# OGIS Consult Limited Presents Proposal for National Security Integrated Land Databank[NASILADAB]

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### MAJOR COMPONENTS AT A GLANCE GEOGRAPHICAL COMPONENT DATABANK

This is the basic and technical Geographical Information System [GIS]; a skeletal framework upon which all other components are based. This is usually established by the Surveyors who provide numeric, alpha-numeric and the Geographical [alpha, beta, Lambda] and geodetic [XYZ] framework all over the country upon which every natural and artificial features and other components herein will be based;

From this basic framework the availability and the knowledge of Distances ,Bearings, Heights and locations we can loop, attach, integrate, derive multifarious attributes that will eventually provide a platform to accommodate and house other layers as follows; We shall also employ high resolution imageries [used to identify, view and interpret attributes of every feature] to achieve the numerous purposes of the project.

#### SECURITY DATABANK COMPONENT:

Establishment of Electromagnetic Remote Sensing Capture equipments all over the Nation to access security prone locations, properties, sites and Capturing of security information through Remote Sensing gargets.

National Digital Depository of visual and audio Security recording facilities, Gadgets, Signals and Captures all over the federation for recordings of Riot, mob and other gathering Signals and Alerts system.

Digital processing, auditing, retrieval and updating of security data and dissemination @ designated Centers all over Nigeria,

Location, Detection and detonation of explosives from source & provision of inbuilt alert system to the base station are unquantifiable attributes of the System.

24/7 Crime detection, monitoring and Surveillance of Security situation in Nigeria from the base stations is also a great advantage.

- LAND CADASRAL DATABANK MANAGEMENT COMPONENT: This is a unique databank in itself dealing with the following: Digital boundary, delineation, delimitation and demarcations. Federal and state establishments. Land acquisition, Subdivision, Arbitration, Litigation, Land use and Sites and Services.
- COMMERCIAL/INDUSTRIAL INSTITUTIONS DATABANK
- RELIGIOUS INSTITUTIONS DATABANK

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- ECONOMIC DATABANK MANAGEMENT COMPONENT
- ADMINISTRATIVE COMPONENT DATABANK
- EDUCATIONAL COMPONENTS DATABANK
- MINERAL RESOURCES DATABANK
- AGRICULTURAL COMPONENTS DATABANK
- E T C

#### NB

Each component can be handled separately, differently and gradually but they must be based on the 3-Dimensional Digital map where Geographical component are established as the skeletal framework for all other components/layers; But to save overhead costs this system envision a comprehensive, detailed attributes of all features put together in a multilevel database like River Dam where all sectors can draw resources from.

## PREAMBLES

As at the moments up to date and adequate data regarding land in Nigeria is virtually nonexistent. Each state of the federation has its own splinted spatial data in pieces. This is because there are no secured land depository systems in Nigeria. Most times communities' clashes with government agents. Also States clashes with the Federal government on matters of land acquisition. Not only that illegal occupation by bandits is on the increase, Terrorists, Kidnappers, Ethnic and Religious sects are ravaging the land without any current and up to date means of monitoring the environment. Hence detection and eradication of vices becomes an uphill task.

This system will technologically equip our government and security agencies to track down offenders and pre-empt the criminals in their hideouts in their bid to perpetrate nefarious tendencies. This is most desirable as the new government settles down to work. With this system in place land administration becomes simplified, manageable and we can tame the tide of environmental Security menace in our Nation Nigeria. We shall employ the best hands in the technological world [GIS, ICT and IT Security] to execute this project.

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# OGIS Consult Limited Presents Proposal for National Security Integrated Land Databank[NASILADAB]

## 1. INTRODUCTION

[National Security Integrated Land Databank [NASILADAB] is multifaceted and multi-disciplinary as indicated in the major components databank enlisted therein and the array of professionals involved. It will solve major Security, Land, Economic, Social, Environmental and boundary problems. More attributes can be added for a robust and comprehensive databank. It is priceless for the current government administrations anti-corruption and transparency agenda.

With this in place land reform would not only become a mere routine; easy and achievable but provide a means of sustainable revenue generation and massive employment becomes automatic like the telecoms sector.

With the central security in-built into the NASILADAB system government can be rest assured of:

- A National Depository System for Land Title holdings and records in all states of the federation and the federal capital territory
- A mechanism for land valuation in both urban and rural areas all over the federations for the purpose of revenue generation.
- A permanent Solution not only to cadastral and boundary conflicts within and outside Nigeria borders but Land use, Site and Services projects and Land acquisition problems in general.
- It will also guarantee proper monitoring of the entire Nigerian environment covered by the system. It will also guarantee the protection, safety and security of features/properties and the people all over the subject area [Nigeria].

## 2. A MULTILEVEL DATABASE

In a country like Nigeria, a comprehensive National land inventory from diverse areas like; Geographic, political, social, Industrial, Educational, Religious Database etc with the built security devices all over Nigeria are not only important for security purposes but very vital to peaceful adjudication/conflict resolution of land matters nationwide.

In this system, we have pool of multifarious information including the existing GIS database all over the country amalgamated into NASILADAB. From this system, data or layer could be added or retrieved and separated using the right commands.

National Security integrated Land databank is a collection of all information of all land based features that occupy space on the surface of the earth that constitute the nation. It is the complete database of all features on land: natural and artificial features alike.

