
CONNECTED KENYA 2017
National ICT Master Plan
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On behalf of
The Kenya ICT Board, Ministry of Information and Communication

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HE, President Mwai Kibaki, presides over the official ground breaking of Konza Technology City. January 2013
Hon. Samuel L. Poghisio, EGH, MP
Minister for Information and Communications
Access to information is crucial to economic growth. Information and communications technology offer a powerful tool that, if deployed equitably, can ensure citizens are empowered and Government can deliver services more effectively. Information is vital for the efficient delivery of public and private sector product and services that are responsive to the needs of citizens and businesses as well as capacity creation.

For a variety of reasons (economic and policy), developing countries like Kenya are less equipped to take advantage of the potential in ICT to stimulate growth, and are likely to fall behind advanced economies. The Kenya ICT Master Plan is therefore not designed in isolation, given that there is evidence from developed countries that investment in ICT facilitates economic growth by increasing productivity. As the Kenya Government ensures an enabling ICT environment and regulatory framework, this plan aims at stimulating the setup of ICT-related businesses to enhance employment creation.

At the heart of this document is a strategic intent to develop a robust ICT sector that will enhance economic growth through creation of businesses and hence employment. In the execution of this plan, Kenya will become a leading ICT hub for the region, improve the lives of her citizens and see significant ICT-led economic growth in line with Vision 2030. This ICT Master Plan aims at building and promoting an environment where more service sector businesses are created and are able to thrive through leveraging on ICT.

ICT offers key benefits that make life simpler and more convenient for citizens and businesses and provides channels to collaborate and share information, which in turn enables innovation.

The Government while guiding budgets will ensure that projects deliver the value they promise towards attainment of the objectives of this Master Plan. Achievements will underlie the Government’s commitment in enhancing transparency, ensuring greater accountability to the public as well as opening up new opportunities for local entrepreneurs.
By 2017, Kenya becomes Africa’s most globally respected knowledge economy

- Master Plan Vision
Dr. Bitange Ndemo,
CBS
PS, Ministry of Information and Communications
The Kenya ICT Master Plan 2017 is focused on driving real economic growth. The Ministry of Information and Communications will take a three-pronged approach in the execution of this plan, which recognizes Government projects that deliver citizen’s needs, the need to strengthen industry through ICT and encouragement of the creation of ICT businesses.

Kenya’s ICT Master Plan aspires to position Kenya as a regional leader in ICT while delivering the latest and most robust infrastructure.

Open standards, transparency and accountability are all key to the success of this Master Plan. Further, the Ministry is diligently working on standardizing business processes and the development of sub-plans to allow for the delivery of innovative public services within Government.

We are strengthening governance and increasing engagement with Government and with Private Sector to remove barriers that would impede execution. This plan centers on the needs of the citizen to ensure all efforts are designed to address those needs and truly deliver a society built on knowledge.

There are challenges anticipated in enabling the realization of ICT as an integral component of Vision 2030. This plan has therefore, been designed with interventions that are specific to both Social and Economic Pillars. The initiatives in this plan have been mainstreamed with the objectives of Vision 2030 given that the Government acknowledges that the future of our economy depends on developing a skillful and knowledgeable human capital.

For Kenya to achieve full benefits of ICT, the plan has set seven key intervention areas under the vision 2030 social pillar namely: Education and Training, Health Sector, Water and Sanitation, Environment, Housing and Urbanization, Gender, Youth and Vulnerable groups, Social Equity and Poverty Reduction. In addition, there would be seven key areas of intervention under the vision 2030 economic pillar. These are: Tourism, Agriculture, Wholesale and Retail Trade, Manufacturing, Business Process Outsourcing and Financial Services and Creative Industry.
Every Citizen Connected

Every citizen, resident, home and institution will be connected through countrywide robust, accessible and affordable ICT infrastructure.

Kenya is Africa’s ICT Hub

Kenya will become the leading ICT Hub in Africa, attracting leading global players and generating globally respected local entrepreneurship and innovation.

Public Services for All

Public Services will be available to all citizens through ICT and ICT will enable a truly integrated, open and efficient Government delivering meaningful value to citizens.

