REPORT OF THE PRESIDENTIAL COMMITTEE

ON

PRODUCTION OF

MASTERPLAN AND ROADMAP FOR THE IMPLEMENTATION OF INFORMATION AND COMMUNICATIONS TECHNOLOGY FOR NATIONAL DEVELOPMENT

Federal Republic of Nigeria

September, 2010

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Executive Summary

1. In pursuit of the Federal Government's desire to promote and develop ICT through various key strategic polices, programmes and plans as a strong platform for Nigeria to leapfrog the nation from a resource dependent to a knowledge based economy, His Excellency, the Vice President of the Federal Republic of Nigeria, Architect Mohammed Namadi Sambo, GCON, set up a Presidential Committee on 30th July, 2010 to develop a Masterplan and Roadmap for the implementation of Information Technology for National Development. The Masterplan was also expected to provide a framework to enhance the productivity of key sectors of the economy and promote the development of new ICT based and knowledge intensive industries.

2. The Presidential Committee, made up of fourteen members, was chaired by the Honourable Minister of Science and Technology, Professor Mohammed Ka'oje Abubakar. In view of the cross-cutting nature of its assignment and in consonance with the directive of His Excellency, the Vice President of the Federal Republic, the Committee coopted five other members.

3. The Terms of Reference (TOR) of the Committee were to:
    I. Produce a Masterplan and Roadmap, with specific benchmarks and timelines for the implementation of Information and Communications Technologies for National Development in Nigeria;
    II. Propose virile institutional, legal and policy frameworks and recommend appropriate leadership structures for driving the proposed implementation programme;
    III. Work out comprehensive cost implication for the programme and identify viable funding options;
    IV. Advise government on effective strategies for harmonizing, coordinating, streamlining and re-focusing the implementation of Government IT programmes and projects, with a view to avoiding unnecessary duplication and saving costs;
    V. Identify relevant MDAs and other stakeholders with a view to assigning specific roles and functions in the process of programme implementation;
    VI. Examine critically all related security and privacy issues in all ramifications and advise on an efficient and effective means of guaranteeing the protection of National interest in the implementation of the programme;
    VII. Advise on other related matters that are capable of ensuring the timely realization of Government objectives on this subject.

4. The Committee worked through a Technical Committee and four Sub-Committees covering four thematic areas to accomplish its assignment. It reviewed Nigeria's current ICT status, using eight (8) key indicators of Infrastructural Accessiblity, thirty three (33) Global Information Technology Report Ranking (2009/2010), and Networked Readiness Indices to assess Nigeria's state of readiness to transit to knowledge based economy (KBE) using Brazil, China, India and Malaysia as comparative countries. An analysis of the indicators showed that Nigeria is at the bottom rung of the ladder in all respects except in the cases of mobile phone subscribers and internet users where Nigeria performed better than India.

5. Particularly instructive were the facts that Nigeria ranked 127th in Infrastructure Environment, 128th in Education Investment and 101st in Government Readiness out of 133 countries in the Global Competitive Index (GCI 2009/2010). The indices indicated steady deterioration when compared to the ranking of 88th in 2006, 94th in 2008/2009 and 99th in 2009/2010. Within the African continent, the 2009 African Competitiveness Report (ACR) ranked Nigeria below countries like Tunisia, South Africa, Namibia, Egypt, and The Gambia.

6. Specifically, the Committee found that the major challenges to ICT development included:

   I. Uncoordinated and inadequate policies coupled with the absence of appropriate legal and regulatory frameworks;

   II. Non enforcement of, and in some cases non-compliance with existing ICT policies;

   III. Inadequate and weak institutional framework precluding seamless synergy between existing ICT implementing institutions and lack of requisite ICT infrastructure;

   IV. Lack of a deliberate effort to mobilise the citizenry and fast-track ICT penetration, access and affordability;

   V. Weak Public Private Partnership framework militating against active participation of the Private Sector;

   VI. Poor state of the nation's economic infrastructure, particularly power; and

   VII. Inappropriate costing and poor funding of projects and programmes.

7. After an exhaustive deliberation on its Terms of Reference (TOR), the Committee make the following recommendations:

I. The establishment of a Ministry of Communications and Information Technology (MCIT) to coordinate policies and regulate development of ICT in Nigeria. The Agencies to be supervised by the proposed MCIT include NITDA, NCC, NBC (Technical components), NIPOST, Galaxy Backbone, Plc, CPN and a new ICT Intellectual Property Office;

II. The constitution of a National Advisory Committee to be chaired by His Excellency, the Vice President of the Federal Republic of Nigeria. The Committee is to advise Government on the overall policy direction at the highest level and deepen ICT development in Nigeria;

III. The review of all existing Information Technology, Telecommunications and Broadcasting Policies with a view to harmonising and streamlining them and producing one single Policy document for the ICT sector;

IV. The review and updating of existing laws and enactment of new laws to provide an enabling legal environment for the growth of the ICT sector. Specifically, the Committee recommends adoption of the draft e-Transaction Bill as an Executive Bill to fast track its immediate enactment into law and the review and update of the Laws of Evidence, Intellectual Property and Competition, Contract, Banking and Commerce. It also recommends the enactment of Laws on Computer Crime and the establishment of a regulatory framework and infrastructure for lawful transmission intercept.

V. The provision of a network of six interconnected Internet Exchange Points (one per geo-political zone) to handle all outgoing and incoming internet traffic to facilitate effective monitoring and control. The Committee also recommends the installation of Location Based Devices to enable tracking of calls and the deployment of an appropriate Content Management Infrastructure for the protection of under-aged children from improper content. The establishment of a national Computer Emergency Response Team (CERT) is also recommended.

VI. The deployment of a fibre optic backbone infrastructure that ensures high bandwidth availability, universal access and no single point of failure throughout the country. The Committee also recommends the deployment of an

interconnected network of fibre optic cables to link all State capitals and Local Government Headquarters, including strategic Military Formations, and complemented by full satellite network of transponders to provide effective redundancy;

VII.   The development of guidelines for the re-engineering and the automation of Government business processes including the strengthening of the ICT structures in the MDAs for effective public service delivery. This should be complemented by the establishment of Centres of Excellence for training of ICT professionals and deliberate efforts to encourage production and dissemination of digital contents;

VIII.   That all disparate databases should be harmonised, streamlined and interconnected into a single centrally coordinated National Database Systems with a view to providing a secure point of universal access and encourage information sharing and re-use across platforms;

IX.   That the estimated total cost of Five Hundred Billion naira (₦500 Billion) required to implement all the initiatives captured in the Masterplan Document is to be derived from the following sources: Government (35%), Development Partners and grants (15%) and Private Sector including PPP and FDI (50%);

X.   Strengthening the MCIT to work out a virile Public Private Partnership (PPP) framework for the active participation of the Private Sector to drive ICT penetration and thereby promote economic growth; and

XI.   The privatisation of NigComSat Ltd. and Galaxy Backbone, Plc to ensure efficient service delivery in the overall interest of the country.

8. To encapsulate all the above recommendations, a Masterplan and Roadmap including a Project Implementation Timeline (Annex A) was articulated to provide a logical framework for ease of implementation of all the initiatives contained in the report.

9. In view of the dynamic and fast developing nature of the ICT sector with its high rate of obsolescence, the Committee recommends a single 5-year implementation period (2010-2014) within which the content of the Masterplan should be fully accomplished.

1.0. INTRODUCTION

Over the last two decades, changes in technology, the forces of globalisation and liberalisation in economic and social life have been driving changes in the global socio-economic landscape. It is widely accepted that digitisation of the global economy in particular has increased the speed of globalisation and liberalisation. While the information revolution has resulted in several positive socio-economic impacts to mankind, the revolution has also intensified the need for competitiveness.

The general consensus is that ICT is a catalyst for increasing competitiveness and the emergence of the new economy, both as a sector and enabler for enhancing efficiency and productivity. It is also generally acknowledged that better quality public services, more responsive and appropriate for their users' needs, provided electronically by more efficient public administrations, are crucial to reap the benefits of the information revolution.

The Nigerian economy has undergone structural changes from an agriculture-based economy to one that has come to be dominated by oil, thereby leading to the weak development of the manufacturing sector. However, in the last few years, Nigeria has embarked on the implementation of a series of reforms that are interdependent and self reinforcing, aimed at the attainment of the MDGs which constitute quantifiable and achievable targets for delivering better and sustainable quality of life for the citizenry in a globalised world. The nation has also espoused an added overarching goal to become one of the 20 largest economies in the world by year 2020.This calls for enhanced national competitiveness and ICT is expected to play a key role in this wealth creation, both in terms of a sector and an enabler.

It is generally acknowledged that information is key to every aspect of human existence, be it education, empowerment of the citizenry, labour, economic growth, poverty reduction etc; it may therefore be stated that a community deprived of ICT infrastructure has been deprived of the ability to exploit the value of information. Consequently, without

information and the ability to communicate it, and given that over half the Nigeria population live in villages, the gap between urban and rural areas is significantly widened. Furthermore, "Bandwidth" has been described as the life-blood of the world's knowledge economy. Unfortunately, it is scarcest where it is most needed – in the developing nations of Africa which require low-cost ICT to accelerate their socio-economic development.

Several World Bank studies have indicated that every dollar invested in ICT translates to $6 of economic benefit to the country or the region where such investments have been made.

This is why most governments around the world are encouraging the investment and deployment of ICT.

It is in realisation of the above fact, that the Federal Government of Nigeria is desirous of promoting and developing ICT through various key strategic policies, programmes and plans as a strong platform for the country to leap-frog from a resource- dependent to a Knowledge-Based economy. This necessitated the constitution of a Committee by His Excellency, the Vice-President of the Federal Republic of Nigeria, Arch. Mohammed Namadi Sambo, GCON on Friday 30th July, 2010 to develop a **Masterplan and Roadmap for the Implementation of Information and Communications Technology for National Development** which will provide a framework to enhance the productivity of key sectors of the economy and promote the development of new ICT-based and knowledge-intensive industries.

1.1. Membership

The members of the Committee comprised of the following:

1. The Honourable Minister, Federal Ministry of Science and Technology (FMST) -   Chairman

2. The Honourable Minister and Deputy Chairman, National Planning Commission (NPC) Member

3. The Senior Special Assistant to the Vice President (ICT) -   Member

4. Head of the Civil Service of the Federation(OHCSF) -   Member

5. The Director -General, National Information Technology Development Agency (NITDA) Member

6. The Statistician- General, National Bureau of Statistics (NBS) -   Member

7. The Executive Vice -Chairman, Nigerian Communications Commission (NCC)-   Member

8. The Director- General, National Identity Management Commission (NIMC) -   Member

9. The Director -General, National Space Research and Development Agency (NASRDA)Member

10. The Managing Director, Galaxy Backbone, Plc -   Member

11. The Managing Director, Nigerian Communication Satellite(NigComSat) Ltd -   Member

12. The Executive Vice- Chairman, National eGovernment Strategies (NeGSt) -   Member

13. The President, Nigeria Computer Society (NCS) -   Member

14. The President, Computer Professionals Registration Council of Nigeria (CPN) -   Member

In view of the cross-cutting nature of its assignment, the Committee on the directive of His Excellency, the Vice-President, co-opted other relevant stakeholders considered to be strategic to the delivery of the assignment. The co-opted members were:

  I.   Representative of the Honourable Minister of Defense;

  II.   Representative of the Honourable Minister of Education;

  III. Representative of the National Security Adviser.

  IV.   Representative of the Director General, Budget Office of the Federation; and

  V.   Representative of the Governor, Central Bank of Nigeria.

1.2. TERMS OF REFERENCE (TOR)

The Terms of Reference (TOR) of the Committee were to:

  I.   Produce a Masterplan and Roadmap, with specific benchmarks and timelines for the implementation of Information and Communication Technologies for National Development in Nigeria;

II. Propose virile institutional, legal and policy frameworks and recommend appropriate leadership structures for driving the proposed implementation programme;

III. Work out comprehensive cost implication for the programme and identify viable funding options;

IV. Advise Government on effective strategies for harmonising, coordinating, streamlining and re-focusing the implementation of Government IT programmes and projects, with a view to avoiding unnecessary duplication and saving costs;

V. Identify relevant MDAs and other stakeholders with a view to assigning specific roles and functions in the process of programme implementation;

VI. Examine critically all security and privacy related issues in all ramifications and advise on an efficient and effective means of guaranteeing the protection of National interest in the implementation of the programme;

VII. Advise on other related matters that are capable of ensuring the timely realisation of Government objectives on this subject.