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A Central Security Monitoring Systems integrated into the Land Databank made it security prone. This is to ensure the protection and safety of all necessary features/properties with the owners' security and the safety of the occupants of such properties.

It will be a strong room where all matters that occupy space and has weight on the geographical space called Nigeria is deposited for keeps. It will be a perpetual and secured Land and Security library where all manner of information anywhere in Nigeria can be stored, processed and legally and legitimately accessed.

It's a warehouse of all land related information needed whereby Spatial data are accessed and Security experts are enabled to monitor all activities on land throughout the length and breadth of Nigeria, and a useful Land reservoir for both local and foreign investors.

In a National security Integrated land data bank [NASILADAB], information on every object pooled together can thus be stored, processed, accessed and or retrieved accordingly. The different areas of interest in the database are given security codes

Features like: roads, houses, parcels, area, extent, size, titles and their owners will be given appropriate codes: like resisted codes, commercial code, industrial code, and agricultural code and security codes for controlled reference only. With the different data security codes only authorized individuals can access the information needed after making necessary payment where necessary.

NASILADAB consist of all land situated features and their attributes database: Location, Numerical, Size, and shape of all features required will be provided and available for interested users. The land parcels available throughout Nigeria, who owns what and where? The properties owned by whom and at where can be easily identified or verified as the case may be at a glance. This will make asset declaration verifiable and aid in the war against corruption.

Each layer/feature is packaged in relevant software and overlaid in the system in different database as layers distinctly. It can be accessed, queried, edited, updated and uploaded as at when necessary with new innovations and current technological devices.

NASILADAB system with checks and balances shall be the solution to all land and security problems in Nigeria. It shall cover every village hamlets, towns and cities of Nigeria. It will be a Strong room where all matters that occupy space and have weight on the geographical space called Nigeria is deposited for keeps. It will be a perpetual secured Land Library where all manner of information anywhere in Nigeria can be stored processed and legally and legitimately accessed. It is far more than what we have now as line-map digitization in the office of the Surveyor General of the federation OSGOF in Lagos and Abuja. This is also far more than the GIS of land use or the master plan at AGIS, and the mini GIS offices nationwide. It is more than the land registry records scattered all over the country, these and others will only be integrated into this all important robust systems appropriately

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This involved the gathering of relevant professionals [as consortium] producing all manner of data from their fields for integration into the system for keep like the normal CBN is serving the financial institutions. NASILADAB will be a warehouse of all land related information vital to the economy are kept and processed. It is a place whereby spatial data are accessed, secured and monitored by experts. The security agents and border patrol agents will find it invaluable to monitor all activities on land throughout the length and breadth of Nigeria from the comfort of their offices for effective surveillance. It is a useful land reservoir of all land information for both local and foreign investors.

All Record copies of properties surveyed by the Registered Surveyors all over the country thereafter shall be integrated into the system at prescribed fees. All other economic and social attributes desirable can also be integrated as at when due at a fee. Alienations, Sales and transfer can be effected on the system in alpha numeric form i.e. numerically, geographically and digitally for revenue generation.

## 3. INEVITABILITY OF NASILADAB

National Security Integrated land databank [NASILADAB] is inevitable in the new age of RESOURSE HARMONIZATION for sustainable growth as the need for operators of National economy to communicate geographically continues to arise. Digital surveying and Mapping therefore have been unavoidably occupying a center position in the management of most nations of the world especially United States of America and Israel. It is a collection of all land features attributes and with cognizance to the security of the property and the people: the owners and the occupants of same.

Finally, but most importantly, the built in location codes and alerts system in the Security and Safety components or layers will help in monitoring what happens anywhere in Nigeria. Close circuit TV cameras induced with Explosive detection, detonation and crime detective electromagnetic radiation devices with remote sensors are also a significant feature of the National Security Integrated Land Databank [NASILADAB].

## 4. GIS/LIS AS A TOOL FOR NASILADAB

LAND DATABANK administration system consists of collection, recording and storage of all information related to individual land parcels. This will be used for easy monitoring and control of the land with the detailed information about: who owns the land, who occupies the land and how frequently improvement is being done on the Land?

Every state and local government authority is facing challenge over the efficient management of its assets, the quality of the service it delivers to customers and the effective of its revenue collection. All these activities depend on a digital map.

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With GIS as a tool Land Databank will be used in the local government authorities for the following:

- Monitoring changes: In schools, in housing requirements, in the economy and in the demand for land, leisure, and community services. Security services e.t.c
- Service planning; through identifying and forecasting changes in patterns of needs for services and investments as a basis for safe delivery of services and distribution of resources. This will determine both the scale of provision and its location. It will also highlight areas of social deprivation.
- Transportation management: including provision and maintenance or high ways, public transport schedules, school transport, street cleaning.
- Property development and investment: including the preparation of development plans, assessing land potential and preparation of property registers; promoting industrial development; rural resources management.
- Education: Land databank will be used to know the location of all schools and their state or conditions.
- Military defense: Applications such as the handling of commands, and control systems for defense and civil security, including police and fire

Operations will be incorporated into the Land databank system. The mapping information that will be produced for military maps and charts, for navigational and tactical use, by aircrafts, ships and land forces for military base planning are included.

With this system large amount of information from different sources can be recalled to make instant decisions and communicate them to others. In military contexts, the data required might include the location of military unit, supply stations and airfields, for army maneuvers. For civilian users, data required might include the location of police stations, fire hydrants, property containing toxic materials and road network.

