Executive Summary

The Ethiopian Ministry of Communication and Information Technology (MCIT) has a mission to develop, deploy and use ICT to improve the livelihood of Ethiopians and optimize its contribution for the development of the country. Towards this end, erstwhile EICTDA, ETA and the communication wing of the previous MoTAC, has undertaken a number of e-Government initiatives to improve the internal efficiencies within the government organizations and to improve the access to government services for the general public. Ministry of Communication and Information Technology realizes the need to integrate these initiatives to provide a strategic direction for e-Government implementation in the country. It is in this context that the **e-Government strategy for Ethiopia** has been designed, with a focus on facilitating effective delivery of government services to customers (residents, businesses and visitors).

The strategy envisages implementation of 219 e-services comprising of seventy seven (79) informational and one hundred thirty four (140) transactional services over a five year period. The implementation is proposed to be done **through twelve (12) priority projects and service delivery would be through four channels (Portal, Call centre, Mobile devices and Common service centres)** and delivery will be facilitated and strengthened through Six(6) core projects, including National Payment Gateway, Enterprise Architecture framework, Public Key Infrastructure, National Data Set, National Enterprise Service Bus and National integrated Authentication Framework.

In addition – common applications which will horizontally cut across all ministries are proposed, which include initiatives like E-Procurement, Human resource Management System, E-Office, E-Mail and Financial management & Information System

The Strategy has been design keeping the following guiding principles of e-Government

- E-Government is focussed in creating a SMART (Simple Moral Accountable, Responsive and Transparent) Government;
- E-government promotes causes of e-citizen and e-democracy;
- E-Government is not translating processes, however transforming processes;
- E-Government necessitates Capacity building within the Government;
- E-government aims networked and integrated government;
- E-government is citizen-centric;
- E-government provides multi-channel delivery of public services;
- E-Government aims in providing convenient access of information to all, and improving service access & delivery;
- E-Government enables development & participation of all segments of population to reap benefits of IT and also participate in the Governance process and be able to voice their opinions more effectively; and
- E-Government supports in development and inclusion of Private Sector in public service delivery.

The e-Government strategy has a customer-centric focus so as to facilitate the delivery of services and information through alternate channels in a manner that is convenient for the citizens and is in line with their expectations and aspirations. Life cycle based representation of services is a powerful tool towards this end and therefore, the strategy envisages the use of life-cycle events while electronically enabling the services.

As per the life cycle based concept, all services for a particular event, for e.g. 'starting a business' should be available under a single umbrella and the customer should not be required to have multiple touch points for the same. In addition to classifying and prioritizing services, services must be integrated at the back-

end based on customer lifecycle approach. The services can be grouped by their customer base, and these can further be mapped onto the various customer lifecycle events, where they each respond to a particular need of the customer at a given time. Hence existing services can be identified based on life-cycle services approach for the various customer groups— citizens/residents, businesses, visitors and government employees. **Life-cycle of events for the citizens/residents, business, visitors and government employees is discussed in detail in the full document of the strategy.**

In line with the above, Vision, Outcomes, targets and strategic plan for the Government of Ethiopia has been pictorially depicted in the figure overleaf. Each of the components depicted in the figure overleaf are further detailed in the next few pages. A brief of the proposed implementation plan for the strategy is also mentioned – thus encapsulating the complete E-Government Strategy and its implementation – in this chapter.