2.0. MODUS OPERANDI

The Committee was inaugurated by the Honourable Minister of Science and Technology on 3rd August, 2010. In order to facilitate its assignment and ensure it meets the target date for submission of its report, the Committee immediately set up a Technical Committee to undertake the assignment. The Director-General of NITDA, Prof. C. O. Angaye and the Senior Special Assistant (SSA) to the Vice-President on Information and Communications Technology, Dr. Baba J. Adamu served as co-Chairmen of the Technical Committee.

Pursuant to effective delivery of the assignment, the Technical Committee broke into four Sub-Committees. Each Sub-Committee examined specific ToR.

The four Sub-Committees were:

I.	Institutional, Legal and Policy Framework	Chaired by NITDA
II.	Infrastructure, National Security, Content and National Database	Chaired by NCC
III.	ICT in Government, Socio-Economic and Industry Development	Chaired by Galaxy BB, Plc
IV.	Costing and Funding	Chaired by NigComSat

The membership of the four Committees was drawn from the main Committee and the Sub-Committees were mandated to co-opt strategic stakeholders that could assist in carrying out their assignment whenever the need arose.

The composition of the Sub-Committees was as follows:

A. Institutional, Legal and Policy Framework

I.	National Information Technology Development Agency (NITDA)	Chair
II.	Nigerian Communications Commission (NCC)	Member
III.	Office of the Head of Civil Service of the Federation (OHCSF)	Member
IV.	Computer Professionals Registration Council of Nigeria (CPN)	Member
V.	National eGovernment Strategies (NeGSt)	Member
VI.	Federal Ministry of Science and Technology	Member
VII.	Galaxy Backbone, Plc	Member
VIII.	Nigerian Communications Satellite (NigComSat) Ltd.	Member

B. Infrastructure, National Security, Content and National Databases

I.	Nigerian Communications Commission (NCC)	Chair
II.	Galaxy Backbone, Plc	Member
III.	Nigerian Communications Satellite (NigComSat) Ltd.	Member
IV.	National Bureau of Statistics (NBS)	Member
V.	National Identity Management Commission (NIMC)	Member
VI.	National Space Research & Development Agency (NASRDA)	Member
VII.	Nigeria Computer Society (NCS)	Member
VIII.	Office of the National Security Adviser (ONSA)	Member
IX.	Ministry of Defence	Member

C. ICT in Government, Socio-economic and Industry Development

I.	Galaxy Backbone, Plc	Chair
II.	Nigerian Communications Commission (NCC)	Member
III.	National eGovernment Strategies (NeGSt)	Member
IV.	National Information Technology Development Agency (NITDA)	Member
V.	National Bureau of Statistics (NBS)	Member
VI.	Office of the Head of the Civil Service of the Federation (OHCSF)	Member
VII.	Nigeria Communications Satellite (NigComSat) Ltd.	Member
VIII.	Nigeria Computer Society (NCS)	Member
IX.	National Space Research & Development Agency (NASRDA)	Member
X.	Central Bank of Nigeria (CBN)	Member
XI.	Computer Professionals Registration Council of Nigeria (CPN)	Member

D. Costing and Funding

I.	Nigerian Communications Satellite (NigComSat) Ltd	Chair
II.	Nigerian Communications Commission (NCC)	Member
III.	National Planning Commission (NPC)	Member
IV.	Office of the Head of the Civil Service of the Federation (OHCSF)	Member
V.	Galaxy Backbone, Plc	Member
VI.	National Information Technology Development Agency (NITDA)	Member
VII.	Senior Special Assistant to the VP on ICT	Member
VIII.	Ministry of Finance	Member
IX.	Budget Office of the Federation	Member
X.	Central Bank of Nigeria (CBN)	Member

E. Ad-Hoc Committee on the Harmonisation of Reports

After series of deliberations and meetings, the Sub-Committees presented their reports to the Technical Committee for review and adoption. However, for effective harmonisation of all reports submitted by each Sub-Committee, an Ad-Hoc Committee

was constituted to coordinate and streamline them with a view to producing a single logical framework for the Masterplan.

The Committee which was chaired by the National Bureau of Statistics comprised the following:
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I.	Galaxy Backbone, Plc -	Member
II.	National eGovernment Strategies (NeGSt) -	Member
III.	Computer Professionals Registration Council of Nigeria (CPN) -	Member
IV.	Nigerian Communications Commission (NCC) -	Member
V.	National Information Technology Development Agency (NITDA) -	Member

3.0. APPRAISAL OF THE CURRENT ICT ENVIRONMENT IN NIGERIA

Information and Communication Technologies (ICT) have brought about unprecedented improvements in the world's economic, political and social systems. This has led to the development of new goods and services with attendant significant positive impact on our way of life, such as no other technology has done before.

In realization of the above and the need for Nigeria to bridge the digital divide and be positioned as a major player in the global information society, the Federal Government of Nigeria has embarked on some major initiatives to enhance ICT development in the country.

Prior to 1999, development in the ICT sector of Nigeria was very low. For instance, total fixed telephone lines were less than 400,000 while regular internet users were less than 200,000. The federal government therefore embarked on major reforms in the ICT sector which included the:

I. implementation of a new National Telecommunications Policy in September 2000, followed by the enactment of the Nigerian Communications Act 2003 which strengthened the regulatory performance of the Nigerian Communications Commission (NCC);

II. development and launch of National Policy on Information Technology in 2001 and the establishment of NITDA to implement the policy, co-ordinate and regulate Information Technology development in the country;

III. launch of National Space Policy and the establishment of the National Space Research and Development Agency (NARSDA) to implement the Space Policy and the Nigerian Satellite programme;

IV. promulgation of the National Broadcasting Commission Act and the establishment of NBC for the implementation of the National Mass Communication Policy with particular reference to broadcasting;

V.   incorporation of NigComSat Ltd. as a government owned company established in 2006 to manage and operate the first geostationary communications satellite in sub-Saharan Africa i.e. The *Nigerian Communications Satellite-1* (*NigComSat-1*)**;**

VI.   incorporation in 2006 of Galaxy Backbone, Plc as a government owned corporation   with the official mandate to build and operate a single nation-wide IT infrastructure platform to provide network services to all Federal Government Ministries, Departments and Agencies (MDAs);

VII. establishment of Nigeria Internet Registration Authority (NIRA) in 2006 to increase Nigeria's presence in the cyberspace; and

VIII. establishment of a Nigeria Internet Exchange Point (IXP) in 2007 to keep local internet traffic local and reduce the cost of internet service within the country; and

The various efforts have culminated in massive development in the ICT sector. For instance, Nigeria has moved from about 400,000 fixed lines pre- 1999 to over 72 million lines by the first quarter of 2010, thereby making Nigeria's telecommunications market the fastest growing in Africa. Investment in the sector alone in Nigeria had risen to over $18billion with $12billion coming from Foreign Direct Investment while the balance of $6billion was from within the country.

There is now massive ICT deployment in the functioning of government organisations, as well as in the private sector. ICT now drives virtually all activites in the financial and oil and gas sectors while various e-Government initiatives are ongoing in various departments at the three tiers of government. The number of licensed Internet Service Providers (ISPs) and investment in the sector in the last 8-9 years also increased tremendously. The Nigerian internet population witnessed a boost from about 2.4million users in 2005 to an estimated 10million in 2008. The figure currently stands at over 24 million.

Government initiatives and policies have led to the creation of the requisite enabling environment thereby engendering both local and foreign direct investment in ICT development in Nigeria. Over four computer assembly plants have been established in Nigeria while ICT multinational companies now have offices across the country.

The newly completed National Information and Communications Technology for Development Plan (ICT4D), a compedium of specific actions, programmes and timelines, has also been proposed for ICT development in Nigeria.

In spite of the above listed commendable efforts, Nigeria still ranks abysmally low on the basis of various global indices used to assess the country's readiness to transit to a knowledge-based economy compared with other countries such as Brazil, China, India and Malaysia. Analysis of the indicators shows that Nigeria is at the lower rung of the ladder in all respects except in the cases of mobile phone subscribers and internet users where the country fared better than India.

Particularly instructive are the facts that Nigeria ranked 127 in Infrastructure Environment, 128 in Education Investment and 101 in Government Readiness out of 133 countries. The nation is currently one of the least competitive countries in the world in both composite and individual sector competitiveness. It is currently ranked 99 out of 133 countries in the Global Competitive Index (GCI 2009/2010). This indicates steady deterioration when compared to the ranking of 88 in 2006 and 94 out of 134 in 2008/2009. Within the African continent, the 2009 African Competitiveness Report (ACR) ranked Nigeria below countries like Tunisia, South Africa, Namibia, Egypt, and The Gambia.

In respect of knowledge and digital divide, the situation is even more disturbing. This is in terms of knowledge creation, penetration of ICT, access to and usage of internet as well as telephone penetration (fixed and mobile) and physical infrastructure. The knowledge and digital divide cuts across geographical, gender and cultural dimensions. It exists among the 36 states of the Federation and the Federal Capital Territory; the 774

Local Governments, rural and urban areas, men and women, rich and poor, young and old, able bodied and disabled, illiterate and educated.

3.1. GAPS IDENTIFIED IN ICT DEVELOPMENT

The major challenges militating against the growth and wide spread use and applications of ICT in Nigeria include:

I. Uncoordinated and inadequate policies coupled with the absence of appropriate legal and regulatory frameworks;

II. Non enforcement of, and in some cases non-compliance with existing ICT policies;

III. Inadequate and weak institutional framework precluding seamless synergy between existing ICT implementing institutions and lack of requisite ICT infrastructure;

IV. Lack of a deliberate effort to mobilise the citizenry and fast-track ICT penetration, access and affordability;

V. Weak Public Private Partnership framework militating against active participation of the Private Sector;

VI. Poor state of the nation's economic infrastructure, particularly power; and

VII. Inappropriate costing and poor funding of projects and programmes.

It was the realization of the urgent need to tackle these challenges head-on with a view to putting the country on the same pedestal with other successful world economies that informed the constitution of this Presidential Committee charged with the task of working out an implementable Masterplan and Road map for the use of ICT for National development.

4.0. RECOMMENDATIONS

TOR 1

To produce a Masterplan and Roadmap with specific benchmarks and timelines for the implementation of Information and Communications Technologies for National Development in Nigeria

The Committee reviewed the contemporary situation whereby various Agencies of Government conceive and implement national ICT programmes and projects without relating to one another. This had resulted in duplication of efforts, lack of harmonisation and, in a number of cases, abandoned projects and projects with little or no impact to national development. It has also resulted in waste of both time and scarce financial resources.

Accordingly, the Committee proceeded to articulate a comprehensive solution package, in the form of a well-balanced, mutually supportive and fully harmonised set of initiatives critically needed to provide a virile ICT infrastructural platform capable of actively driving national development, in all its ramifications. The Committee also proposed the institutional, legal and policy frameworks required to drive the implementation of the solution package to full realisation within the shortest time frame possible.

The details of the Committee's recommendations are encapsulated in the accompanying document captioned the "Masterplan and Roadmap for the Implementation of Information and Communications Technologies for National Development".

TOR 2

To propose virile Institutional, Legal and Policy frameworks and recommend appropriate leadership structures for driving the proposed implementation programme

Having established that one of the most important factors militating against the expedited growth of the ICT sector is the lack of harmonisation in project conception and execution by relevant ICT implementing Agencies of Government, the Committee deliberated on various options available to remedy the situation.