A Society Built on Knowledge

Kenya will be a Knowledge Based Society. All Kenyans will be able to use ICT to improve their knowledge, businesses and livelihood. ICT will be the greatest enabler of Kenya’s economic growth.
1. Enhanced Public Value

Enhancing the delivery and access of public services for all through strategic and innovative use of ICTs and achieve exemplary governance

One stop shop approach to the delivery of public services to persons and establishments;

Access by 100% persons.
Access by 100% establishments.
Access to 80% of public sector services.

Improved governance through a whole-of-government approach constitution to IT alignment;

Best in class enterprise architecture that addresses the imperatives of the new constitution.
Best in class implementation.

2. Development of ICT Businesses

Establish eco-system for market adoption of locally developed innovations;

100 successfully commercialized businesses.
20 new innovations that are globally propagated through government co-facilitated commercialization.

An ICT Industry that is a substantial economic driver;

USD 2Bn sector.
500 new Tier 1 ICT companies.
50,000 jobs.

20 new innovations that are globally propagated through government co-facilitated commercialization.

3. Strengthen ICT as a driver of industry

Transformation of key Vision 2030 economic sectors to significantly enhance their productivity and global competitiveness and growth

Establish eco-system for ICT adoption with special emphasis on SMEs;

Impact on GDP +25%.
60% automation of SMEs.
+50% productivity gain for Vision 2030 economic sectors.

Enhanced Public Value

Transformation of key Vision 2030 economic sectors to significantly enhance their productivity and global competitiveness and growth

2. Development of ICT Businesses

Establish eco-system for market adoption of locally developed innovations;

100 successfully commercialized businesses.
20 new innovations that are globally propagated through government co-facilitated commercialization.

An ICT Industry that is a substantial economic driver;

USD 2Bn sector.
500 new Tier 1 ICT companies.
50,000 jobs.

3. Strengthen ICT as a driver of industry

Transformation of key Vision 2030 economic sectors to significantly enhance their productivity and global competitiveness and growth

Establish eco-system for ICT adoption with special emphasis on SMEs;

Impact on GDP +25%.
60% automation of SMEs.
+50% productivity gain for Vision 2030 economic sectors.
Foundational Pillars

Integrated Country Positioning:
Integrate Kenya’s ICT agenda into local and international communication including policy, political and diplomatic initiatives to promote Kenya’s innovation and Konza Technology City.

Enhancing Citizen Capacity:
Deploy integrated, open and secure national networks across all technology domains with an emphasis on shared access, growing national capacity and inclusion of all citizens.

Integrated ICT Infrastructure & Info-structure:
Minimize duplication and create true integration in the investment in public services ICT to enable best practice application of shared services, national data infrastructure, open data, and policy frameworks.

- Campaign for Local and International ICT Country positioning.
- Konza City Marketing

- Next generation super-broadband networks, enhanced NOFBI, thematic super networks (Health, Agriculture, Education, Trade)

- World class Government Shared Services backbone & Citizen end to end services, Citizen services centre
- Core shared services applications
Strategic Pillar 1: Enhanced Public Value

The Public Value pillar will focus on enhancement of the quality of life for all Kenyans through affordable, accessible and available ICT. The goal is to attain +90% inclusion of Kenyan society to public services, information and knowledge through ICT.

The plan will allow for ubiquitous solutions for centralized public service delivery.

The pillar will address the following services:
Health, Education, Agriculture, Youth, Gender and Vulnerable Groups.
Connected Health

ICT adoption in the health sector will focus on enhancing health service provision for Kenyans. This will ensure faster service delivery for all.

Expected outcomes:
- A working Health Information Management System
- A Telemedicine strategy
- Counterfeit drug control services
- Medical information and mobile health applications availability to citizens

Connected Education

Education is the foundation of knowledge for all. ICT within the education sector will ensure connectivity for all students by providing virtual classrooms to enable learning through online participation.

Expected outcomes:
- Connected academic centres
- Access to online resources for students and teachers
- Increase online participation by adults
- Improved quality of education
- National Schools Education Network (SENet)
Kenya is an agricultural country. Adoption of ICT will facilitate access to information for improving production among farmers. Through this, Kenya will increase her exports to other countries while reducing imports and increasing food security.

