Health Services

Police

Fire Brigade

Other Departments and Agencies

Extension into Area Councils

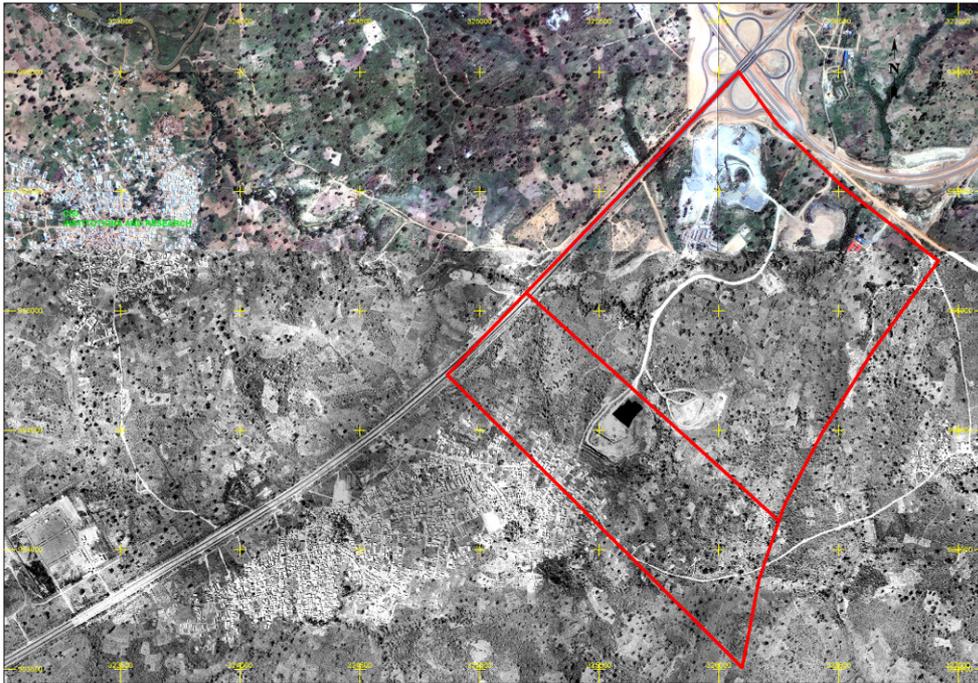
Satellite Towns and Area Councils

Additional Data

Points of Interest (Natural features & Man-Made features)

Navigable Road Data
Specific IT-Products
Title deed plan, Certificate of Occupancy
Addressing
New Access technology
Mobile Solutions
Web-enabled functionality