At the end of its discourse, the Committee came to a unanimous conclusion that the most effective option is to pool all ICT implementing organs of Government under a single administrative structure. The Committee therefore recommends the creation of a Ministry of Communications and Information Technology (MCIT), to be charged with the responsibility of providing administrative and policy direction to all ICT implementing

Agencies of Federal Government. The Agencies to be supervised by the proposed Ministry of Communication and Information Technology (MCIT) are:

    I.   NITDA;
    II.   NCC;
    III.   NBC;
    IV.   NIPOST;
    V.   Galaxy Backbone Plc;
    VI.   CPN; and
    VII.   A new ICT Intellectual Property Office.

In addition to the creation of the MCIT, the Committee proposed an administrative structure of the new Ministry and also identified the various legal and policy instruments and Acts that needed to be created, reviewed, up-dated and/or amended in order to provide a virile ICT-enabled environment, nation-wide. These are adequately detailed in the Masterplan Document.

Furthermore, the Committee recommended the privatisation of NigComSat Ltd. and Galaxy Backbone, Plc in order to ensure efficient service delivery.

TOR 3

To work out comprehensive cost implication for the programme and identify viable funding options.

The Committee took a comprehensive look at all existing sources through which ICT programmes and projects are currently being funded. Having regard to the compelling objective of ensuring a well harmonised and streamlined implementation of ICT initiatives nationwide, so as to achieve an enhanced cost-effectiveness, the Committee recommends the funding of the initiatives identified in the Master plan Document from the following sources:

    I.   Annual Budgets of the proposed MCIT and its Agencies;
    II.   Universal Service Provision Fund (USPF) of the NCC;
    III.   National Information Technology Development Fund (NITDEF) of the NITDA;
    IV.   20% of Petroleum Technology Development Fund (PTDF);
    V.   20% of Education Trust Fund (ETF);
    VI.   10% of Funds under the Millennium Development Goals (MDG);
    VII.   Private Sector Funds, including those through the Public-Private Partnership funding model;
    VIII.   Foreign Direct Investments (FDI); and
    IX.   Funding from Development Partners and Donor Agencies.

The estimated total cost of the initiatives proposed in the Masterplan Document comes to about ₦500 billion.

In arriving at the decision to include funds from the PTDF, ETF and the MDG, the Committee noted that a number of ICT projects/programmes are currently being implemented from these intervention funds. Pooling these funds will provide the singular opportunity to streamline and coordinate the funded ICT projects.

TOR 4

To advise Government on Effective Strategies for Harmonising, Coordinating, Streamlining and Re-focusing the Implementation of Government programmes and projects, with a view to avoiding unnecessary duplication and saving costs.

The Committee considered the current practice where Agencies of Government implement various ICT programmes and projects without harmonisation or coordination, thereby leading to undesirable overlap and duplication and, inevitably, waste of scarce public resources. Accordingly, it recommends the review of the enabling Acts, or other legal instruments, establishing these Agencies with the view to streamlining their individual mandates in such a manner as to more precisely define the range of their individual operations and thereby avoid duplication of functions.

TOR 5

Identify relevant MDAs and other stakeholders with a view to assigning specific roles and functions in the process of programme implementation.

The Committee considered all initiatives proposed in the Master plan Document and determined the Agency/Agencies most appropriate to handle their implementation, either solely or in collaboration, based on the existing mandates of the Agencies. These information ha been reflected accordingly in the Master plan Document.

TOR 6

To examine critically all security and privacy related issues in all ramifications and advise on an efficient and effective means of guaranteeing the protection of National interest in programme implementation.

The Committee reviewed the current situation characterised by very weak and uncoordinated infrastructure and tools that could enable various regulatory authorities in the sector to exercise meaningful, prompt, and effective supervision, monitoring and control of system transactions with a view to assuring data security and citizen's privacy while simultaneously, and proactively, executing necessary protocols to guarantee national security.

Accordingly, a number of security related initiatives were recommended which, when implemented together, will, in the professional opinion of the Committee, adequately redress the situation. These have been included in the Masterplan Document under the subhead of "National Security Infrastructure".

In addition, the Committee recommends the re-organisation/reform of the various national databases so that they can play critical complementary roles towards the enhancement of National Security.

The legal instruments necessary to support the security and privacy issues were also identified. Specifically, the Committee noted the existence of a draft
e-Transaction Bill, which had already secured the necessary buy-in by all stakeholders and therefore recommends that the draft Bill be adopted as an Executive Bill (having gone through the Federal Ministry of Justice) and be presented to the National Assembly, within the shortest time possible.

TOR 7

Advise on other related matters that are capable of ensuring the timely realisation of Government objectives on this subject.

In this regard, the Committee appeals to Government at the highest level to provide the sustained political will critically needed to jump-start, drive and support the implementation of the content of this Masterplan Document to maturity.

5.0. CONCLUSION

It is globally acknowledged that a strong ICT infrastructure has played very crucial roles in the dramatic turn-around of various nations, especially the emerging countries of Asia. Nigeria should also exploit this technology in its drive towards achieving the declared Vision 20:2020. Accordingly, the various initiatives and recommendations in this Report had been carefully and painstakingly put together with this singular goal in mind.

It is pertinent to invite Government's attention to the highly dynamic nature of the ICT sector with its attendant high rate of system obsolescence. An expedited implementation of the recommended initiatives is therefore strongly advised. The Committee believes that a coordinated implementation will definitely achieve the desired results and set Nigeria on the path of economic prosperity.

Finally, the members of the Committee feel highly honoured to serve their fatherland in this esteemed capacity and wish to express their individual and collective gratitude to His Excellency, the Vice President of the Federal Republic of Nigeria for the unique opportunity given them.

Long Live The Federal Republic of Nigeria.

6.0. MASTER PLAN FOR THE IMPLEMENTATION OF ICT FOR NATIONAL DEVELOPMENT

This Document encapsulates the idea and conceptions of the Committee in terms of specific programmes, projects and initiatives which will be implemented within a period of five (5) years aimed at providing a veritable platform that will uplift the country to meet up with its peers in the comity of nations. A Master plan of this nature normally has Short, Medium and Long-term implementation frameworks. However, having regard to the highly dynamic and fast developing nature of the ICT sector with its high rate of obsolescence, the Committee recommends a single 5-year implementation term within which all basic and enabling infrastructure would be put in place.

6.1. VISION

To make Nigeria one of the foremost ICT enabled nations of the world

6.2. MISSION

To transform Nigeria into a major Information and Communications Technology hub where knowledge, technology and innovation drive wealth creation, empower citizens, preserve security, promote efficiency and national competitiveness for sustainable socio-economic development

6.3. STRATEGIC GOALS AND OBJECTIVES

S/N	GOALS	OBJECTIVES
1.	To make ICT an enabler to transform the socio-economic sectors of Nigeria	I. Ensure that 60% of the government workforce acquire and use work-related ICT applications and skills in their functions by 2012 and 75% by 2014; II. Promote acquisition of basic ICT knowledge and applications among the citizenry to achieve 50% increase in ICT literacy level by 2014; III. Provide a framework for the successful coordination and implementation of the ICT NV20: 2020 strategies and initiatives by 2010.
2.	To develop the ICT industry to global standards	I. To increase the level of ICT-centric FDI (Foreign Direct Investment) flows to Nigeria by 50% annually from 2011 to 2014;

S/N	GOALS	OBJECTIVES
		II. 5% contribution to GDP by the ICT sector by 2014 by putting in place initiatives to develop ICT as an economic sector; III. To encourage 30% of Nigerian ICT firms to acquire international certifications by 2014.
3.	To deploy ICT in Government to improve the efficiency and effectiveness of service delivery	I. Ensure the interconnectivity of all Government MDAs on a single network infrastructure platform; II. Ensure that critical public services (e.g. citizen, birth and death registration, revenue collection, driver's license applications, etc) are offered online by 2014; III. Achieve computerisation of 75% of the business processes of MDAs by 2014.
4.	To establish the Ministry of Communications and Information Technology for regulation and development of the ICT Sector in Nigeria	I. Re-engineer the current institutional framework for regulation and development of ICT in Nigeria.
5.	To review and harmonise all existing Legislation (Laws and Policies) and Enact/Update Relevant Laws to facilitate Implementation of ICT programmes Nationwide	I. To enact ICT enabling Legislations; II. To produce a single harmonised policy document for the ICT sub-sector.
6.	To attain sufficient capacity in ICT Infrastructure that will drive socio-economic development	I. Have a fibre-optic backbone infrastructure that ensures high bandwidth availability, universal access and no single point of failure throughout the country by 2014; II. To have all Federal & State networks connected to the National fibre backbone by 2014; III. Interconnect all National Databases by 2014; IV. Achieve 60% local content by 2014; V. Ensure appropriate security infrastructure to reduce computer related crimes by 80% by 2014.
7.	To produce standards and guidelines for ICT use and application and for programmes and projects implementation	I. Ensure development of appropriate standards and guidelines to regulate the ICT sub-sector by 2011.

7.0. INITIATIVES TO REMEDY IDENTIFIED GAPS

The initiatives in this section were proposed to redress the various gaps that have been identified to exist currently in the overall development of the ICT sector in Nigeria. The initiatives have been carefully selected, structured and harmonised to avoid unnecessary duplications. The goal is to achieve a high integrity, fully integrated and secure national ICT infrastructural system that is fully supportive of the national drive towards the twin goals of the MDGs and the NV 20:2020.

7.1. ICT INFRASTRUCTURE

The initiatives covered in this sub section are those that provide physical connectivity between various nodes within the ICT network, either by means of fibre optic cables or satellite. The existing system is very weak, whether in terms of coverage, strength or capacity. Implementing these initiatives will provide effective remedies for the observed gaps.

Goal: To deploy ICT Infrastructure with sufficient capacity and coverage to support national development.
Objectives:
1. *Have a fibre-optic backbone infrastructure that ensures high bandwidth, universal access and no single point of failure throughout the country by 2014*
2. *Have all Federal and State networks connected to the National fibre backbone by 2014*
3. *Interconnect all National databases by 2014*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
1. Establish regional cross border fibre link with neighbouring countries like Chad, Benin, Cameroon and Niger to provide redundancy on the fibre connecting Nigeria to the rest of the world.	2011-2014	Reduction in down time due to Fibre cuts	Scope creep and extended implementation period	Proper project monitoring	NCC in collaboration with Private Sector, Galaxy	3,500	NCC/USPF, & Private Investors
2. Facilitate the extension of fibre back bone to reach every state capital of the federation in the first instance	2014	% of states covered	Delay in right of ways	Engage all stakeholders from inception	NCC, Galaxy.	150,000	NCC/USPF & Private Investors
3. Provide metal pipes to serve as	2011-2014	% of states	Delay in right of	Engage all	NCC in	100,000	USPF &

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
ducts for fibre and other cables installation interconnecting all state capitals. This should reduce challenges of acquiring right of ways for network expansion.		covered	ways	stakeholders from inception	collaboration with Private Sector		Private Investors
4. Extend fibre from State Capitals to every local Government Headquarters while connecting towns along the routes	2010-2014	% of states covered	Delay in right of ways	Engage all stakeholders from inception	NCC in collaboration with Private Sector (On-going)	50,000	NCC/USPF & Private Investors
5. Ensure deployment of Metro fibre rings connecting all densely populated areas as well as switching centres of telecoms networks	2010-2014	% of states covered	Delay in right of ways	Engage all stakeholders from inception	NCC in collaboration with Private Sector	500	NCC/USPF & Private Investors
6. Extend fibre from all switching centres to base stations in major cities, starting from Abuja and Lagos.	2011	% of major BTS covered	Delay in Right of ways & community users	Engagement of all stakeholders	NCC & Network Operators	100	NCC/USPF & Network operators
7. Support deployment of fibre to homes and premises as pilot schemes so that people can appreciate the benefit.	2011	% of homes covered in Abuja and Lagos	Delay in right of ways	USPF & Private Investors	NCC	50	NCC/USPF & Galaxy
8. Deployment of fibre to the Tertiary Institutions	2010-2014	% of Tertiary institutions covered	Delay in right of ways	Engagement of all stakeholders	Galaxy	14,252	NCC/USPF
9. Deployment of fibre to major government hospitals	2010-2014	% of hospitals covered	Delay in right of ways	Engagement of all stakeholders	Galaxy	14,252	NCC/USPF
10. Provide fibre connectivity to content locations such as libraries, post offices, TV stations and antennas to	2011-2014	No of locations covered	Delay in right of ways	Sensitisation	Galaxy	1,420	NCC/USPF