**Connected Agriculture**

*Expected outcomes*
- Connected and ICT savvy farmers
- Affordable connectivity for farmers
- Social networks and collaboration tools

**Youth, Gender and Vulnerability Groups**

Kenya’s population majority consists of the youth and with the gender balance initiatives, Kenya, through ICT will ensure that IT literacy in the country is increased especially among the youth and vulnerable groups.

*Expected outcomes*
- Affordable connectivity in youth service organizations
- IT savvy youth
- Increase employment levels among the youth through ICT opportunities
- Increased availability of information to the youth
Strategic Pillar 2: Development of ICT Businesses

This pillar focuses on developing a globally competitive ICT industry as the foundation of a knowledge economy. Included here is the establishment of smart parks, smart infrastructure, smart platforms and centers of excellence that attract foreign direct investment, and create employment.

It further addresses Technology Innovation, Konza Technology City, BPO/ITES Industry, Digital Economy Development, Centers of Excellence, Technology Innovation. This shall entail creation of policies and infrastructure necessary to foster creativity and innovation at all levels.
Technology Innovation

Technology innovation aims to develop a creative and innovative ICT sector for the country. This shall entail creation of policies and infrastructure necessary to foster creativity and innovation at all levels.

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<tr>
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<th>Outcome(s)</th>
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<tr>
<td>Develop Industrialization Science and Technology Parks</td>
<td>Champion the development of science and technology parks that will provide the thrust for innovation, economic transformation, attract foreign direct investment and position the country as science and technology giant.</td>
<td>Economic transformation, Foreign Direct Investment Innovation</td>
</tr>
<tr>
<td>Develop software and hardware development standards</td>
<td>Champion the development of software and hardware development standards to prepare local developers with necessary skills and increase their competitiveness at the global stage.</td>
<td>Software development standards, Hardware manufacturing standards, Competitive skills</td>
</tr>
<tr>
<td>Promote Intellectual Property Rights (IPR) to safeguard innovation</td>
<td>To safeguard the innovation, together with responsible state agencies champion the enforcement of intellectual property rights in the country, create awareness among stakeholders and protect the creative industry.</td>
<td>Increased awareness on IPR, Protect Innovation</td>
</tr>
<tr>
<td>Recognize and Reward ICT innovators</td>
<td>Together with other industry stakeholders, champion the creation of mentors and role models by recognizing and rewarding ICT innovators through public acknowledgements and awards.</td>
<td>Mentors programme</td>
</tr>
<tr>
<td>Establish Centers of Excellence</td>
<td>Champion the establishment of centers of excellence to exhibit the use and adoption of ICT in different industries, sectors and fields. This is meant to showcase the possibilities of technology.</td>
<td>Centers of Excellence</td>
</tr>
</tbody>
</table>

Table 1: Technology Innovation
The vision for Konza Technology City is to build a sustainable world-class technology hub with a vibrant mix of businesses, residents, and urban amenities that will be a major economic driver for the nation.

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</table>
| Identify priority sectors, assesses competitiveness and maps companies  | Develop a 4-stage process for:  
Prioritizing sectors  
Defining enablers for competitiveness  
Identifying ICT opportunities across the value chain  
Mapping companies against the set criteria | Commitment from key investors                                                                        |
| Developing incentives for investment                                   | Creating a portfolio of incentives to attract ideal investors                                        | A great ecosystem of investors across key sectors who are able to contribute to the attainment of the Konza vision |
| Implementation of the Konza Technology City Project                    | Empower enabling sectors, e.g. Financial, Health, Education, etc  
Deploy infrastructure  
Deploy reliable telecommunication services  
Improve high-class shared amenities, e.g. roads, sanitation, etc | Deliver Africa's number 1 technology city                                                              |

Table 2: KONZA Technology City
Having been identified as a flagship project in Vision 2030, Business Process Outsourcing and IT Enabled Services (BPO/ITES) presents a tremendous opportunity for the country if leveraged well. This project area will explore and execute key strategies to unlock this potential.