 Urban and regional planning: The linkage of all data in this central Security Land Databank is the ability to integrate different data sets by relating information by location so that any data of an area can be put alongside its features. This approach provides the basis for many kinds of spatial analyses.

Planners need better spatial information to foster economic growth and to protect the environment. GIS/LIS would improve the planning information base.

- Water resources planning: All over the world water authorities are using GIS/LIS for water quality research and water resources planning to access the risk associated with spreading sherry and the use of agrochemical. This analysis of spatial data by GIS/LIS offers a good practical solution to the management Solution to the management of surface and ground water catchment.
- Modern City Architecture: GIS is the tool to be used to design and construct a spatial representation of the key features such as major roads, minor roads, parks, open spaces, location of bus stops and garages near and around a place .e.g. markets, schools and buildings etc.

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- The Social Economic data; such as Census Information, Ward demarcations for election purposes, trade areas and others can be transformed into the Central Security Land Databank.

## 5. INTEGRATION OF INFORMATION/DATA SECURITY/RETRIEVAL

Features can be stored, identified and any descriptive information can be called up and displayed without the user having to get up to search through file cabinet or library. It is a multilayer database where management reports, analysis and data/information in any format relating not only to the usage of the land or property but all attributes of every physical features could be accessed with the right command.

This complete Security databank could be updated from time to time using the right command. Integration of any other attributes/information from time to time is an added advantage.

The security of the data as well as the safety of the people and the nation and its people is a special feature of this database system.

All information, attributes, dimensions including security information could be geographically communicated to our system as at when due.

## 6. REQUIREMENTS

1. The basic requirement is the provision of adequate network of ground controls throughout the length and breadth of Nigeria. Two types of digital data that needs to be prepared as a matter of urgency to set the ball rolling are;

- Elevation Data distributed as DIGITAL ELEVATION MODELS 'DEM' and
- Horizontal Control Data distributed as DIGITAL LINE GRAPH 'DLG'

2. Acquisition of Up to date Digital mapping Camera and Instruments like Digital Remote Sensors and Geodetic Positioning System for the accurate capture and Mapping of Nigeria.

- 3. High Resolution Satellite image receivers stationed across the Nation.
- 4. Aerial CCTV Cameras with explosive detectors' devices
- 5. Crime Detection electromagnetic devices integrated Cameras to locate and identify offenders
- 6. Acquisition of specialized Computer hardware with relevant software.
- 7. Networking devices and backup of systems
- 8. Training of staff in the application of the database systems.
- 9. Management Team of Experts who will run the systems 24/7.

## 7. AIMS OBJECTIVE OF NASILADAB

1. When properly established, adapted and mastered by the professionals; Surveyors and GIS/LIS experts, the system will launch the nation into a Modern City Architecture; The Design and construction of key features before the actual transfer to the location.

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- 2. This system will guide and advice urban planners and the government of both surface and underground infrastructures.
- 3. Proper international, State and Local government boundary delineation, delimitation and demarcations.
- 4. Proper and digital definitions and demarcations of Local government boundaries, ward, constituencies and senatorial districts.
- 5. Family and individual property surveys, As-built surveys of both developed properties all over Nigeria.
- 6. NASILADAB will collaborate and provide technical assistance to state and local government to undertake land cadastral nationwide.
- 7. It will help determine individuals 'possessory' rights using best practices and most appropriate technology the process and identification of locations and registration of title holdings.
- 8. It will ensure that land cadastral boundaries and title holdings are demarcated in such a way that community, hamlet village areas towns, etc will be recognizable.
- 9. It will encourage and assist State and Local governments to establish an arbitration mechanism for land ownership and conflict resolution.
- 10. It will be a national depository for land title holdings and records in all the states of the federation and the federal Capital territory.
- 11. It will be a veritable mechanism for land valuation in both urban and rural areas in all parts of the country.
- 12. It will help to locate and detect explosives with specially coded alerts to alert the relevant agencies of the presence of such dangerous timed explosives and weapons at source.
- 13. It will ensure effective simplified sustainable and successful land administration in Nigeria.
- 14. Through the use of NASILADAB security agencies will be technologically equipped to monitor the Nigerian environment at base stations established in Strategic locations.

### 8. ADVANTAGES OF NASILADAB

The benefits and the advantages of National Security Integrated Land Databank cannot be overemphasized. The different databases or layers which constitute the databank are loads of information for divers segment of the interested public as discussed in this Project proposal. The followings are the advantages:

### 8.1 Economic advantage

All information generated from the system are products to be packaged for sale thereby enhancing the economic well being of the state, the federal and the entire citizenry. They are assets to industrialists, governments, tourists, hospitality industries, teachers, educationists Security Agencies, Students etc. Patronizing these products by these and other classes of people is of immense economic value to the States in terms of employment generation.

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### 8.2 Technical advantage

In this age of information Technology, it is a national expectation that Surveyors and other related experts in the industry would be enabled to pick up bits and pieces of the cadastral Survey, topographical surveys and engineering surveys and other relevant data like the volume of cuts and filled dumped in the construction and geological engineers dustbin, for survey integration and also for national Survey data inventory thereby making cadastral mapping, geological and construction survey and other data integration inevitable.