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
enable access to content							
11. Project to Subsidize Airport Hot Spots for at least 3 major airports as pilot schemes.	2011	No of Airports covered	Poor quality of work	Proper quality management	NITDA	15	NCC/USPF
12. Free up the spectrum (698-862) MHz from analog TV for IMT use so as to promote competition and bring down prices.	2011	Spectrum capacity recovered	Non conversion of analog to digital	Ensure migration from analog to digital	NBC, NCC	1200	NCC/USPF, NBC
13. Deploy additional satellites with full satellite and transponder redundancy to compliment terrestrial infrastructure	2011-2014	Satellite deployed and operational with redundancy	Missed deadlines	Proper monitoring	NASRDA	75,000	Budgetary allocation
14. Provide six (6) interconnected Internet Exchange Points (1 per geo-political zone) that interconnect all Internet Service Providers (ISPs) in Nigeria to enable them exchange domestic Internet traffic locally without sending messages across multiple international hops to reach final destination.	2011	% of national traffic not going beyond borders	Non compliance by ISPs	Sanctions	NCC, NITDA	475	NITDA/NITDEF & NCC/USPF
15. Connect all Government MDAs in Abuja via Fibre and enable e-communication on the 1-Gov.Net Hosted, Messaging and Collaboration platform (email, VOIP,	2011	% of MDAs connected and using service	Lack of funding, lack of user training	Train users and provide funding	Galaxy	600	Budgetary allocation

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
chatting, portals , video conferencing etc)							
16. Provision of RITCs to enhance access to ICT facilities in the rural areas of Nigeria. All existing and proposed community (CCC)/rural centres to be subsumed within these RITCs	2013	25% access from rural areas by 2010, 50% by 2011, 75% by 2012 and 100% by 2013	• Lack of buy-in • Non delivery to standard	• Sensitization • Proper Project Management • Build, Operate and Transfer Models	NITDA to develop models. USPF to provide take-off fund and minimal recurring subsidy, and to lead programme group in collaboration with GALAXY	7,306	USPF/NCC, NITDEF/NITDA
17. Upgrade ICT facilities in Post Office Buildings Nationwide	2014	Number of Post office Buildings Rehabilitated or remodelled.	Lack of funding	Provide funding	NIPOST in collaboration with NITDA, GALAXY and NigComSat	1,420	Budgetary allocation
18. Give special tax incentives for all imported equipment to be used for green uncovered rural areas	2011-2014	Number of rural areas covered by Operators	Abuse	Monitoring	NCC, NITDA, Presidency, Ministry of Finance	N/A	NA
19. ICT4D Sectoral Implementation	2014	Increase in the level of deployment in major economic	Funding and lack of awareness	Ensure collaboration with key stakeholders	NITDA	5,000	NITDEF, Development partners and budgetary allocation

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
		sectors					
20. Implementation of Digital Resource Centres to include eLibrary and Research facilities for all Military Training Institutions	2011-2014	No of such Digital Resource Centres implemented	Lack of fund	Provide fund	Defence		Budgetary allocation
21. Deployment of fibre connectivity to all military formations for effective integration of all defence related information and communication assets	2011-2014	No of military formations covered	Lack of fund	Provide fund	Defence		Budgetary allocation
22. Deployment of a dedicated fibre connectivity for fast and effective e-Payment traffic nationwide	2011-2012	Faster and more efficient e-Payment network	Non Compliance by stakeholders	Effective collaboration of stakeholders	NITDA, CBN, Galaxy in collaboration with Private Sector	16,700	CBN, NCC/USPF
23. Implement ICT initiatives contained in FSS 2020 Document	2011-2014	% completion of initiatives in the document	Non-realisation of the Vision	Enforcement by the National	Various MDAs contained in the Document	-	-

7.2. NATIONAL SECURITY INFRASTRUCTURE

The initiatives covered were aimed at providing effective means of monitoring and /or auditing system transactions in such a manner as to protect the privacy and sensitive data of individuals, organisations, and governments without jeopardising national security.

Goal: To achieve a robust, secure and integrated system capable of assuring citizen's privacy, data security and overall national security
Objective*:*
1. *Ensure appropriate security infrastructure to reduce computer related crimes by 80% by 2014*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
1. Provide six (6) interlinked gateways to Internet Exchange Points (1 per geo-political zone) on which all incoming and outgoing internet traffic can be monitored and controlled	2011	Gateway in place	ISPs do not connect	Enforce	Galaxy	See Initiative 14 under ICT Infrastructure	Same as in Initiative 14 under ICT infrastructure
2. Mandate all Telecom Operators to install/activate location-based devices(GPS & Non-GPS enabled) to enable tracking of calls/handsets	2010	Services activated	Non compliance	Enforce	NCC	540	USPF/NCC
3. Put in place an infrastructure for lawful intercept to include voice, data etc	2010-2011	Call intercept activated	Non compliance	Enforce	ONSA, NITDA, NCC	1,000	ONSA
4. Deploy appropriate Content Management Infrastructure for the protection of under aged children	2010-2011	% of inappropriate contents	Improper implementation	Proper project management	ONSA, NITDA	100	Budgetary allocation

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
from inappropriate contents		successfully blocked					
5. Put in place infrastructure to enable the effective operation of a national Computer Emergency Response Team (CERT) and forensic laboratory	2010	% reduction in cybercrime	Improper implementation	Project management	ONSA	500	ONSA, NITDA/NITDEF
6. Rapid deployment of Emergency Communications Centres Project in line with global standards	2011	% of state capitals covered	Poor implementation	Proper implementation and monitoring	NCC in collaboration with Internal Security, traffic and disaster management agencies and Private Operators, NEMA	2,000	NCC/USPF
7. Deploy high resolution satellite imagery to enable monitoring of airspaces and seas. This will integrate with existing infrastructure	2011-2012	System in place	Lack of skills	Train adequately	NASRDA, ONSA	10,000	Budgetary allocation.
8. Deploy terrestrial surveillance monitoring infrastructure for unauthorized signal emmissions.	2010	No of sites implemented	Project delay due to bureaucracy	Management of expectations	NCC & Defence	1, 500	NCC/USPF & Defence
9. Deploy under-water transducers for	2011	No of sea sites	Project delay	Management	Defence	750	Defence

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
detecting unauthorised /unwanted signal emmissions.		implemented	due to bureaucracy	of expectations			
10. Deploy camera surveillance systems at strategic locations	2010-2012	% of strategic locations covered	Lack of funding	Provide	NCC, NigComSat, Defence, Galaxy	500	NCC/USPF
11. Deployment of an integrated and independent security communication system for Emergency Communication services	2014	Number of states covered	Lack of adequate funding	Provide	NCC, NigComSat, Defence	8,999.00	Budgetary allocation
12. All 2-way V-SATs and other Gateways must provide links for lawful intercepts or at least their locations must be known.	2012	% of licensees that have complied	Lack of cooperation	Intensive monitoring & Surveillance	NCC, ONSA	300	NCC/USPF
13. Deployment of National PKI platform for all ICT related activities	2011	PKI implemented	resistance	Educate	NITDA, GALAXY, CBN, ONSA	1,680	NITDEF/NITDA
14. Deployment of Telepresence solutions at strategic levels of military high commands	2011-2014	No of Military High Commands covered	Lack of fund	Provide fund	Defence		Budgetary allocation

7.3. DATABASE INFRASTRUCTURE

Initiatives covered are those relating to systems and structures that support the national repository of critical data and information in the country, its citizens including its socio-political, economic, cultural affairs, etc. Currently, there exist several uncoordinated electronic services such as e-Governance, e-Commerce, e-Learning, e-Payment, e-Banking, etc that run on independent databases across both public and private sectors in the country. This is definitely counter-productive. There is therefore the need to centrally coordinate these databases with a view to providing universal access and encourage information sharing and re-use across platforms.

Goal: To achieve an integrated, harmonised and well managed national database system that is fully accessible.
Objective:

1. *Interconnect all National databases by 2014*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
1. Harmonise similar, existing/planned Databases and their fields to eliminate duplication (Identity dependant, Corporate and Banking database.	2010	% harmonization achieved	Resistance	Sensitisation	Galaxy, NITDA	50	Galaxy, NITDA/NITDEF
2. Use SIM cards registration as incentive to get people to provide data to use for identification purposes.	2010	% of SIM card owners registered	Resistance	Education	NCC	6,200	NCC
3. Deploy the framework , Interconnectivity and point of access for national databases	2011	Platform readiness	Lack of funding	Identify sources of funding	Galaxy, ONSA, NITDA, NBS, NCC	2, 200	Budgetary allocation, NBS
4. Replicate interconnected national databases to provide redundancy at the Government Data Centre	2012	% of database replicated	Resistance, non-readiness of infrastructure	Sensitization, collaboration	Galaxy	1,000	Galaxy, MDAs
5. Implement the National Identity	2010-	• % of	Non	Project	NIMC	1,500	Budgetary

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
Management System as a critical foundation for all citizen centric services	2012	populace with ID card • No of other systems using it for verification	completion	Management			allocation
6. Provide 1-Gov.Net (Gov intranet) and Internet connectivity for all ministries and parastatals nationwide	2011	• No of MDAs connected • % of staff accessing the 1-Gov.Net	Lack of patronage Lack of adequate funding	Educate users Provide funding	GALAXY	10,000	From Special und
7. Update and Implement a world-class comprehensive National addressing system and post-code that will facilitate the identification of residences, businesses and citizens	2014	% Coverage	Lack of funding	Provide funding	NIPOST	9,000	Budgetary allocation

7.4. CONTENT INFRASTRUCTRE

Content refers to the actual intelligible entities, information or data that is transmitted from one point to the other over the ICT infrastructure. Initiatives covered in this section aim to remedy the gaps currently existing in the production and dissemination of digital contents.

Goal: To provide enabling environment to promote and sustain the growth of digital content.

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agency	Estimated Cost (N'm)	Source of Funding
1. Explore the possibility of moving to IPv6 addressing scheme. This can be achieved by offering subscribes discounts on subscription charges	2010	% of subscribers migrated	Resistance	Education, incentive	NCC, NITDA	200	NITDA/NITDEF
2. Provide grants for research on the production of digital content such as databanks, courseware, portals, digital libraries and archives, etc.	2011-2014	No of research conducted	Inappropriate use of funds	Proper monitoring	NITDA	750	NITDA/NITDEF
3. Make it mandatory for all MDAs to have locally hosted functional web presence	2010	% of MDAs who comply	• Lack of skills	• Educate • NITDA to provide migration plan • NITDA to provide standards and sanctions	MDAs, OSGF	100	Budgetary allocation

7.5. PROMOTION OF LOCAL ICT INDUSTRY

A virile local ICT industry is crucial to the sustainability of the ICT sector. Apart from its ability to promote knowledge transfer, it will also support government efforts in wealth creation, employment generation and more importantly reduce capital flight.