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<tbody>
<tr>
<td>Develop a market for BPO/ITES both locally and Internationally</td>
<td>Create BPO opportunities and proactively market Kenya abroad as a BPO/ITES destination</td>
<td>Delivery of BPO services locally and internationally</td>
</tr>
<tr>
<td>Develop and Implement National BPO/ITES strategy</td>
<td>Development of a Techno-city for promoting BPO/ITES, IT Tourism and Employment creation</td>
<td>Fully operational Techno-city offering employment, entrepreneurship and ICT export opportunities</td>
</tr>
<tr>
<td>Develop National BPO/ITES standards</td>
<td>BPO/ITES standards are necessary to ensure credibility of the industry and fair trade</td>
<td>A formalized and regulated BPO/ITES industry</td>
</tr>
<tr>
<td>Develop and implement a National ICT R&amp;D strategy</td>
<td>The ICT R&amp;D strategy will include development of well resourced incubation centers, and a comprehensive, consolidated value chain between developers and the market</td>
<td>An influx for local innovations into the market through the existence of a supported value chain</td>
</tr>
</tbody>
</table>

Table 3: BPO/ITES and the ICT Industry
The Digital Economy is a key input in propelling economic growth and has been proven to create employment and improve income levels. It is essential in ensuring the uptake of ICT infrastructure and promoting economic growth. The focus of this project area will.

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<tr>
<td>Increase enterprises - SMEs and SMMEs - online participation</td>
<td>Support creation of online trading capabilities, including solutions in logistics and secure payment, access to IT cloud applications and web and mobile applications</td>
<td>Seamless sales fulfillment, improved service delivery and affordable operational tools for SMMEs</td>
</tr>
<tr>
<td>Encourage and Promote Telecommuting</td>
<td>Promotion of Fiber Connectivity to the home to enable home offices, entertainment and education through home learning</td>
<td>Increased online access for telecommuters, Increased localized learning tools</td>
</tr>
</tbody>
</table>

Table 4: Digital Economy Development
This Masterplan will be supported by a local resource base developed through well-equipped research and development environments, which allows for testing and creation of new concepts.

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<tr>
<th>Action</th>
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<th>Outcome(s)</th>
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<tbody>
<tr>
<td>Establish technology research and integration centres (TRIC)</td>
<td>Focus on research, development, and deployment of efficient and affordable technologies</td>
<td>Local R&amp;D Centres with adoptable solutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47 Technology Adoption and Integration Centers</td>
</tr>
<tr>
<td>Establish Technology Project Implementation Methodology for local SMEs</td>
<td>Develop tools for SMEs to use to implement projects and make them readily available</td>
<td>Improved quality of products and services and efficient use of business tools through project management training and resources for SMEs</td>
</tr>
<tr>
<td>Establish Permanent Demo Centers</td>
<td>Develop training centres for SMEs on business skills through Digital Villages</td>
<td>Digital Villages spread country-wide with SME business skills training centres</td>
</tr>
</tbody>
</table>

Table 5: Center of Excellence
Strategic Pillar 3: Strengthen ICT as a driver of industry

Transformation of key Vision 2030 economic sectors to significantly enhance their productivity, global competitiveness and growth.
Goal:
Programs in the Financial Services sector aim to transform Kenya into a trusted gateway and an innovative hub to East Africa for financial services through ICT.

Highlighted Outcomes:

An all encompassing e-Transaction law
Champion the enactment of e-Transaction legislation that will bring in legal certainty for e-Commerce and e-Business and therefore ensure full participation. This will also ensure all required standards are considered in the regulatory process.

Promote the development of affordable e-services
Promote adoption and localization of global e-services Increased awareness on availability, safety and access to e-services.

Promote awareness on cyber security
Both financial and non-financial institutions need high awareness of the need for secure online systems. This will ensure a secure online environment for conducting business and other economic activities. Encourage the use of security standards while designing, building and deploying IT systems.
Tourism and Hospitality

Goal:
ICT will be used to improve the experience of visitors to Kenya before, during and after their visit, and enhance the growth and competitiveness of the Tourism and Hospitality sector. The main focus will be on supporting a Digital Concierge Program.