### 8.3 Resource wastage/fraud control

It will reduce waste of National resources and make the bulk of DATA been generated but loosely kept in other industries easily accessible and secured.

### 8.4 Planning and management

It will help in no small measure in the planning of developmental programs serve as the best tool for land management in ward and Local Government Creations and adjustments, Population census, Elections etc.

### 8.5 Budgeting enhancement

It will make budgeting less stressful. Our budget and planning will not be based on assumptions but on facts and figures available and visible by on the spot access by all parties to the items under consideration.

#### 8.6 Monitoring enhancement

With the aid of the security gargets looped to a base station, it will enhance monitoring of all activities and events in every part of the length and breadth of Nigeria.

#### 8.7 Cost reduction

It will reduce cost in the conduct of population census and General elections. This is because all the spatial information needed are not only available and accessible but retrievable and printable from the system.

#### 8.8 Crime detection and control

It will help to checkmate crimes to the barest minimum and also help in tracking down offenders at source through the inbuilt alerts and tracking down gadget systems

### 8.9 Value addition

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It will encourage data integration of our master plan and blueprints in order to monitor our land use to prepare her rural land use for orderly growth and proper land valuation for the economic well been of all.Value addition can come from varied sectors to augument the database.

### 8.10 Job Creation

It will create employment opportunities for professionals and non professionals as well as the teeming masses of Nigerians in various cadres

### 8.11 Land Arbitration

NASILADAB will help in land-in-dispute/lacal and International boundary dispute. It is vital to peaceful adjudication/conflict resolution of all land based dispute.

### 8.12 Revenue generation

It will generate enormous revenue for the nation through many ways.

Including the physical and legal definition of landed property for the purpose of registration of deeds. It will provide a safe system for the collections of property tax, ground rent, charting of plan and approve building plan. And it will make the establishment of a harmonized central digital cadastral (central computerized lands register) feasible.

Each of the contents becomes marketable products of NASILADAB and can be accessed and treated separately for sale to user community.

### 8.13 State security advantage

NASILADAB is an invaluable operational instrument and a formidable digital intelligence gathering database for state security services and the police and border patrol and safety machinery which consists of the following special security features:

Location, updating and integration mechanism of crises prone locations

Remote sensing of Events/Detection of crime with alerts system

Natural Disaster alert system: landslide and earthquake, etc.

Location and detection of bombs and other explosives with alerts and detonation apparatus

Live coverage information gathering camera directed/controlled with Special remote controlled monitoring devises for problem prone areas like the borders from NASILADAB Secretariat. Every mob and social gathering, rallies capture will also be an integral part of it.

Street camera CCTV induced with laser explosive detection capture (remote controlled from NASILADAB base) installed at junctions and other strategic areas

## 9. COMPONENTS/LAYERS OF NASILADAB

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Contents of the NATIONAL security integrated Databank shall include but not limited to the following areas of GIS layers

### **9.1** Geographical components

All spatial data's relating to Nigeria's geodetic network of controls processed to information. XYZ of every feature: Topographical features like Rivers, Mountains, plateaus, waterfalls, landforms, road networks spatial patterns and relationship modeling and analysis et cetera. This is the base for other items.

### 9.2 Federal and state establishments

Nationwide: A database of all Land use layout and Cadastral Site and services schemes of the various states, Ministries, Departments and Agencies, Name of institutions, location, area of parcel, Size of property, Value of property, Extent, Topography, 'cut and fill'. Volume et cetera

### 9.3 All Land ACQUISITIONS NATIONWIDE

Database of all land acquisitions, freehold land, Mineral deposits and trade zones and their volume and extent across the nation will be a layer in the system

#### **9.4** Commercial components

Database of banks, insurance and other financial institutions will be a layer in the system, Private and commercial premises, markets and supermarkets. Street names and Number No of flats in a house, Name of owners/occupants. Trends ETC

#### 9.5 Social components

Database of all hotels and guest house, club houses, tradition of the people, type of people etc, Resources available and activities such as Residential, Commercial Industrial, Private or Public use etc. Security and Safety devices will be integrated into the system

#### **9.6 Religious components**

Database of all churches. Shrines, mosques, etc will be attached with close circuit monitoring devices

#### 9.7 Industrial components

This consist database of all industries in Nigeria located and monitored through the system with integrated security devices located in strategic places. The system will show the type of industry, the location, spread, and extent, Area covered, Staff Strength etc.

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#### **9.8 Adminstrative components**

This is the database of International State and Local Government, Cities, Towns and Village administrative boundaries, Senatorial districts Constituencies and ward delineations. Title documents Obtained and year, e.g. C of O, Registered conveyance, the owner of the property and the occupants will be digitally documented for reference purposes. Part or a whole of each of these components can be retrieved as at when due.

### **9.9 Educational components**

This is the database of all Schools: Primary, Secondary, Private and Public schools, Colleges and all Tertiary institutions. This includes Students population, Staff Strength, Spread, Locations and area covered. Etc.

### 9.10 Mineral resources components

This contains the conglomeration of all Minerals, Geological Seismic other geo-physical explorations, Oil and Gas deposits and installations nationwide. Resources and where is it located in Nigeria. More of this is contained in my article of February3, 2000 of National Concord.

### **9.11 Agricultural products**

This consist the assemblage of all agricultural products and their location in Nigeria. Food crops, Cash Crops, Livestock and poultry products, Fisheries Concentration area etc.