Goal: To develop the ICT industry to global standards
Objectives:
1: *To increase the level of ICT-Centric FDI (Foreign Direct Investment) flows to Nigeria by 50% annually from 2011 to 2014*
2: *5% contribution by the ICT sector to GDP by 2014*
Achieve 60% local content by 2014

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Commercialisation of Research and Development (R&D) in Nigeria: Impact Assessment of the Roles of Intellectual Property and Technology Transfer Offices (IPTTOs)	2013	No of successfully commercialised research results	Misappropriation	Close supervision	NACETEM, NOTAP	80	Research Fund
2. Where relevant enforce the circular directing MDAs to acquire local products and services but without compromising quality and industry standards	2010	% of compliance	Non-compliance	Impose sanctions for non compliance	OSGF, NITDA	5	Budgetary allocation
3. Provide standards for establishment of ICT Parks	2011	Standards in place	Non-compliance	Engage stakeholders	NITDA	30	NITDEF/NITDA
4. Provide incentives for the private sector to establish ICT Parks through tax rebates, easy access to land, etc	2012-2014	No of ICT Parks created	Lack of incentives	Engage stakeholders to get their buy-in	NITDA	1,000	NITDEF/NITDA

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
5. Achieve twenty per cent of local content in ICT hardware, software and services by 2014	2014	% of local content achieved	Lack of local content capacity to meet demand	Provide incentives to meet demand	NITDA, NIPC, BPP	1000	Budgetary allocation
6. FGN should launch and invest in more commercial satellites; PPP options should be explored.	2011-2014	No of commercial satellites launched by FGN and of PPPs formed	Government Interference	Keep Government equity below 35% in PPP	NASRDA	5,650	Budgetary allocation/Private Sector
7. Establishment of Software Development Centres	2013	Increased local content software in Nigeria	Sustainability	Proper Monitoring	NITDA	1,000	NITDEF/Budgetary allocation

7.6. ICT INDUSTRY STANDARDS

The development and enforcement of industry standards in all project implementation will ensure interoperability of various systems and avoid the incidence of technology dumping. This is very crucial to the sustainability of projects and programmes in order to ensure that the desired national objectives for their implementation are realised.

Goal: To ensure the availability of and compliance with adequate industry standards in all projects and programmes implementation.

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Development of standards, guidelines and frameworks for ICT uses and applications in Nigeria.	2011	Achievement of interoperability in all ICT projects	Non-compliance	Ensure collaboration with key stakeholders	NITDA	500	NITDEF

7.7. ICT HUMAN CAPITAL DEVELOPMENT

Human capital is crucial to the successful attainment of the national vision in the ICT sector. These initiatives are aimed at providing an enabling environment capable of improving the ICT compliance level of Nigerians.

Goal: To enhance the overall eReadiness rating of Nigerians
Objective:
1. *To develop the requisite Human Capital Requirement for the ICT sector*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Establishment of ICT Centres including virtual library in all Nigerian tertiary institutions (ICT in Education Programme)	2013	At least 1 in each geo-political zone in 2010, 1 in each State by 2011, 75% of all tertiary institutions in 2012 and 100% by 2013	Lack of sustainability	• Proper project Management • Build, Operate and Transfer model	NUC,NITDA, CPN and NCC Tertiary Institution Access Programme (TIAP)	1,800.00	NITDEF
2. e-Readiness Capacity Building Programme for top Government officials	2012	25% of officers covered by 2010, 75% by 2011,100% by 2012	Lack of willingness/interest on the part of the officers	• conduct examinations • Encourage usage • Proper Project Monitoring	OHCSF	1,995	NITDEF USPF
3. Using Information and communication technologies as an effective E-learning tool in Nigeria tertiary institutions in at least every geo-political	2013	1 in each geo-political zone by 2011 and 75% by 2012, 100% by 2013	Lack of sustainability	• Proper project Management • Build, Operate and Transfer model	NUC, NigComSat	90	NITDEF, USPF

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
zone							
4. Establishment of an institute responsible for the training of ICT professionals	2011	Establishment of the institute	Lack of political will	• Political will	NITDA, CPN, NCC	161	Budgetary allocation
5. Catch them young	2014	Increase in ICT skills among youths	Lack of sustainability	Ensure collaboration with key stakeholders	NITDA	500	NITDEF

7.8. ICT IN GOVERNMENT

There is the need for a deliberate effort to deploy ICT tools and system to drive government business and improve service delivery. This will also support government efforts to achieve the much desired openness, transparency and accountability needed to secure the citizen's confidence.

Goal: To deploy ICT in government to improve the efficiency and effectiveness of service delivery

Objectives:

1: *Ensure that critical public services (e.g. citizen, birth and death registration, revenue collection, driver's license applications, etc) are offered online by 2014*
2: *Achieve computerisation of 75% of the business processes of MDAs by 2014*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Develop guidelines for re-engineering and automation of Government administrative and public service delivery processes including the strengthening of the ICT structures in the MDAs.	2010	Guidelines developed and enforced	Lack of executive buy -in	Sensitise	NITDA	200	NITDEF
2. Implementation of Electronic Local Government Administration Platform	2012	% of administrative functions performed online by LGAs	Lack of buy-in	Sensitise, monitor	NITDA, GALAXY	1,100	NITDEF, USPF
3. Implementation of Central e-Form Repository for MDAs of Federal Government	2011	No of MDAs whose forms are online	Lack of compliance	Enforce	OHCSF, NITDA	652	NITDEF

8.0. PROGRAMME IMPLEMENTATION PLAN

In order to ensure a coordinated, harmonised and sustained implementation of programmes and projects, there is the need to have in place a strong institutional framework to drive the national ICT programmes beyond the period covered by the Masterplan. The institution should be empowered to provide overall policy guidelines and leadership for all organs of Government involved in ICT programmes. Accordingly, a Ministry of Communications and Information Technology is recommended to be established to fulfill this role.

8.1. CREATION OF THE MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (MCIT)

Goal: *Re-engineer the current institutional framework for regulation and development of ICT in Nigeria*

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Create a new Ministry of Communications and Information Technology to include the following: a. NITDA b. NCC c. NIPOST d. GALAXY e. CPN f. NBC (Technical components) and g. A new ICT Intellectual Property Office	2010	Ministry created	Non implementation	Advocacy	Presidency	200	Budgetary appropriation
2. Harmonize the functions of the various agencies and companies of government providing ICT functions to avoid	Sept. 30, 2010	Establishment of MCIT	Government bureaucracy and resistance	Political will	FMST, MOIC, OSGF, FME etc	20	100% of USPF, 100% of NITDF, Direct budget by Presidency, internally

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
duplication and waste							generated revenue from commercialization of services, 25% ETF fund, 25% PTDF etc
3. Deploy the human capacity, policies and guidelines for the acquisition, deployment, use, and operation of ICTs in MDAs	2010	Policy in place and degree of compliance	Non compliance	Enforce	NITDA	150	NITDEF
4. Declare ICT infrastructure as a Critical national security infrastructure across the country	2010	% reduction in vandalisation	lack of funding	Provide	Presidency	N/A	N/A
5. Review and harmonise existing Information Technology Policy, Telecommunications Policy, and Broadcasting Policy with a view to producing one single policy document for the ICT subsector.	2010	Harmonised documents in place.	Resistance	Buy-in from all agencies involved	NBC, NCC, NITDA, Min of Justice	50	NITDEF, USPF, NBC

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
6. Publish and ensure compliance on appropriate ICT architecture to guide the automation and interconnection of MDAs and public services including development and deployment of ICT Interoperability Framework	2010	Framework developed and implemented	Non compliance	Sensitize	NITDA, Galaxy	175	NITDEF
7. Provide adequate resources for CPN for monitoring and compliance purposes	2011-2014	Fund provided	Lack of fund	Political will	CPN, NITDA	50	Budgetary allocation
8. Privatise the Nigerian Communications Satellite (NigComSat) Limited and Galaxy Backbone, Plc	2011-2014	Privatisation concluded	Lack of effective implementation	Political will	Presidency	10	Budgetary Allocation

8.2. MANDATES AND STRUCTURE OF THE PROPOSED MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (MCIT)

8.2.1. MANDATES

The policy direction of the proposed Ministry would be to:

I.   provide technical support to the Federal Government of Nigeria while the States' Ministries of ICT will perform similar role in the states;

II.   work out and implement ICT solutions that will reduce the cost of running government business;

III.   provide standards and policies for the harmonisation of ICT practice in Nigeria;

IV.   build human capital necessary to make Nigeria leverage the benefits of ICT for national development;

V.   harness the human capital for wealth creation;

VI.   facilitate the provision of government services online to citizens;

VII.   determine ICT related requirement s in government;

VIII. provide technical support to other Federal Ministries;

IX.   manage the career of ICT professionals in the public sector;

- Training;

- Postings and development (GLs 8-14);

- Promotion (GLs 8-14);

- Performance management;

- Certifications etc.

X.   provide standards for the procurement of hardware and software tools in government;

XI.   liaise with Original Equipment Manufacturers (OEM) for Enterprise (bulk) licensing on behalf of government;

XII.   increase Personal Computer (PC) penetration in Nigeria;

XIII.   extend the reach of internet penetration.

8.2.2. ADMINISTRATIVE STRUCTURE

The MCIT should be headed by a Cabinet Minister who shall be a professional in the field of ICT and shall report to the Federal Executive Council. He shall be responsible for the overall management of the Ministry in line with the priorities of the Federal Government of Nigeria. He shall be the Chief Executive of the Ministry and also the Secretary to the National Advisory Committee

There shall be office of the Permanent Secretary (MCIT) who shall equally be a professional in the Civil Service.

8.2.3. OPERATIONAL DEPARTMENTS

I.   INFORMATION TECHNOLOGY DEPARTMENT
II.   COMMNUICATIONS & INFRASTRUCTURE DEPARTMENT
III.   TECHNOLOGY PROMOTION DEPARTMENT
IV.   INFORMATION SECURITY DEPARTMENT

8.2.4. SUPPORT SERVICES DEPARTMENTS

I.   HUMAN RESOURCES MANAGEMENT DEPARTMENT
II.   FINANCE AND ACCOUNTS DEPARTMENT
III.   POLICY, PLANS AND STRATEGY DEPARTMENT

8.2.5. UNITS
I.   Legal Unit
II.   Protocol, Press & Public Relations
III.   Audit
IV.   ACTU
V.   SERVICOM

8.2.6. PARASTATALS

   I.   National Information Technology Development Agency (NITDA)
  II.   National Broadcasting Commission(NBC)*
 III.   Nigerian Communications Commission(NCC)
 IV.   Galaxy Backbone, Plc
  V.   Computer Professionals Registration Council of Nigeria(CPN)
 VI.   Nigerian Postal Services(NIPOST)

NOTE:

1. All the staff in the Ministry including those in the admin section should be ICT compliant.

2. It is recommended that the existing Federal Ministry of Information and Communications (FMIC) be renamed Federal Ministry of Information and National Orientation.

3. *In recommending the inclusion of NBC under the proposed MCIT, the Committee noted that three of its four main functions are relevant to the new Ministry, more so under a new future environment of technology convergence. It is therefore more appropriate for the following three functional units to be under the MCIT i.e.

   I.   Licensing of Broadcast Operations;
  II.   Development of Broadcasting Industry; and
 III.   Technical Regulation of the Industry (e.g. Standards, Frequency issues, Type approvals etc)

The fourth functional unit, i.e. Social Regulation of the Industry (including Regulation of Content, Ethics and Conduct) remains with the Ministry of Information and National Orientation.