Highlighted outcomes:

Facilitate the development of a digital concierge programme
Accelerate the development of informational, transactional, location-based and mobile-commerce services by solution providers through common reusable content and functionalities.

Facilitate networks for innovation of tourism innovation and destinations
Work with responsible ministries, agencies and other stakeholders to generate new innovative products and services through the use of ICT and broadband infrastructure to reach new markets and deliver exceptional tourist experience. Promote the development of an m-Tourism subsector that will utilize the momentum gained by the mobile industry. This may include the development of mobile applications, games and services for the sector.

Facilitate the use of ICT to promote and enhance the touristic offer
Assist the responsible Ministry and agencies to take full advantage of the available ICT and broadband infrastructure to promote, enhance and animate the Kenya touristic offer including the use of analytics and business intelligence solutions.
Goal:
ICT is a key enabler for the manufacturing sector. It is transforming the global manufacturing arena while at the same time opening up opportunities. Innovation and ICTs are transforming many sectors to anywhere, anytime platforms. In the manufacturing sector, the focus will be design anywhere, make anywhere, and sell anywhere.

Highlighted outcomes:

Facilitate the automation of the manufacturing value chain
Automation within the manufacturing industry and especially its value chain will lead to efficiency which brings a host of benefits including lower cost of production and hence competitiveness at the local, regional and international markets.

Promote manufacturing intelligence and digitally enabled manufacturing
Knowing what to produce and when is the next generation manufacturing trend that avoids waste and increases return on investment. This involves analyzing consumer trends and habits through analytics and business intelligence tools. Konza will promote the establishment additive manufacturing, leveraging the presence of world class technology institutions.

Promote green manufacturing
Sustainable manufacturing means a sustainable economy and a sustainable country. Together with responsibly ministries promote the use of green sustainable technologies and energy sources.
Transport and Logistics

Goals
Kenya is the transport and logistics hub of East Africa and as such programs in the Logistics sector will focus on using ICT to entrench Kenya’s position as a high-value hub and a supply chain nerve center.

Highlighted Outcomes

Facilitate setting up of an online trade exchange portal
Together with responsible ministry and other stakeholders, facilitate the setting up of an online trade exchange portal will provide the much-needed centralized information on trade including products and encourage buying and selling of commodities and services online.

Facilitate the development of a national logistics and transport network
In collaboration with the responsible Ministry and other stakeholders develop a national online transport and logistics network that will provide a one-stop shop for standardized logics and supply chain services.

Facilitate the development of a Trade Information Management System
Assist the responsible Ministry to develop a Trade Management Information System that capture statistics on trade, products and services, regulatory, trade facilitation information and data for effective decision making.
Goals
The high-tech sector has developed at extraordinary speed over the last couple of decades, at a scale far beyond early predictions. This development has also come with a growing energy need. The initiatives here are meant to promote innovative use of energy, adoption of green and sustainable energy sources.

Highlighted Outcomes

Promote the use of alternative energy (Green ICT)
Together with the responsible Ministry encourage the use of alternative sustainable energy to power ICT use and deployment.

Promote the development of Energy Efficient ICT Solutions
Encourage ICT practitioners, device manufacturers, system designers and developers to develop energy efficient solutions in line with sustainable ICT.

Promote the use of artificial intelligence on energy consumption
Through the responsible Ministry and Agencies, encourage the use of artificial intelligence and smart grid to improve and increase reliability, efficiency and sustainability of electricity and other forms of distributed energy.
**Goal**
Digital content has been identified as a critical enabler for rapid up take of broadband technology. Availability of local and relevant digital content and services contributes to an increased use of broadband infrastructure.

**Highlighted Outcomes**

**Increase trade opportunities for Creative Industry**
Support the creation of a Centre of Excellence to promote the arts and sciences. The Centre will collaborate with private and public sector to promote and enabling environment for the creative industry.

**Raise the Profile of Creative Industry**
Establish programs to highlight, recognize and celebrate exceptional talent in Kenya. By promoting local professionals, the program hope inspire and draw Kenyans to participate in the creative industry. This will help to increase the talent pool in the creative industry.