Figure 1 : e-Government Strategy and Goals
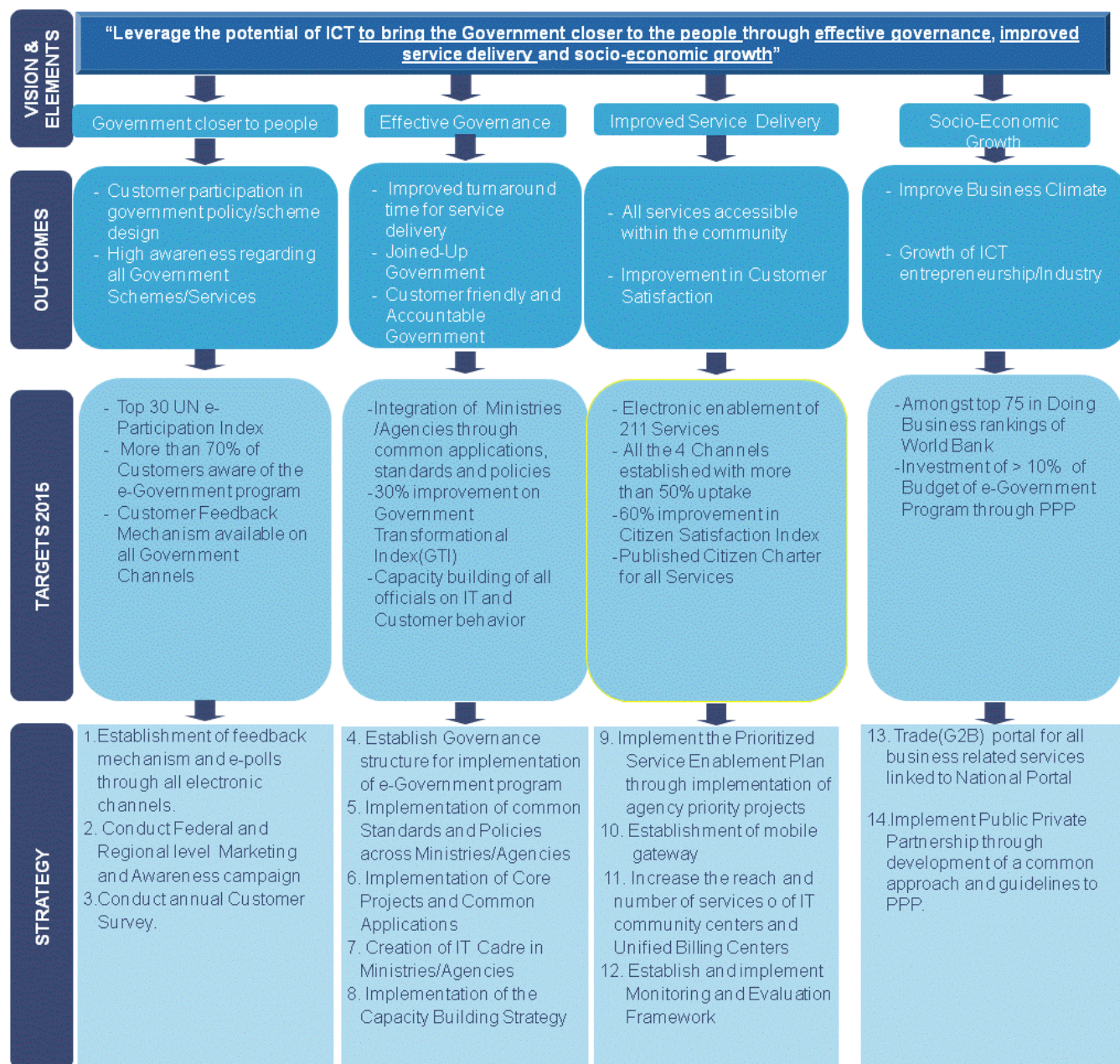
The vision of the e-Government strategy has four key elements:

1. **Bring the Government closer to the people:** The e-Government strategy aims to increase the awareness levels of the people regarding the services offered by the Government and their rights as customers and also make it easier for the customers to influence and participate in design of Government policies and schemes. This participation is expected to create a sense of ownership and a culture of higher compliance leading to closer ties between the government and the people.

2. **Effective governance:** The implementation of the e-Government strategy will lead to backend automation and adherence to a common set of policies and standards leading to better integration and information sharing amongst them and resulting in making the government organizations more effective and efficient in discharging their services and duties. Furthermore, capacity building to impart training to public servants on skills that will enable them to serve the customers in a more effective manner is an integral part of the overall e-Government strategy.

3. **Improved service delivery:** The *sine qua non* of the e-Government Strategy is the electronic enablement of 219 services to be delivered through alternate channels such as the internet, mobile, call centre and the citizen facilitation centres. The introduction of these alternate channels will empower the people with the choice of how, when and where they interact with the government to facilitate a "no-wrong door policy" which will further improve the customer satisfaction levels with the government services. It is also envisaged that electronically enabled services would be not only faster, and easier to demand and avail but will also have pre-defined and published service levels thereby leading to a visible enhancement in quality of service delivery.