#### 9.12 Security formations

The database of Police, Military formations, States Security Service, CUSTOMS, Civil Defense, all security outfits all over the country etc. They will be responsible for monitoring the safety and security integrated into this Central Security Land Databank

All other features captured by the digital camera or remote sensors will be given due recognition. In addition wide consultations shall be made to include all the necessary information nationwide for the purpose of integration into the systems.

## **10. PHASES OF NASILADAB PROJECT EXECUTION**

Phase 1: BASIC GIS REQUIREMENT: This is the geodetic framework of primary database provided by the surveyors. Upon which other databases are situated.

A: Identification and/or establishment of Control stations

B: Geodetic or primary or 1st order Control networks

C: Secondary or Second Order Control networks and

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D: Tertiary or Third order Controls to handle all cadastral jobs all over Nigeria E: Topographical Survey of the entire nation.

These are invaluable for the establishment of NASILADAB system before fixing roads and Boundary delineation, delimitation and demarcations as in 1 and 2 above

Phase 2: ADMINISTRATIVE GIS: Inter governmental administrative concerns in GIS in subdivisions of wards, land administrations, districts and local governments within the state. The surveyors in collaboration with stakeholders: community leaders the government provides it.

Phase 3: COMMERCIAL GIS; Land use and Cadastral database for revenue generations. Financial value and commercial reasons are the primary considerations here, Site and services programs of government. Banks can use the system to identify the best site location for a new branch and monitor the successes of customer service in the existing branches. Read more on my articles: advertising and marketing agencies can use this aspect of GIS to target key customers and marketing companies: Property management companies can use this aspect to hold up-to-date information's on their properties and occupiers.

Revenue generations opportunities abound in the NASILADAB and marketing of land resources and products, Processing of property documentations. Many experts like the Estate Surveyors and Valuers, Quantity surveyors, Tax experts and marketers est. are the stakeholders here. More information is available in my article published in the National Concord on the benefits of GIS of Thursday, January 27 2000.

PHASE 4: SOCIO ECONOMIC GIS: This database is done with political/economic undertone hence political data's. Census data's, economic information's, Government Reserved areas are common features and Forest reserves facility/property valuation investments opportunities and mortgage facilities. Land use for effective cadastral system, Statistical data and demographic values throughout the state. Many stakeholders are involved here: Politicians, Economist, Financial institutions est.

Phase 5: SECURITY AND SAFETY GIS; this is Security devices database for the use of Security agencies and the Government in power. It involves integration and networking of explosive laser detector alerts with CCTV cameras and other security gadgets to the primary or basic database which will be controlled in the NASILADAB Base Station. The range of detection is extensive depending on the availability and affordability. This will cover both short and long distance range in monitoring and detection bombs and other explosives. This will be networked to other sensitive government organs or security outlets all over subject area (National, State and or local government) as necessary. Digital security experts, ICT experts and Surveyors must team up to geographically communicate the security devices to all parts of Nigeria through NASILADAB database.

## **11. BASIC GIS PROCESSES**

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This aspect is handheld primarily by the surveyors who are registered with registered office in Nigeria. There are enough Survey Assistance and Survey Technologist registered under the cap 194 of the laws of Nigeria to handle the data gathering under supervision of the Registered Surveyors. I want to emphasize here that there is no need for raising or training of Para-surveyors in the data gathering as survey firms all over the country have enough survey technicians/technologist as assistance/staff/associates to handle the execise.

Basic GIS. The fund for such training should be channeled towards equipping the existing firms to update them in the current technology to make them fulfill the purpose of the exercise.

Basic GIS constitute 50% of land databank project execution. It involves the following steps. Data capture by surveyors with fields instruments.

Data gathering: Field technical data collation, Cadastral, surveying, geodetic and geographical data by surveyors and other allied professions from all over the nation.

Data processing and computations; Numerical processing of the numerical values of spots heights and XYZ of all the required locations.

Data analysis, Plotting/printing and publishing the first phase

Data integration: This is from different GIS Components and Sources, Geological constructions, Cadastral, social and physical data. Etc.

# 12. ADDITIONAL FUNCTION OF NASILADAB

The main function of NASILADAB is

- To coordinate and amalgamate all the existing GIS institutions in Nigeria into a database
- To establish GIS institutions in places or states where none is existing.

## **13. BASIC GIS DATA COLLECTORS/GATHERING**

The spatial or geo-informatics engineers GIS experts must combine information science of gathering, storing, organizing, retrieving and disseminating information on specific subjects with the services of ICT team and the Security Experts to establish the database

The Surveyors and Geo-informatics [GIS] team have the responsibilities of employing field officers (not freelance Para-surveyors) who will collect all the needed data with the sophisticated and up-to-date instruments for explicit and implicit data collections.

These experts may be employed on contract bases to execute their own aspect of the project, leaving few of them to be employed on permanent bases to maintain the system in perpetuity

### **14. INSTRUMENTATIONS**

For a reliable National Security Integrated Land Databank (NASILADAB) the following up-to-date instruments are imminent.