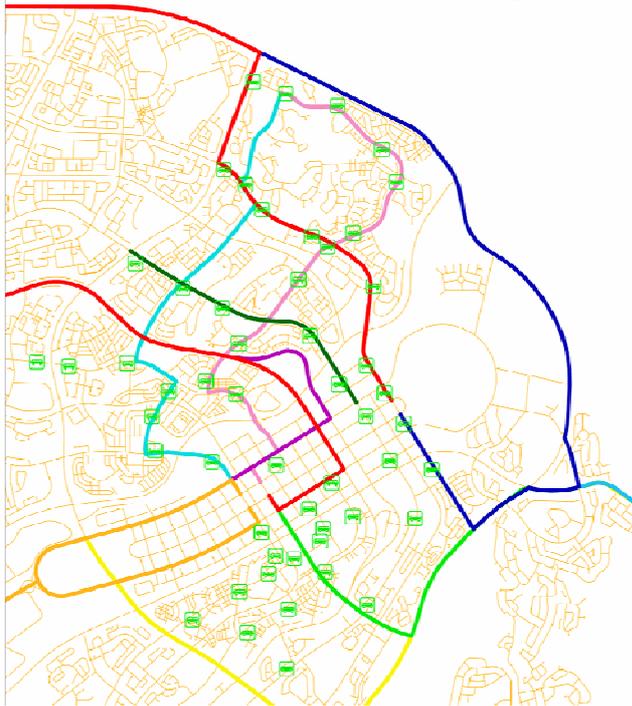
AGIS EXAMPLES



Urban & Regional Planning: Site for Abuja Technology Village



Development Control / Land Revenue: positions for billboards



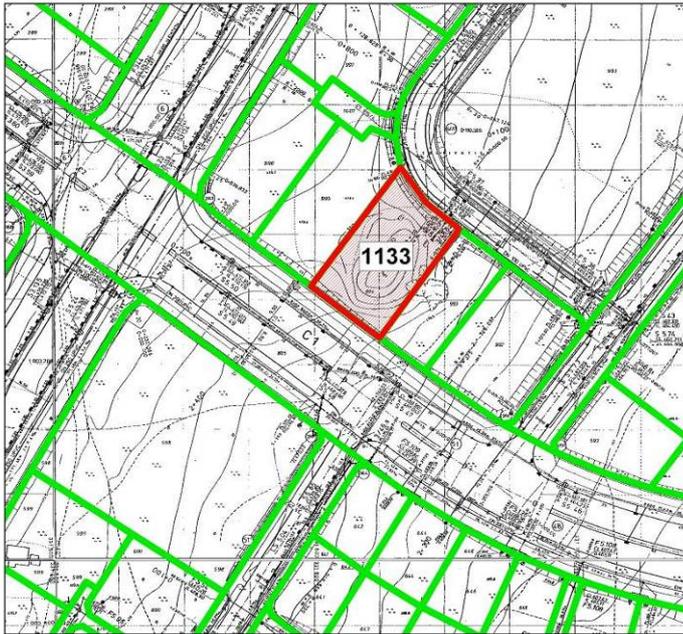
Transportation: Planning of bus lines



Engineering Infrastructure: Development in a 330kv power line corridor



Cadastral Plot & Satellite image



Cadastral Plot & Water Infrastructure



Cadastral Plot & Landuse Plan



Planning / Development Control: illegal development in road corridor

ABBREVIATION LIST

AEPB	Abuja Environmental Protection Agency
AGIS	Abuja Geographic Information System
FCC	Federal Capital City (of Abuja)
FCDA	Federal Capital Development Authority
FCT	Federal Capital Territory
FCTA	Federal Capital Territory Administration
STDA	Satellite Town Development Authority

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BIOGRAPHICAL NOTES

Mr. Roland Klaus

Age: 49 years

Degree in Land Surveying 1984. 3 years as a surveyor and photogrammetrist in Germany and East Africa. Application engineer GIS with Intergraph Germany for 4 years. Division Manager and Consultant with an GIS service company for 2 years. Independent Consultant for 10 years. Project manager AGIS for Julius Berger Nigeria since 2003.

Mr. Ibrahim Usman Jibril

Age: 48 years

Educational qualifications: B.A.ED (geo/educ) & MSc. with specialization in land administration Working experience: over 15 years as lands officer in the administration of the Federal Capital Territory, Abuja. Has worked (during his national service year) as an instructor in map reading with the Nigerian Army School of Artillery, Kachia – Kaduna state, Nigeria, has also worked as a geography teacher in many secondary schools and a polytechnic in Nigeria; attended advance training programme in Gavle – Sweden on land administration and geographical information, organised by Swedesurvey (the overseas agency for the national land survey of Sweden) sponsored by Sida, has served at various times as secretary of the , technical committee on rural lands within the FCT, ministerial committee for the appraisal of physical planning and development issues within the FCT, land use and allocation committee of the FCT, taskforce on computerisation of the cadastral and land registry of the FCT, currently working with Abuja Geographic Information Systems (AGIS), a body that is the only official source of geospatial information for the Federal Capital Territory, Abuja - Nigeria, Present post: Assistant Chief Lands Officer

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