Fig. 1 STRUCTURE OF THE PROPOSED MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (MCIT)
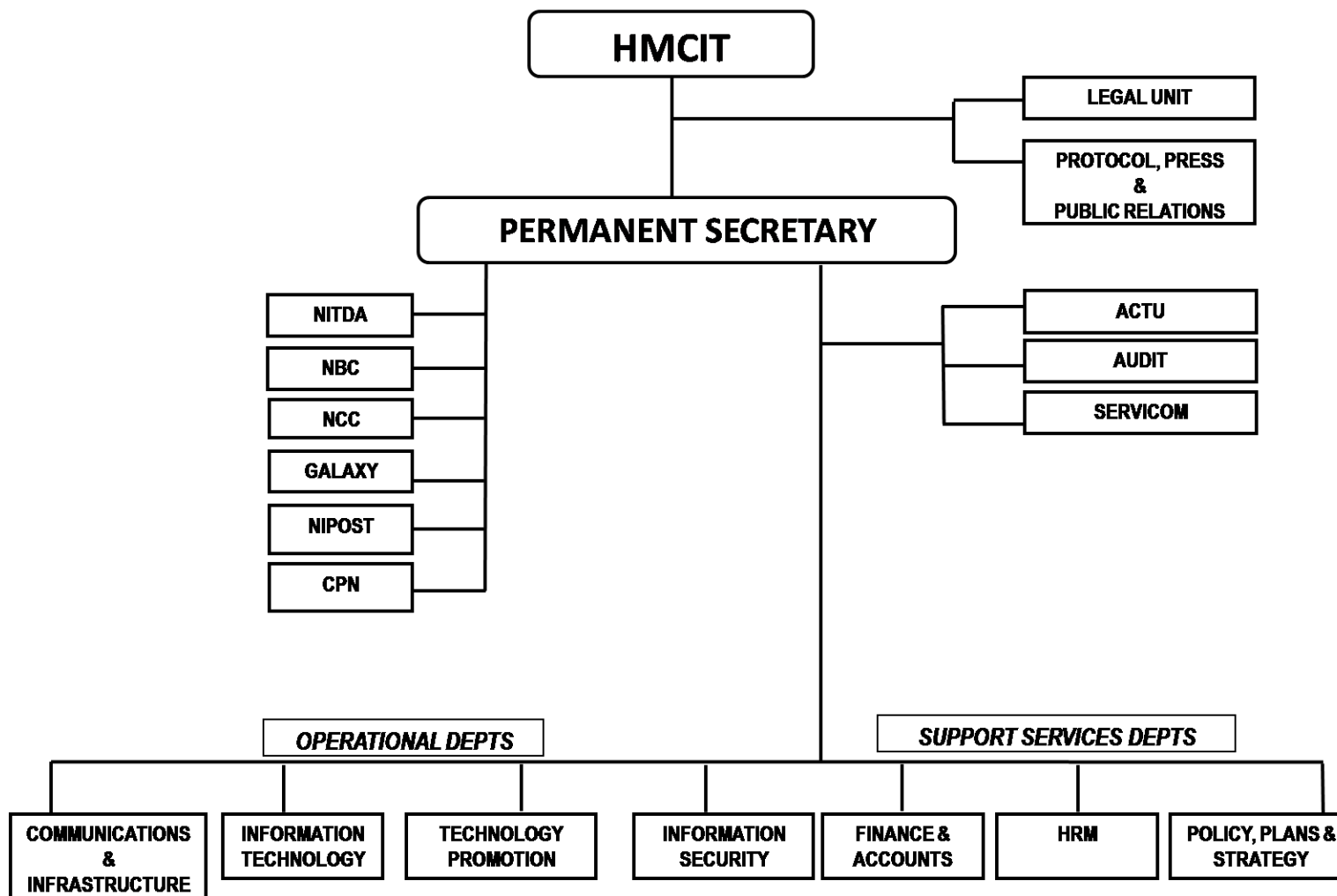
8.3. NATIONAL ADVISORY COMMITTEE

The Presidential Committee recommends the establishment of a National Advisory Committee with the following membership:

1. The Vice President of the Federal Republic -   Chairman
2. Honourable Minister of Communications and Information Technology -   Member/Secretary
3. Honourable Minister of Finance -   Member
4. Honourable Minister and Deputy Chairman, National Planning Commission   Member
5. Honourable Minister of Defence   Member
6. Honourable Minister of Justice and Attorney General of the Federation   Member
7. National Security Adviser (NSA)   Member
8. Four other ICT Professionals -   Members

FUNCTIONS OF THE NATIONAL ADVISORY COMMITTEE

The Committee shall advise Government on the following:

1. Coordination of national ICT policy and strategies with policies and strategies in other environments;
2. The development of an effective response mechanism in the event of a nationwide computer emergencies;
3. Strategies for attracting Foreign Direct Investment in the ICT sector;
4. Effective coordination and stimulation of the use and application of ICT at various tiers of Government.

9.0. MONITORING AND EVALUATION (M&E)

Monitoring and Evaluation (M&E) is critical to effective programme implementation especially in a project heavy Ministry like the MCIT. Accordingly, it is recommended that there should be a strong Monitoring and Evaluation division under the Policy, Plans and Strategy Department of the MCIT headed by a substantive Deputy Director.

The primary function of the Division is to keep track of programme implementation by regular collection and reporting of information to track whether desired results are being achieved as planned and to also evaluate through appropriate analysis to answer specific questions about performance of programme activities.

The complementary role of M&E will follow as depicted below:

MONITORING	EVALUATION
Routine collection of information	Ex-post assessment of effectiveness and impact
Tracking implementation progress	Confirming (or not) project expectations
Measuring efficiency	Measuring project impact

In the final analysis, M & E should provide conclusive answers to the twin questions of whether "the projects are doing things right?" and whether "the projects are doing the right things?"

9.1. M&E FRAMEWORK, 2010 -2014

Below is a sample template that could be used to progressively measure Key Performance Indicators of the various initiatives.

INDICATORS	CURRENT SITUATION	EXPECTATIONS OF ACHIEVEMENTS (%)				
		2010	2011	2012	2013	2014
A New MCIT & its parastatals established	0.0	50	75	100	100	100
Harmonised Legal documents	75**	80	100	100	100	100
	0.0++	70	100	100	100	100
75% computer literacy level for the Public sector at the Federal level	15	15	30	45	60	75
55% computer literacy level for the public sector at states level	5	5	15	25	45	55
35% computer literacy level for the public sector at local government level	2	2	10	20	28	35
100% for states in fibre connectivity	50	70	100	100	100	100
100% for LGAs in fibre connectivity.	15	25	35	50	70	100
100% for all Tertiary institutions, major Hospitals in fibre connectivity	0	30	40	50	100	100
100% neighbouring countries' fibre connectivity	25	50	75	100	100	100
All MDAs have standardized Databases with one central point of access 100%	10	20	40	60	80	100
100% SIM card subscriber registration	20	25	100	100	100	100

INDICATORS	CURRENT SITUATION	EXPECTATIONS OF ACHIEVEMENTS (%)				
		2010	2011	2012	2013	2014
100% CERT implementation	5	5	100	100	100	100
100% PKI deployment	10	50	100	100	100	100
80% Monitoring and Surveillance at all state capitals and FCT	5	5	30	50	70	80
100% deployment of Emergency Communication Centres and Number in state capitals	15	80	100	100	100	100
Appreciable growth in local content development	2.5	2.5	10	20	30	40

NOTE:
1. ** Merger: It is expected that where MDAs will be merged, the process of developing and concluding their legal frameworks will be more cumbersome and this takes more time
2. ++No Merger: Where there will not be mergers, existing MDAs will simply be moved to the newly created MCIT.

10.0. LEGAL FRAMEWORK

A review of the legislative and regulatory environment indicates that there lot of gaps which needed to be filled to facilitate the integration of ICT for economic growth. The absence of such legal environment will result in the lack of a trust based system which invariably would dissuade any form of Foreign Direct Investment in the sector and thereby stunting its growth.

10.1. HARMONISATION OF EXISTING LAWS

A number of currently existing laws needed to be reviewed and or harmonised so as to promote the growth of the ICT sector. These have been identified and listed in this section.

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Review and update Law of Evidence	2011	Relevant Law in place.	Lack of collaboration with all stakeholders	Ensure collaboration with stakeholders	NITDA, Min. of Justice	10	NITDEF
2. Review and Update Laws on Intellectual Property and Competition	2011	Relevant Laws in place.	Lack of collaboration with all stakeholders	Ensure collaboration with stakeholders	NITDA, Min. of Justice	10	NITDEF
3. Review and harmonise existing Acts setting up NCC, NBC or at least merge the technical sections of the organizations for the time being which is supported by the existing Telecommunication Act 2003	2011	Harmonised technical sections or merger of the two orgnisations in line with global best practice	Resistance	Government focus and determination	Presidency, NASS	15	NCC
4. Review and Update Laws of Contract, Banking and Commerce	2011	Relevant Laws in place.	Lack of collaboration with all stakeholders	Ensure collaboration with stakeholders	NITDA, Min. of Justice, CBN	10	NITDEF

10.2. ENACTMENT OF NEW LAWS

In addition to the harmonisation of existing laws, there is the need to enact a number of new laws that are ICT specific to support the development of the sector. These have been identified and captured in the following initiatives and aligned with global best practice.

Initiatives	Timeline	KPI	Risks	Mitigation	Implementing Agencies	Estimated Cost (N'm)	Source of Funding
1. Enact Laws on Computer crimes	2011	Relevant Laws in place.	Lack of collaboration with all stakeholders	Ensure collaboration with stakeholders	NITDA, Min. of Justice	10	NITDEF
2. Put in place a regulatory framework for lawful transmission intercept	2010	Call intercept activated	Lack of support from NASS	Advocacy	NCC,ONSA, NITDA	50	ONSA,NCC
3. Fast track the enactment of the harmonised e-Transaction Bill	2010	Act/Law in place	Lack of Executive will	Ensure Executive buy in	Presidency, CBN, NITDA	50	NITDA/NITDEF

11.0. FUNDING

The Committee recognised the need to harmonise the entire process of ICT projects implementation for it to have the desired impetus as an instrument to drive growth and national competitiveness. It is imperative that the harmonisation of initiatives should be holistic. Consequently, the conceptualisation, planning, budgeting, execution, delivery and monitoring of the projects and programmes should be harmonised.

11.1. SOURCES OF FUNDING

Funding shall be derived from the following sources:

1. Direct Budgetary Allocation
2. Dedication of 100% of NITDEF;
3. Dedication of 100% of USPF;
4. Dedication of 20% of PTDF;
5. Dedication of 20% of ETF;
6. 10% of funds under the MDG;
7. Credits and Grants from Development Partners;
8. Internally Generated Revenue from commercialisation of services by Agencies of the MCITs;
9. Private Sector including PPP and FDI.

11.2. RELATIVE CONTRIBUTION OF THE TOTAL PROGRAMME FUND

S/N	DESCRIPTION	WEIGHT	%	AMOUNT (₦Bn)
1.	GOVERNMENT** • Federal • State and Local	0.35	35	175
2.	DEVELOPMENT PARTNERS • IDA (CREDIT) • GRANTS	0.15	15	75
3.	PRIVATE SECTOR(PPP, FDI)	0.50	50	250
		1.00	**100**	**500**

NOTE: **Funds identified in the table above represent trigger or catalyst fund for effective take-off of the initiatives. It will also help create the enabling environment for effective private sector participation and investment in the sector. It is expected that the bulk of the fund to sustain the programmes will come from private sector initiatives.

11.3. RELATIVE WEIGHT FOR COSTING

The Committee realised that the most critical gaps to be bridged existed in the areas of ICT infrastructure. Accordingly a large number of the initiatives being proposed are in this area resulting in up to 85% of the total funding requirements. M & E has also been accorded the required priority in view of its critical role in ensuring timely and effective project implementation.