4. **Socio-Economic growth:** The implementation of the e-Government program will benefit through participation of the private sector and deployment of its resources, entrepreneurship and competence. At the same time, the private sector would also benefit through the e-Government program as government services will be delivered faster and at a lower cost to the customers thereby resulting in lower cost of doing business. This is likely to foster a symbiotic environment that would promote economic growth and sustainability of the e-Government initiatives.

Outcomes and Targets

In order to measure and manage progress, it is imperative to define key outcomes and targets that would enable realization of the vision. Also linkages with the National ICT policy Goals have been provided in the table below:

Table 1: Outcomes and Targets

Outcomes and Targets	Description
Element of Vision: Bring government closer to the people	
Outcome 1: Customer participation in Government policy/scheme design **Target 1 - Ethiopia to be amongst the top 30 countries in the world in the e-Participation index of UN by the year 2015 (Ranked 135 in 2010):** Most countries are using electronic channels to understand firsthand the views, expectations and aspirations of their people. UN's e-Participation index measures the progress made by all the member countries in doing the same. It is envisaged that the e-Government portal as well as other alternate service delivery channels will facilitate the citizens in putting forth their feedback and preferences on national issues. **Target 2: Customer Feedback Mechanism available on all Government Channels:** A comprehensive Grievance redressal mechanism and a process to inculcate feedback from various stakeholders would be established so that existing Government policies and schemes can be modified and new schemes created as per customers' feedback. **Outcome 2: High awareness regarding all Government Schemes/Services** **Target 3: More than 70% of Customers aware of the e-Government program:** An integral element of the implementation of the strategy would be a high decibel marketing and awareness campaign at the federal as well as regional levels to create awareness regarding the e-Government program and the benefits of availing e-Services. E.g. The customers need not travel to Addis Ababa or any other regional centre to seek information and services – such facilities would be made available within their immediate community. This will not only present the government in positive light as working towards the benefits of the customers but will also facilitate in higher take-up of new channels. **Linkage to National ICT Policy Goal:** To ensure access to ICT by Ethiopia's rural population.(It is also linked to Vision of Improved Service Delivery across different Channels)	
Element of Vision: Effective Governance	
Outcome 3: Improved turnaround time for service delivery **Target 4 – At least 30% improvement on Government Transformation Index (GTI) from 2010 to 2015:** Government Transformation Index (GTI) helps to assess impact of the e-Government program on Government based on parameters such transparency, accountability, responsiveness and quality of delivery of services. It aims to measure the beneficial impact of projects in transforming government practices at a program level. This tool will also build a review mechanism to assess the	

Outcomes and Targets	Description

impact of implementation of e-Government strategy in enhancing the effectiveness of the government. The target is to improve government efficiency by at least 30% from 2010 to 2015.

Outcome 4: Joined-Up Government

Target 5- Integration of Ministries /Agencies through common applications, standards and policies: The e-Government Strategy mandates the implementation of common applications, standards and policies to improve government efficiency and costs through facilitation of better coordination amongst the government departments. Towards this end, two key imperatives would be:

- Core projects which include, Data Centre, Woreda Network, National Dataset, Payment Gateway, Enterprise Architecture and PKI would be implemented to provide the requisite foundational infrastructure upon which service enablement can be accomplished

- Along with the core infrastructure, common applications need to be made available across the Ministries and Agencies to enable smooth functioning and provide focus on implementation of the priority projects by reducing the effort required. The common applications would also facilitate collaboration and consistency across common processes such as procurement, HR management, Financial Management etc.

Outcome 5: Customer friendly and Accountable Government

Target 6 – Capacity building of all officials on IT and Customer behaviour: Capacity building is an integral part of the e-Government strategy and is envisaged to be a tool for change management, imparting relevant IT skills to government personnel and to re-orient the customer facing staff in terms of customer etiquette and quality of service. By 2015, all the officials should have received training relevant to their job which will enable them to discharge their responsibilities in a more effective and efficient manner.

Linkage to National ICT Policy Goals:

- Establish highly skilled ICT human resource base for transforming Ethiopia into a knowledge- and information-based society and economy.(Through Capacity Building Initiatives detailed in further sections)

- Promote infrastructure development including physical and telecommunications and communications infrastructure as a backbone for ICT development.(Core Projects and Common Applications which will help in delivery of public services)

Element of Vision: Improved Service Delivery

Outcome 6: All services accessible within the community

Target 7 - Electronic enablement of 219 services: Electronic enablement of the 211 service 'transactions' to enable services across Life Cycle Events for businesses and citizens/residents. All services that can be provisioned electronically will be made available through alternate channels. Procedural information and support for services that are not amenable for electronic delivery will be provisioned through alternate channels.