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- Gripen Aircraft system is the first generation multirole aircraft in operational service. It combines censor information with geographic data to create situation awareness. We have the contact information to work with.
- Other Aerial Camera are: DJI Phantom4 Buzzflyer and Yuneec Typhoon 3 Standard Arieal phographic aircraft. We also have RC Helicopters, Unner 250 Advance: Walkera F210; UDIR/C New Lark FPV. We also have Drones, Quadcopters, Multirotors.
- Border Surveillance 360 degree coverage 24/7 performance by the integrated Border Surveillance; <u>www.flir.com/Surveillance</u>.
- Digital Mapping equipments like global positioning systems, Total stations and sophisticated latest surveying and mapping instruments must be employed.
- High resolution computer hardware in right quantity and right quality
- Relevant and latest software for acquisition of data, storing, processing and integration of data are required for the exercise. Like GEO-ROVER-SOFTWARE. GEO ANALYSER a high performance browser-based application REGIONAL SHORE INSTALLATION MANAGEMENT SYSTEM (RSIMS), ARCGIS, ARC READER, ASIMMETRICAL SOFTWARE KIT (ASK) DISTRIBUTED GEOSPARTIAL INTELLIGENCE NETWORK (DGI-net)
- MOBILE DETECTION SYSTEMS (MDS) and Arc-IMS software is the foundation for distribution of GIS DATA and application in the internet. Commercial/Joint Mapping Toolkit C/JMTK is a standardized, commercial and comprehensive mapping toolkit of software mapping components for the management analysis and visualization of maps and map related information.
- State of the art global positioning system: and other latest total stations and sophisticated positioning/surveying instruments.
- Laser and other high sensitive security devises must be procured. The equipment must be able to compare data with high degree of accuracy in the right quantity and quality to meet current international standards.
- High resolution digital aerial cameras: for aerial photography or satellite receivers.
- Other high resolution CCTV cameras with detective devices
- Latest digital electromagnetic remote sensors
- Latest digital high resolution imageries of various brands will be explored for clarity of data acquired.
- Software and hardware of computer systems of high resolution configurations

These high precision instruments help to provide a suitable platform for an accurate and precise location of objects/targets in space or on the earth surface. Also, for a profitable, lasting, strong and enduring database in all ramifications. Precise location of targets in necessary for the safety and defense mechanism

## **15. OTHER IMPORTANT FACILITIES**

Office accommodation nationwide, Operational Vehicles is of Necessity. Integrating and networking facilities, other consumables and accessories

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### 16. PHASES 2-5

Phase 2-5 will be accomplished through integration of the other necessary features and their attributes in different layers as stated above for upgrading and updating of the basic and primary GIS database by the relevant professionals to the comprehensive all inclusive NASILADAB.

## **17. PROJECTS MODULES**

S/N	MODUL	E WORK CONTENTS
1	IA	Design, Planning and Establishment of Geodetic Controls.
	IB	Signalizations of Controls
	IC	Acquisition of high resolution Imageries
2	IIA	Determination of Geoids
	IIB	Determination of an Active GPSA Reference station
3	IIIA	Densification of Controls production of DTM and Otho-photo Map
	IIIB	Digital Mapping
4	IVA	GIS Database overlay of components
	IVB	GIS Applications of relevant Softwares.
	IVC	Enterprise/Commercial GIS
5	VA	Acquisition of Relevant Up-to-Date Hardware and Software
	VB	Provisions and Establishment of ICT Infrastructures
	VC	Provisions and Establishment of IT Security Infrastructures
6	VIA	Education and training
	VIB	Public Enlightenment and Stakeholders meetings
	VIC	Marketing of NASILADAB products
18. NASILADAB CONSORTIUM		

As it is in financial institutions all over the world that though the bankers and the economic experts are the major players in the bank, they still require the amalgamation of different experts to sustain the institution. So it is in the case of NASILADAB.

It is hereby suggested that the proposed System, NASILADAB should be under the supervision of a consortium of relevant professionals mentioned in this proposal to manage it. This should be constituted by experienced and seasoned consultants as administrators. The board of consortium could be given 4 or 5 year term in office.

Though the spatial engineers or GIS experts or the Surveyors are to produce the basic and primary database framework which other professionals built upon, they should also be part of the maintenance team and permanent custodian of this treasury of information.

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However they needed the input and the expertise of other professionals not only to bring it up to date but for a robust and secured Databank. The volume and enormity of the information involved in this exercise made it inevitable for experts from major fields to combine their expertise in the evolution, maintenance and administration of an endurable, dependable, Secured and Central Security LDB for Nigeria.

## **19. MAJOR PROFESSIONAL PLAYERS IN NASILADAB**

- National Space Research and Development Agency [NASRDA]: The custodian of National Geo-information NGI policy. They are to provide Satellite data/information
- Land Surveyors/Spatial Engineers: To provide spatial data like controls, cadastral framework, topographical information, Geodetic and Hydrographic information, As-built Surveys and Township and Utility maps. Boundary demarcation, delineations and delimitation etc.
- Remote Sensing Experts: They interface with the Security infrastructural facilities.
- Estate surveyors: They provide valuation reports for integration.
- Geologist/ Environmental Scientists: They supplies mineral deposit data for integration.
- Urban and Regional Planners: They design modern City Architecture, Urban renewal etc.
- ICT experts: To interface the digital map with the security infrastructures.
- IT Security Experts: To provide digital security infrastructures nationwide
- Community Relation experts and marketers: They interface between the government and the people.
- Quantity Surveyors: To provide estimated cost of infrastructures like bridges, roads, Dams, Houses etc.
- Geographers/GIS/LIS experts: To integrate the economic/social statistical data like Subdivisions, Boundaries, Population distributions, Vegetations etc,

### **19.1 Research and development team**

From the array of professionals mentioned above a team of researcher will be raised to be in charge of research into the world of environment and technology to keep abreast of the current and emerging technological development for the advancement, orderly and safe environment.