Promote efficiency, quality and quantity of goods and services in the Creative Industry

Support the Creative Industry with IT infrastructure like cloud computing, access to fiber optic networks and e-commerce tools.
The foundational pillars will form the platforms upon which the strategic pillars will be executed. This will consist of integrated ICT infrastructure and info-structure, country positioning, enhanced citizen capacity.
## Integrated ICT infrastructure and info-structure

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<tr>
<th>Action</th>
<th>Description</th>
<th>Outcome(s)</th>
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<tbody>
<tr>
<td>Roll out a National Next Generation Broadband Network</td>
<td>The rollout of a Next Generation Nationwide Broadband and Wireless Networks as the cornerstone for achieving the Connected Kenya Masterplan as it connects Government agencies, businesses, schools, hospitals and homes. By 2030, 100% of all sectors must have countrywide connectivity.</td>
<td>Provision of countrywide last mile connectivity solutions</td>
</tr>
<tr>
<td>Establish a National cloud computing platform for use by both private</td>
<td>Establishment of a national cloud environment for local businesses to offer Software as a Service to citizens and customers.</td>
<td>Centralized affordable cloud services</td>
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<tr>
<td>and public sector</td>
<td></td>
<td>Citizens service centres across the counties</td>
</tr>
<tr>
<td>Implement a National Open Data and strategic data Programme</td>
<td>Work with multiple government agencies, private sector and development partners to avail to the public important machine readable data</td>
<td>World class Open Data Portal</td>
</tr>
<tr>
<td></td>
<td>Develop strategic programme in the management of national data</td>
<td>Open Data based developer and application eco-system</td>
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<td>Integrated national data management framework</td>
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Table 5a: Center of Excellence
### Integrated ICT infrastructure and info-structure (Cont.)

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<tr>
<th>Action</th>
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<th>Outcome(s)</th>
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<tbody>
<tr>
<td>Develop a National framework for Information and Cyber Security through a proactive approach to the country security needs</td>
<td>Incorporate a comprehensive and integrated cybersecurity programme from vision to operational capability implementation</td>
<td>Government cybersecurity organisation incorporating multiple agencies</td>
</tr>
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<td></td>
<td>National cybersecurity governance framework</td>
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<tr>
<td></td>
<td></td>
<td>National cybersecurity policy and standards</td>
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<td></td>
<td></td>
<td>Raised cybersecurity awareness across Kenya</td>
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<td>Holistic comprehensive government cybersecurity architecture technology pipeline and implementation plan</td>
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Table 5b: Center of Excellence
<table>
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<tr>
<th>Action</th>
<th>Description</th>
<th>Outcome(s)</th>
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<tbody>
<tr>
<td>Develop an integrated multi-sector positioning strategy</td>
<td>Konza Technology City will be the basis for promoting Kenya as the Silicon Savannah to deliver the Master plan objectives</td>
<td>Established PPPs for delivering the Master plan</td>
</tr>
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<td></td>
<td></td>
<td>Completion of Phase 1 of Konza as a smart city with a world class data centre and world renowned research based technology university and 10 local/international anchor tenants</td>
</tr>
<tr>
<td>Drive local sector relevance for Konza</td>
<td></td>
<td>Establish incubation and local centre of excellence for local firms</td>
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<td></td>
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<td>Develop partnership between local and international firms for mutual growth</td>
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Table 6: Country Positioning
Enhanced Citizen Capacity