S/N	DESCRIPTION	WEIGHT	FACTOR	2010	2011	2012	2013	2014
1.	INFRASTRUCTURE	85	0.85	0.85	0.85	0.85	0.85	0.85
2.	HUMAN CAPITAL DEVELOPMENT	7	0.07	0.07	0.07	0.07	0.07	0.07
3.	MONITORING AND EVALUATION (M&E)	6	0.06	0.06	0.06	0.06	0.06	0.06
4.	INSTITUTIONAL, LEGAL AND POLICY FRAMEWORKS	2	0.02	0.02	0.02	0.02	0.02	0.02
	TOTAL	100	1.00	1.00	1.00	1.00	1.00	1.00

MEMBERSHIP OF THE COMMITTEES BY NAME

TABLE A: THE MAIN PRESIDENTIAL COMMITTEE

S/N	NAME	DESIGNATION/ORGANISATION	STATUS
1.	Professor Mohammed Ka'oje Abubakar	Honourable Minister of Science and Technology	Chairman
2.	Dr. Shamsudeen Usman	Honourable Minister and Deputy Chairman of National Planning Commission	Member
3.	Mr.Segun Aganga	Honourable Minister of Finance	Member
4.	Prince Adetokunbo Kayode	Honourable Minister of Defence	Member
5.	Mr. Steve Oronsaye	Head of the Civil Service of the Federation	Member
6.	Mr. Femi Olayisade	Permanent Secretary, FMST	Member
7.	Major General Mohammed Gusau (Rtd.)	National Security Adviser	Member
8.	Mallam Lamido Sanusi Lamido	Governor of Central Bank of Nigeria	Member
9.	Dr. Bright Okogu	Director-General, Budget Office of the Federation	Member
10.	Dr. Baba J. Adamu	Senior Special Assistant to the Vice President (ICT)	Member
11.	Professor Cleopas O. Angaye	DG, National Information Technology Development Agency (NITDA)	Member
12.	Dr. Eugene Juwah	EVC, Nigerian Communications Commission (NCC)	Member
13.	Dr. V.O. Akinyosoye	Statistician General, National Bureau of Statistics (NBS)	Member
14.	Dr. S. O Mohammed	DG, National Space Research and Development Agency (NASRDA)	Member
15.	Mr. Gerald Ilukwe	MD/CEO, Galaxy Backbone, Plc	Member
16.	Engr. T. Ahmed-Rufa'i	MD/CEO, Nigerian Communications Satellite (NigComSat) Ltd	Member
17.	Barrister Chris Onyemenem	DG, National Identity Management Commission (NIMC)	Member
18.	Mr. I.Z.B. Tizhe	President, Computer Professionals Registration Council of Nigeria (CPN)	Member
19.	Professor Charles Uwadia	President, Nigeria Computer Society (NCS)	Member
20.	Dr. Olu Agunloye	EVC, National eGovernment Strategies (NeGSt)	Member
21.	Engr. W.K Jimoh	Director, ICT, Federal Ministry of Science and Technology (FMST)	Member/Secretary

TABLE B: TECHNICAL COMMITTEE

S/N	NAME	ORGNISATION	STATUS
1.	Professor C.O Angaye	National Information Technology Development Agency (NITDA)	Co-Chairman
2.	Dr. Baba J. Adamu	Presidency (Senior Special Assistant to the Vice President (ICT))	Co-Chairman
3.	Mrs. Monilola Udoh	Office of the Head of the Civil Service of the Federation (OHCSF)	Member
4.	Dr. Bashir Gwandu	Nigerian Communications Commission (NCC)	Member
5.	Mr. Gerald Ilukwe	Galaxy Backbone, Plc	Member
6.	Mr. Henry Eteama	National Bureau of Statistics (NBS)	Member
7.	Engr. T. Ahmed-Rufa'i	Nigerian Communications Satellite (NigComSat) Ltd	Member
8.	Dr. Spencer Onuh	National Space Research and Development Agency (NASRDA)	Member
9.	Mrs. U. Chigbo	National Identity Management Commission (NIMC)	Member
10.	Mr. I.Z.B. Tizhe	Computer Professionals Registration Council of Nigeria (CPN)	Member
11.	Mr. S.B.A Ezichi	Nigeria Computer Society (NCS)	Member
12.	Mr. Gbenga Adebusuyi	National eGovernment Strategies (NeGSt)	Member
13.	Mr. Onumo Aristotle	National Planning Commission	Member
14.	Engr. W.K Jimoh	Federal Ministry of Science and Technology (FMST)	Member/Secretary

TABLE C: OFFICERS IN ATTENDANCE

S/N	NAME	ORGANISATION	STATUS
1.	Mr. S.L. Akinnusi	Office of the Head of Civil Service of the Federation (OHCSF)	Member
2.	Mr. Inye Kem Abonta	National Information Technology Development Agency (NITDA)	Member
3.	Mr. Ugo Okoroafor	Central Bank of Nigeria (CBN)	Member
4.	Mr. Patrick Aririguzo	Central Bank of Nigeria (CBN)	Member

COMPOSITION OF THE SUB COMMITTEES

TABLE D: INSTITUTIONAL, LEGAL AND POLICY FRAMEWORK

S/N	NAME	ORGANISATION	STATUS
1.	Professor C.O. Angaye	National Information Technology Development Agency (NITDA)	Chairman
2.	Mr. Gbenga Adebusuyi	National eGovernment Strategies (NeGSt)	Member
3.	Mr. I.Z.B. Tizhe	Computer Professionals Registration Council of Nigeria (CPN)	Member
4.	Mrs. Monilola Udoh	Office of the Head of the Civil Service of the Federation (OHCSF)	Member
5.	Hajia Rakiya Mohammed	Galaxy Backbone, Plc	Member
6.	Engr. T. Ahmed-Rufa'i	Nigerian Communications Satellite (NigComSat) Ltd.	Member
7.	Mr. Yemi Anyaoku	Office of the Secretary to the Government of the Federation (OSGF)	Member
8.	Engr. W.K. Jimoh	Federal Ministry of Science and Technology (FMST)	Member
9.	Mr. Agbali Mohammed	National Information Technology Development Agency (NITDA)	Member

TABLE E: INFRASTRUCTURE, NATIONAL SECURITY, CONTENT AND NATIONAL DATABASES

S/N	NAME	ORGANISATION	STATUS
1.	Dr. Bashir Gwandu	Nigerian Communications Commission (NCC)	Chairman
2.	Engr. Iliya Solomon	National Space Research and Development Agency (NASRDA)	Member
3.	Mr. S.B.A Ezichi	Nigeria Computer Society (NCS)	Member
4.	Hajia Rakiya Mohammed	Galaxy Backbone, Plc	Member
5.	Mrs. U. Chigbo	National Identity Management Commission (NIMC)	Member
6.	Mr. A. Mamza	National Bureau of Statistics (NBS)	Member
7.	Engr. T. Ahmed-Rufa'i	Nigerian Communications Satellite (NigComSat) Ltd.	Member
8.	Mallam M.B Aliyu	Office of the National Security Adviser	Member

TABLE F: ICT IN GOVERNMENT, SOCIO-ECONOMIC AND INDUSTRY DEVELOPMENT

S/N	NAME	ORGANISATION	STATUS
1.	Mr. Gerald Ilukwe	Galaxy Backbone, Plc	Chairman
2.	Hajia Rakiya Mohammed	Galaxy Backbone, Plc	Member
3.	Mr. Gbenga Adebusuyi	National eGovernment Strategies (NeGSt)	Member
4.	Miss Abimbola Alale	Nigerian Communications Satellite (NigComSat) Ltd.	Member
5.	Miss Alma Udoyen	Nigerian Communications Satellite (NigComSat) Ltd.	Member
6.	Mr. SBA Ezichi	Nigeria Computer Society (NCS)	Member
7.	Mr. Ibrahim Z.B. Tizhe	Computer Professionals Registration Council of Nigeria (CPN)	Member
8.	Mrs. Monilola Udoh	Office of the Head of Civil Service of the Federation (OHCSF)	Member
9.	Mr. Maigana Gidado	Nigerian Communications Commission (NCC)	Member
10.	Dr. Spencer Onuh	National Space Research and Development Agency (NASRDA)	Member
11.	Dr. V.O. Olatunji	National Information Technology Development Agency (NITDA)	Member
12.	Mr. Kayode Shobajo	Computer Professionals Registration Council of Nigeria (CPN)	Member
13.	Mr. Fidfelis Onah	Nigerian Communications Commission (NCC)	Member
14.	Mrs. Mojisola A. Olajide	Central Bank of Nigeria (CBN)	Member

TABLE G: COSTING AND FUNDING

S/N	NAME	ORGANISATION	STATUS
1.	Engr. T. Ahmed-Rufa'i	Nigerian Communications Satellite Ltd. (NigComSat)	Chairman
2.	ASO Patrick Vakporaye	National Planning Commission (NPC)	Member
3.	Mr. Agbali Mohammed	National Information Technology Development Agency (NITDA)	Member
4.		Budget Office of the Federation	Member
5.	Hajia Rakiya Mohammed	Galaxy Backbone, Plc	Member
6.	Mrs. Mojisola A. Olajide	Central Bank of Nigeria (CBN)	Member
7.	Dr. Baba J. Adamu	Senior Special Assistant to the Vice President (ICT)	Member

TABLE H: REPORT HARMONISATION

S/N	NAME	ORGANISATION	STATUS
1.	Mr. Henry Eteama	National Bureau of Statistics (NBS)	Chairman
2.	Mr. Gbenga Adebusuyi	National eGovernment Strategies (NeGSt)	Member
3.	Mr. Ibrahim Z.B. Tizhe	Computer Professionals Registration Council of Nigeria (CPN)	Member
4.	Hajia Rakiya Mohammed	Galaxy Backbone, Plc	Member
5.	Dr. Bashir Gwandu	Nigerian Communications Commission (NCC)	Member
6.	Mr. Abba Adamu	Nigerian Communications Commission (NCC)	Member
7.	Mr. Agbali Mohammed	National Information Technology Development Agency (NITDA)	Member
8.	Mr. Jude A. Adeleke	National Space Research and Development Agency (NASRDA)	Secretariat
9.	Mr. Segun Agbabiaka	National eGovernment Strategies (NeGSt)	Secretariat

TABLE I: SECRETARIAT/EDITORIAL TEAM

S/N	NAME	ORGANISATION	STATUS
1.	Engr. W.K. Jimoh	Federal Ministry of Science and Technology (FMST)	Head
2.	Mr. Sonnie Aruya	Federal Ministry of Science and Technology (FMST)	Member
3.	Mr. Segun Agbabiaka	National eGovernment Strategies (NeGSt)	Member
4.	Mr. Jude A. Adeleke	National Space Research and Development Agency (NASRDA)	Member
5.	Mr. G.O. Abd'rahim	Federal Ministry of Science and Technology (FMST)	Member
6.	Mr. Williams Ebiokobo	Federal Ministry of Science and Technology (FMST)	Member
7.	Mr. Umar Kibiya	Federal Ministry of Science and Technology (FMST)	Member

APPENDICES

Table 1: The Global Competitiveness Index 2009–2010 rankings and 2008–2009 comparisons

Country/Economy	GCI 2009–2010		GCI 2008–2009	
	Rank	Score	Rank*	
Switzerland	1	5.60	2	
United States	2	5.59	1	
Singapore	3	5.55	5	
Sweden	4	5.51	4	
Denmark	5	5.46	3	
Finland	6	5.43	6	
Germany	7	5.37	7	
Japan	8	5.37	9	
Canada	9	5.33	10	
Netherlands	10	5.32	8	
Hong Kong SAR	11	5.22	11	
United Arab Emirates	23	4.92	31	
Malaysia	**24**	**4.87**	**21**	
Ireland	25	4.84	22	
Iceland	26	4.80	20	
Israel	27	4.80	23	
China	**29**	**4.74**	**30**	
Tunisia	**40**	**4.50**	**36**	
South Africa	**45**	**4.34**	**45**	
India	**49**	**4.30**	**50**	
Indonesia	**54**	**4.26**	**55**	
Brazil	**56**	**4.23**	**64**	
Botswana	66	4.08	56	
Egypt	70	4.04	81	

Country/Economy	GCI 2009–2010		GCI 2008–2009	
	Rank	Score	Rank*	
Greece	71	4.04	67	
Croatia	72	4.03	61	
Morocco	73	4.03	73	
Honduras	89	3.86	82	
Georgia	90	3.81	90	
Jamaica	91	3.81	86	
Senegal	92	3.78	96	
Serbia	93	3.77	85	
Syria	94	3.76	78	
Dominican Republic	95	3.75	98	
Albania	96	3.72	108	
Armenia	97	3.71	97	
Kenya	98	3.67	93	
Nigeria	**99**	**3.65**	**94**	

Source: World Economic Forum

Table 2: African Competitiveness Report 2009 Ranking, Top Ten

Rank	Country	Score
1	Tunisia	4.6
2	South Africa	4.4
3	Botswana	4.2
4	Mauritius	4.2
5	Morocco	4.1
6	Namibia	4.0
7	Egypt	4.0
8	Gambia, The	3.9
9	Kenya	3.8
10	Nigeria	3.8

Source: World Economic Forum

Table 3: The Networked Readiness Index 2009-2010

Country/Economy	Rank	Score	Rank within Income Group**	
Sweden	1	5.65	HI	1
Singapore	2	5.64	HI	2
Denmark	3	5.54	HI	3
Switzerland	4	5.48	HI	4
United States	5	5.46	HI	5
Finland	6	5.44	HI	6
Canada	7	5.36	HI	7
Hong Kong SAR	8	5.33	HI	8
Netherlands	9	5.32	HI	9
Norway	10	5.22	HI	10
Taiwan, China	11	5.20	HI	11
United Arab Emirates	23	4.85	HI	23
Malaysia	**27**	**4.65**	**UM**	**1**
China	**37**	**4.31**	**LM**	**1**
Tunisia	**39**	**4.22**	**LM**	**2**
India	**43**	**4.09**	**LM**	**3**
Brazil	**61**	**3.80**	**UM**	**12**
South Africa	**62**	**3.78**	**UM**	**13**
Indonesia	**67**	**3.72**	**LM**	**7**
Kenya	90	3.40	LO	4
Ghana	98	3.25	LO	7
Nigeria	**99**	**3.25**	**LM**	**19**

NOTE: ** Income groups: HI = High Income; UM = Upper-Middle Income; LM = Lower Middle Income; LO = Low Income. Country classification by income group is from the World Bank (situation as of December 2009).