### 20. NASILADAB ICT TEAM

In the age where technology has made it possible for users of television to tell their set what to do without lifting a finger, made possible with the voice-activated-remotes. The InVoca3.0 voice-activated IR remote, for instance uses the sound of one's voice to control up to four electronic devices in a home. Smarthomeusa.com reports culled from page 7 of punch of November, 30, 2011. It is therefore imperative and obvious that the GIS/Security/ICT team already consulted should interface and seize this challenge to use their expertise to translate this vision into digital format. This assures us that for a robust and security prone LDB, all the inputs and the contributions of other experts will be translated digitally as an integral part of the NASILADAB. They shall not just

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fathom the security of the data and information thereof, the team shall be made to also integrate explosive laser detectors and other sophisticated detectors that can cover not less than 300 kilometers radius of distance or more as used abroad must be built into our central security databank to make it pro active and relevant.

## 21. NASILADAB MARKETING/MEDIA TEAM

A team of Media personnel and marketers shall constitute the team that will publicize, design, and manage the advertisements/marketing of the products of the land databank.

Marketers shall be employed or engaged to market the various products/contents which will be of interest to different classes of people. It can be sold either in hard copy or soft copy or in any form that may be introduced as required or both. With powerful marketing strategy this project will fetch the country billions of naira and dollars annually.

## 22. NASILADAB TRAINING TEAM

Training of government and security officials in the implementation of the program is a necessary tool to implementation of the project. This will be done by the experts in the training arm to make the project viable to achieve its aim in the different areas of advantage. Bulk of fund will go to this area of training locally and internationally.

## 23. NASILADAB COMMUNITY RELATIONS REVENUE CONSULTANCY:

1. With the aim of establishing a land data bank for the nation consultants of community relations and land experts will be raised to reach the grassroots to canvas for perfection of landed properties' Documents. Thus, when fully developed in a database, will reflect who owns what and where in each state;

The importance of this statistical data cannot be over-emphasized

- 2. The consultants will represent the government in explaining how they can go about it. They will meet landlords all over the state to know their expectations from government concerning registering their title documents;
- 3. They will be guided by the experts on the need to title their landed properties and on the mode of payment and how and where payment could be made to ensure accountability.
- 4. They will guide them on how, to complete the process to fast-track access to getting certification for their parcels of land in the state or federal as the case may be.

This will be an added advantage for job creation and a great avenue for revenue generation. All the information to be generated from these and other sources will form the contents/products of the NASILADAB which I believe will be money – spinning – machine for our great Nation. This will be updated with latest information technology as they unfold. Data can be retrieved as at when necessary

1. NASILADAB COST/BENEFIT CONSIDERATIONS.

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This project requires a huge capital but the gain outweighs the cost of production/installation. However, with considerable promo, advert and publicity, the program is going to attract sponsorship from international organizations. The most fascinating part of it is the continuous avenue for generating fund just like the regular financial bank for life.

With the program content in view, the cost of procurement of the instruments, the hardware and the software and implementation the basic GIS phase to the final phase will be built at an average of three (3) billion US Dollars, depending on the contents. The average monthly revenue from specially identified sources while the project is on will be in the range of 100m-150million Naira or more, when completed the revenue will be more than double this amount. The capital invested will be fully recouped in five years.

Nevertheless, this project has the capacity for spontaneous revenue generation from the point of take-off and it should be noted that the employment generation and the other earlier stated advantages in this era of mass unemployment cannot be over emphasized.

This project is a perpetual revenue base for government which will be implemented in phases and the actual costing will depend on how comprehensive and complete the contents of the databank are.

## 24. FUNDING

Considering the enormity of this project and its importance to the nation, it could be financed by the IMF, World Bank or UNDP or any other relevant international agencies. The Federal and State governments should not toil with this project especially with spate of bombing and our exposure to explosives in recent times. I am sure with three billion US Dollars judiciously spent on this project the whole country especially our public worship centers, offices, Markets, Schools and other public Institutions shall be free from constant attack and bombardments and they shall become a safe haven for all and sundry. From there a continuous and perpetual upgrading and updating shall begin.

If undertaken by the Federal government, the State Governments shall pay for the cost of production of their area of Jurisdiction to the federal treasury before they could be given access through codes to download all data and information that constitute their State Security Land Databank. Every other USER shall also have to pay on line before the right codes of their property and area or features of interest can be released for them to access. Relevant areas shall be made public on the internet.

### 25. UNIQUENESS OF NASILADAB

1. Undoubtedly, NASILADAB has multiple functions and hence greater impact than the Land reforms exercises which is transitory in interpretations. NASILADAB will make land reforms and security updates convenient, continuous and consistent.