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<tr>
<th>Action</th>
<th>Description</th>
<th>Outcome(s)</th>
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</table>
| Develop a shared services strategy | This will enable public service providers to work closely together to share information as relevant to citizens and ensure seamless access to records. Citizens will be able to access public services through electronic means cost effectively. | Establish citizen portals  
Establish public services shared platforms |
<table>
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<tr>
<th>Action</th>
<th>Description</th>
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<tbody>
<tr>
<td>Masterplan coordination and tracking</td>
<td>The Programme Management Office will ensure targeted projects are executed efficiently.</td>
</tr>
<tr>
<td>Identifying and recruiting partners</td>
<td>The Connected Kenya Masterplan is heavily dependent on partnerships. This facilitation role will, therefore include engaging with relevant public sector partners and bring them on board on specific projects.</td>
</tr>
<tr>
<td>Project management and monitoring</td>
<td>The implementation of this master plan will be treated as a project with timelines and milestones. The Facilitation role will therefore include that of managing the scope, resources and time as defined in the master plan.</td>
</tr>
<tr>
<td>Research</td>
<td>This action will lay the groundwork that will fuel creativity and innovation by providing the necessary platform that supports local research and development, enterprise and talent development through incubation.</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>The Connected Kenya Master plan’s performance will be benchmarked against global indices and from which lessons may be drawn to improve the delivery of the master plan.</td>
</tr>
</tbody>
</table>
Achieving the Connected Kenya Master plan vision of establishing a robust and countrywide high-speed ICT infrastructure, harnessing ICT for economic transformation, people engagement and empowerment and creation of a smart nation will require the mobilization of significant financial resources and technical skills and capacity. In 2011, ICT spending was US$860 million. Government of Kenya spent 0.3% on IT as a percentage of overall spending. This is 20 times less than government industry average of 6.5%. This will need to increase and be reallocated based on planned priorities. Most Government ICT spending is on hardware at 65% compared to global benchmark of 18%. IT spending on staff is significantly lower at 18% as opposed to 38% for global benchmark. A variety of internal and external financing sources will need to be made available to address the different financing and technical assistance needs, both over the short- and the medium-term.

And because there are limitations in public and official development assistance financing, it is essential to mobilize additional resources from other development partners, the private sector, and the capital market. For example, capital market financing needs to be developed to support the issuance of relevant instruments (such as infrastructure bonds), which are considered to have investment grade credit rating.

The ministry through the Kenya ICT Board will come up with incentives to draw in private sector financing the infrastructure projects in the master plan. Development partners and other ministries will need to be engaged to bring in their budgetary allocations for some of the initiatives falling under their ministries or mandates.

Financing risks identified in the Master Plan execution include:

- Starving ICT projects of funds - currently, on average Government ICT projects are not funded enough for the duration of their useful life to keep them current and relevant and so their intended objectives are not effectively met. Projects identified will need to be well funded for initial deployment, licensing, support and maintenance. A detailed costing plan for each identified initiative will be developed as a follow-on to this plan which will center around the basic understanding that:
  i. Software deployment budgets should grow to between 30 - 50% of software licensing budgets while maintenance and enhancement budgets will need to increase to averages of 40% of license budgets annually from the current 5 - 10%
  ii. Infrastructure and hardware should be budgeted for in line with the identified needs in this plan
The development of the Master Plan has been a year-long process driven by the Government of Kenya through the Ministry of Information and Communication with support from the National Communication Secretariat.

In developing this plan, our ambition was to produce a simple document which every citizen would understand while committing to clear deliverables over the next 5-years. The deliverables are key to achieving our outlined vision, which centers on growing the economy through infusion of ICTs and knowledge into all our Vision 2030 pillars. The projected economic growth is largely pegged to enhanced citizen value.

The Master Plan has been a collaborative effort among numerous partners who volunteered their support representing KICTB, NCS, Telecommunication Operators, CCK, Multimedia University, USIU, BPO/ITES Workgroup at the Office of the Prime Minister, CIO East Africa, Creative Industry Task Force, Connected Health Task Force, HP, Cisco, Microsoft, Accenture, Oracle, PWC and IBM Corporate Service Corps among others. We got input for many individuals who we cannot all list here but should know that we are sincerely grateful.

Extensive benchmarking was done with other developed economies that have taken great strides to articulate, develop and implement their ICT Master Plans such as Singapore and Malaysia. Earlier drafts of the plan were validated globally in the USA, UK, Singapore, and South Africa among other countries and learnings incorporated. Beyond this a local citizen engagement exercise was carried out over a period of one month and feedback incorporated. All this was done to ensure that every possible input would be considered to enable delivery of a holistic plan.

This plan is a living document, which will be reviewed annually to assess progress and realignment to the priorities of the day.

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