Source: World Economic Forum

Table 4: Comparison of Infrastructure Accessibility among benchmarked countries

Network readiness index /variable	Nigeria	South Africa	Egypt	Malaysia	Brazil	India	Turkey	France	Denmark	UK	USA
Key Indicators											
Internet Users per 100 pop.	6.8	8.2	11.4	59.7	26.1	6.9	17.7	49.6	64.3	66.2	71.9
Internet Bandwidth (Mbs per 10,000)	NA	0.7	1.4	1.2	1.5	0.2	12.1	32.9	346.0	NA	NA
Mobile telephone Subscribers per 1000	27.3	87.1	39	87.9	63.1	20	104	89.8	114.7	118.5	83.5
Availability of latest Technologies	**81**	37	60	33	58	43	82.8	11	4	30	15
Accessibility of digital content	106	76	83	31	63	61	42	19	5	9	1
Infrastructure Environment											
Number of Telephone Lines	119	93	76	73	63	108	56	7	14	9	12
Secured Internet Servers	111	52	103	56	57	99	50	29	7	9	2
Electricity Production	118	44	85	58	73	104	72	14	30	33	8
Availability of Scientists and Engineers	**36**	110	47	24	57	3	59	5	13	32	6
Availability of new Telephone Lines	**77**	113	25	46	39	38	62	12	3	30	15
Extent of business internet use	**64**	47	36	29	28	41	46	23	5	9	1
Business Telephone connection charge	106	61	116	21	44	57	4	18	34	41	16
Business Monthly Telephone	**100**	90	64	69	106	83	86	25	16	65	46

subscription											
Local Supplier Quality	60	24	103	32	41	37	55	10	9	23	7
Local Supplier Quantity	65	43	86	16	13	4	32	7	15	41	6
Computer Comms, and other services	6	68	56	32	18	23	94	30	41	36	47
Individual Readiness											
Internet in Schools	104	91	99	40	67	60	55	31	6	15	11
Residential telephone Connection charge	110	66	107	22	49	64	3	19	37	51	9
Residential Monthly Subscription	109	97	59	66	100	99	70	37	26	31	45
High Speed Monthly Broadband Subscription	NA	66	89	39	58	68	74	10	15	14	3
Lowest cost of broadband	NA	70	83	43	38	85	68	3	22	10	3
Cost of mobile telephone call	107	90	63	29	93	74	82	41	3	15	39
Individual Usage											
Mobile Telephone subscribers	111	55	96	53	82	120	62	51	23	15	61
Personal Computers	115	66	88	35	48	94	78	13	8	5	6
Broadband Internet subscribers	126	87	89	49	55	94	46	13	1	12	20
Internet Users	100	97	88	18	57	99	74	31	16	13	8
Internet bandwidth	124	82	71	74	69	96	38	24	1	NA	NA

Source: *Global Information Technology Report 2008-2009, World Economic Forum and INSEAD*

Table 5: Networked Readiness Ranking of Nigeria versus Benchmarked Countries

Network Readiness Index /variable	Nigeria	South Africa	Egypt	Malaysia	Indonesia	Brazil	India	Turkey	France	Netherlands	UK	USA
Overall Socio-Economic Environment	88	39	64	26	81	87	60	56	21	11	12	3
Political and regulatory environment	64	26	62	24	83	82	57	56	16	12	20	19
Effectiveness of law making bodies	62	28	81	8	75	119	25	35	23	21	14	33
Laws relating to ICT	65	34	64	19	71	49	38	55	16	20	17	9
Judicial independence	57	30	42	47	90	68	43	64	29	6	18	23
Intellectual property protection	**96**	23	60	33	102	79	57	93	7	11	22	18
Efficiency of legal framework	**72**	20	55	21	66	98	42	82	16	9	18	28
Property rights	**86**	20	67	38	117	70	52	83	18	14	36	26
Quality of competition in the ISP sector	57	112	20	29	78	44	23	62	28	9	21	6
Number of procedures to enforce a contract	**78**	14	103	14	78	116	117	48	14	4	14	31
Time to enforce a contract	45	82	120	82	71	86	126	40	22	59	35	17

* Table values are country ranks out of 137 ranked countries

Source: *Global Information Technology Report 2008-2009, World Economic Forum and INSEAD*

GLOSSARY

S/N	TERM	DEFINITION
1.	ACTU	Anti-Corruption & Transparency Unit
2.	AP & D	Appointment, Promotion & Discipline
3.	BOFID	Banking and Other Financial Institution Decree
4.	BPP	Bureau of Public Procurement
5.	C & M	Coordinating and Monitoring
6.	CBN	Central Bank of Nigeria
7.	CERT	Computer Emergency Response Team
8.	CERT.	Certification
9.	CONSULT.	Consultancy
10.	CPN	Computers Professionals Registration Council of Nigeria
11.	DFA	Donor Funding Agency
12.	DP	Data Processing
13.	eLGA Platform	Electronic Enabled Local Government Administration Platform
14.	eRCB	eReadiness Capacity Building Programme
15.	ETF	Education Trust Fund
16.	FDI	Foreign Direct Investment
17.	FGN	Federal Government of Nigeria

18.	FME	Federal Ministry of Education
19.	FMST	Federal Ministry of Science and Technology
20.	FSS 2020	Financial System Strategy 2020
21.	G2B	Government to Business
22.	G2C	Government to Citizen
23.	G2G	Government to Government
24.	GCI	Global Competitive Index
25.	GFMIS	Government Financial Management Information System
26.	GL	Grade Level
27.	HMCIT	Honourable Minister of Communications & Information Technology
28.	HMST	Honourable Minister, Science and Technology
29.	HW SYS	Hardware System
30.	ICT	Information and Communications Technology
31.	ICTs	Information and Communications Technologies
32.	IDA	International Donor Agency
33.	IGR	Internally Generated Revenue
34.	IL&P	Institutional, Legal and Policy Framework
35.	INSEAD	Founded in 1957 as "Institut Européen d'Administration des Affaires" (European Institute for Business Administration)
36.	IPPIS	Integrated Payroll and Personnel Information System
37.	IPTTO	Intellectual Property and Technology Transfer Office
38.	ISP	Internet Service Provider
39.	IT	Information Technology
40.	IXPN	Internet Exchange Point Network
41.	KBE	Knowledge Based Economy

42.	KPI	Key Performance Indicator
43.	LGA	Local Government Area
44.	M	Million
45.	M&E	Monitoring and Evaluation
46.	MCIT	Ministry of Communications and Information Technology
47.	MDA	Ministry, Department and Agency
48.	MDG	Millennium Development Goal
49.	MHz	Megahertz
50.	MOIC	Ministry of Information and Communications
51.	₦	Naira
52.	NACETEM	National Centre for Technology Management
53.	NASRDA	National Space Research and Development Agency
54.	NASS	National Assembly
55.	National ICT4D	National Information Communications Technology for Development
56.	NBC	Nigerian Broadcasting Commission
57.	NBS	National Bureau of Statistics
58.	NCC	Nigerian Communications Commission
59.	NCS	Nigeria Computer Society
60.	NeGSt	National eGovernment Strategies
61.	NigComSat	Nigerian Communication Satellite
62.	NIMC	National Identity Management Commission
63.	NIPC	Nigerian Investment Promotion Commission
64.	NIRA	Nigerian Internet Registration Authority
65.	NITDA	National Information Technology Development Agency
66.	NITDEF	National Information Technology Development Fund

67.	NITDEF	National Information Technology Development Fund
68.	NOTAP	National Office for Technology Acquisition and Promotion
69.	NUC	National Universities Commission
70.	NV20:2020	Nigeria Vision 20:2020
71.	OEM	Original Equipment Manufacturer
72.	OHCSF	Office of the Head of the Civil Service of the Federation
73.	ONSA	Office of the National Security Adviser
74.	OSGF	Office of the Secretary to the Government of the Federation
75.	P & D	Posting & Development
76.	PC	Personal Computer
77.	PEU	Programme/Project Execution Unit
78.	PgMO	Programme Management Office
79.	PIU	Programme/Project Implementation Unit
80.	PKI	Public Key Infrastructure
81.	PMEU	Programme/Project Monitoring & Evaluation Unit
82.	PMT	Programme Management Team
83.	PMU	Programme Management Unit
84.	PPP	Public Private Partnership
85.	PTDF	Petroleum Trust Development Fund
86.	PUB & RECS	Publication & Records
87.	R & D	Research and Development
88.	RITC	Rural Information Technology Centre
89.	SIM	Subscribers Identification Module
90.	SOA	Service Oriented Architecture

91.	STD	Standards	
92.	SW	Staff Welfare	
93.	SW SYS	Software System	
94.	ToR	Terms of Reference	
95.	TV	Television	
96.	UL	Underwriters Laboratory	
97.	USPF	Universal Service Provision Fund	
98.	VAT	Value Added Tax	
99.	VOIP	Voice Over Internet Protocol	
100	VSAT	Very Small Aperture Terminal	

LIST OF ANNEXES

1. **Annex A:** Project Implementation Timeline

2. **Annex B:** Minutes of Meetings

   I.   **B1:** 1st Main Committee Meeting held on 3rd August, 2010;
   II.   **B2:** 1st Technical Sub-Committee Meeting held on 3rd August, 2010;
   III. **B3:** 2nd Technical Sub-Committee Meeting held on 9th August, 2010;
   IV.   **B4:** 3rd Technical Sub-Committee Meeting held on 12th August, 2010;
   V.   **B5:** 4th Technical Sub-Committee Meeting held on 16th August, 2010;
   VI.   **B6:** 2nd Main Committee Meeting held on 18th August, 2010;
   VII. **B7:** 3rd Main Committee Meeting held on 25th August, 2010;
   VIII. **B8:** 4th Main Committee Meeting held on 31st August, 2010;
   IX.   **B9:** 5th Main Committee Meeting held on 8th September, 2010; and
   X.   **B10:** 6th Main Committee Meeting held on 16th September, 2010

3. **Annex C:** Reports of the Sub-Committees

   I.   **C1:** Institutional, Legal and Policy Framework;
   II.   **C2:** Infrastructure, National Security, Content and National Database;
   III. **C3:** ICT in Government, Socio-Economic and Industry Development;
   IV.   **C4:** Costing and Funding; and
   V.   **C5:** Ad-Hoc Committee on Report Harmonisation.

4. **Annex D:** Reference Documents

   I.   **D1:** NV20:2020
   II.   **D2:** FSS 2020
   III. **D3:** ICT 4D Plan