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- 2. Another thing that made it unique and desirable is that it will discourage the risk of direct contacts with bombs with handlers of metal or non-metal detector devices.
- 3. It will help in the war against corruption as it will reveal at a glance who owns what and where in Nigeria. Once the name or the address is queried it will bring out all data needed on the Nigeria soil.
- 4. It does not duplicate any department of Government; in fact, it has condensed many parastatals to one single profitable entity. It is in conformity with the present administration to cut cost of governance and to ensure that Zero Tolerance to Corruption agenda succeeds.
- 5. It is going to be unique and first of its kind in Africa only akin to what is obtainable in Britain and America.
- 6. If properly implemented, it will increase the IGR of the federal and State Government astronomically.
- 7. Most importantly it will enhance the safety of life and properties and ensure the security of all Nigerians.

27.0 NASILADAB ORGANOGRAM [NATIONAL, STATES AND LG LEVELS]:

- A. The PRIMARY information thus collated from the 377 Local government areas will be managed by a NASILADAB COORDINATORS in each local government of the Nation.
- B. These COORDINATORS will feed NASILADAB commission MANAGERS at the state capitals.
- C. The 36 State branch Managers will feed the NATIONAL security integrated land databank DIRECTORS headed by DIRECTOR GENERAL/CHAIRMAN who will preside over the affairs of the commission nationally.

National Security Integrated Land Databank Board/Commission at the National level, Abuja shall be composed of Directors as follows:

- The Chairman Presiding over all meetings, with
- Director [GIS],
- Director[ ICT],
- Director [Security],
- Director [Surveys/SGF]
- Director [Land/Urban planners]
- Director [Finance/Administration].

B. 36 States NASILADAB shall have management team of managers from the principal fields a s follows:

- State Chairman
- Manager [GIS]
- Manager [Surveys]
- Manager [ICT]
- Manager [Security]
- Manager [URP]
- Manager [Finance/Administration].

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C. The Local Government shall follow suite with a 7 man team of coordinators from the principal fields as follows:

- Local Council Chairman
- Coordinator [Surveys/Remote Sensor]
- Coordinator [GIS]
- Coordinator [Security]
- Coordinator [Lands/URP]
- Coordinator [ICT]
- Coordinator [Finance/Administration].

They will be responsible to the managers at their State level

## 26. SUGESTIONS ON THE MANAGEMENT TEAM

- Land Databank Consultants may be appointed to source for and constitute a technical team that will execute and manage other consultants to establish NASILADAB.
- A Central Security Land Databank Board with the mandate of setting up and completing the Digital mapping Project/Basic GIS framework- a basic pre-requisite for an enduring NASILADAB
- A NASILADAB commission could be set-up once and for all from the take off to its full implementation. A competent and hard working Director General/or Chairman should be empowered to man it.

## 27. MANAGEMENT TEAM OF NASILADAB

- TECHNICAL TEAM; There shall be young dynamic professional's National security land data bank technical team. They shall be involved in the establishment, monitoring, updating and maintenance of the institution both in the state and national levels by the surveyors/GIS/LIS experts
- BOARD OF DIRECTORS; Then the president shall constitute seasoned administrators, directors and heads of department as the National Security Integrated land databank commission of Nigeria board.

## 28. SUMMARY

NASILADAB is not limited to a particular professional group it cut across sundry professionals coming together to form a consortium to put this system together as a permanent and enduring System for emerging generations. I heard this revelation by the Holy Spirit that if this works in America, Britain and other advanced world it will work better here. This is why I am proposing this work to your Excellency early enough in your administration to help your government anti-corruption crusade as a lasting legacy to leave behind for generations of Nigerians and a foundation to build upon.

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- NASILADAB answers to all land use, acquisition, subdivision and local and international boundary matters to douse tension on land reform policies implementations.
- The security and safety devices which shall be built in into the system shall make crime detection easy all over Nigeria makes this system revolutionary in all ramifications,
- The transparency nature of the system will be of tremendous catalyst to d war against corruption agenda of your Excellency's administration.
- The all inclusive nature of the proposal will bring massive employment to the consortium, the boards, the administrative and technical personnel and the massive private sector involvement.
- It will not only reduce the boundary conflicts drastically but the security devices integrated in the system would ensure safety of Nigerians borders as it can monitor all activities around our borders and reduce the incidence of bomb explosions to the barest minimum as it is obtainable in the US and the UK.
- This will be achieved by accessing the best available science and technologies all over the world not only from the natural sciences and engineering, but also from the social sciences and security fields.
- Small and Medium scale entrepreneurs and innovators will emerge from this end and it will create a lot of jobs for skill and unskilled labors like the telecom sector.

## **29. CONCLUSIONS:**

I am presenting this proposal to FIG as a Challenge to the world of Surveyors worldwide to help find a lasting solution to the problem of Insecurity in Nigeria and Africa. I wish the FIG can help giving pressure to African leaders to Adopt this blueprint as a lasting Solution to the Security threats all over Nigeria and the rest of Africa

It will be my greatest joy and a height of fulfillment for me to witness this system working right in my eyes. If it has worked in America, Israel and in UK it is going to work even better in Nigeria. I am sure it will address all land and security questions nationwide. I will be glad seeing the Federal Executive Council, The National and State Assemblies and National Council of States using NASILADAB systems when they are in session. Therefore, I sincerely expect His Excellency Gen. Muhamadu Buhari to formally admit this technical blueprint to your administration agenda when presented and to be manned and coordinated by competent hand to see this project to a logical working pattern shown to me.

Thank you and God bless Nigeria. God Bless FIG Yours faithfully,

Surv. Bishop Isaac O Adedurin, MNIS, JP, Clergy. 08023139029 Managing Director

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