Additionally, a Grievance Redressal System will be developed during the first year of the program, i.e. 2011. Procedural information about all the services that may not be amenable for electronic delivery will also be made available through electronic channels. (Definition of Life Cycle Events and transactions has been provided in Annexure I).

Outcomes and Targets	Description

Target 8 – All the 4 Channels established with more than 50% uptake for alternate service delivery channels: The customers should be able to interact with the government at a time and place of their liking. To facilitate this endeavour, the access to government services and information would be provisioned through internet, m-Government and contact centre so that citizens can connect with government 24*7. Further, common services centres would be leveraged to provide all government services within the community. All the channels are envisaged to be functional by 2012 albeit with different number and maturity of services. All identified services to the maximum possible depth to be provided through all channels by 2015. Uptake of services through alternate channels is the best indicator to test the success of these channels and therefore all efforts would be made to ensure that at least 50% of the transactions with the government are conducted through the alternate channels. This would reflect the efficacy of reaching out to all customers and the effectiveness of the alternate channels created as part of the strategy.

Outcome 7: Improvement in Customer Satisfaction

Target 9 – 60% customer satisfaction: The Customer Satisfaction Index would use mechanisms like e-Poll, Feedbacks, e-Consultation, surveys, etc, to assess customer satisfaction levels with delivery of government services. Comprehensive reviews will be undertaken to take corrective measures wherever satisfaction rating falls below 50% of all customers. The target is to achieve 60% customer satisfaction rate by 2015.

Target 10 - Published Customer Charters for all services provided by government organizations by 2015: Customer charter is a published document that announces the service levels such as the turnaround time for service, escalation mechanism in case of unsatisfactory quality of service, requirements for availing services etc. The target is to put in place a Customer Charter in place for all services provided to citizens, businesses, government employees and visitors. This is likely to increase customer satisfaction levels due to higher transparency and accountability in provisioning services.

Linkage to National ICT Policy Goals:
- Deliver efficient and effective public and civil service to all citizens.(Through Multiple Channels, enablement of e-Services and customer charters for transparency)
- Ensure that ICT as an integral part of education and training at all levels.(Education is one of the 12 Priority Projects being implemented as part of the Strategy)
- Modernize and expand improved health services coverage using ICT. (Health is one of the 12 Priority Projects being implemented as part of the Strategy)
- Modernize agriculture and radically increase output and productivity. (Agriculture is one of the 12 Priority Projects being implemented as part of the Strategy)

Element of Vision: Socio-Economic Growth

Outcomes and Targets	Description

Outcome 8: Improve Business Climate

Target 11 – Amongst top 75 in Doing Business rankings of World Bank for ease of doing business in the country (Ranked 116 in 2009): Doing Business is an annual report investigating the regulations that enhance business activity and those that constrain it. It presents quantitative indicators on business regulations and the protection of property rights that can be compared across 181 economies. The delivery of services through alternate channels is likely to simplify business processes and reduce the cost of doing business and compliance with regulations.

Outcome 9: Growth of ICT entrepreneurship/Industry

Target 12 – Investment of > 10% of Budget of e-Government Program through PPP: Experience of other countries illustrates that a number of industries such as banking, education, Information Technology, Telecommunication etc. get positively impacted due to large scale e-Government implementations. The players in these sectors invest not only as part of their Corporate Social Responsibility (CSR) initiatives but also to create goodwill and awareness regarding their products through advertisement and association with the e-Government program. It is envisaged that such partnerships will facilitate in accrual of 10% of the total funds required for the implementation of the e-Government strategy.

Linkage to National ICT Policy Goal:

- Develop an efficient and globally competitive ICT industry(Through Private sector Involvement and Growth)
- Ensure Ethiopia's effective participation in national, regional and global trade(Trade portal is one of the 12 Priority Projects being implemented as part of the Strategy)

Strategic Dimensions

In order to achieve the above outcomes and targets leading to the realization of the vision, strategic components and an action plan for the implementation of these strategic dimensions has been defined. The figure below presents the key Strategic dimensions:

Figure 2: Key Strategic Dimensions
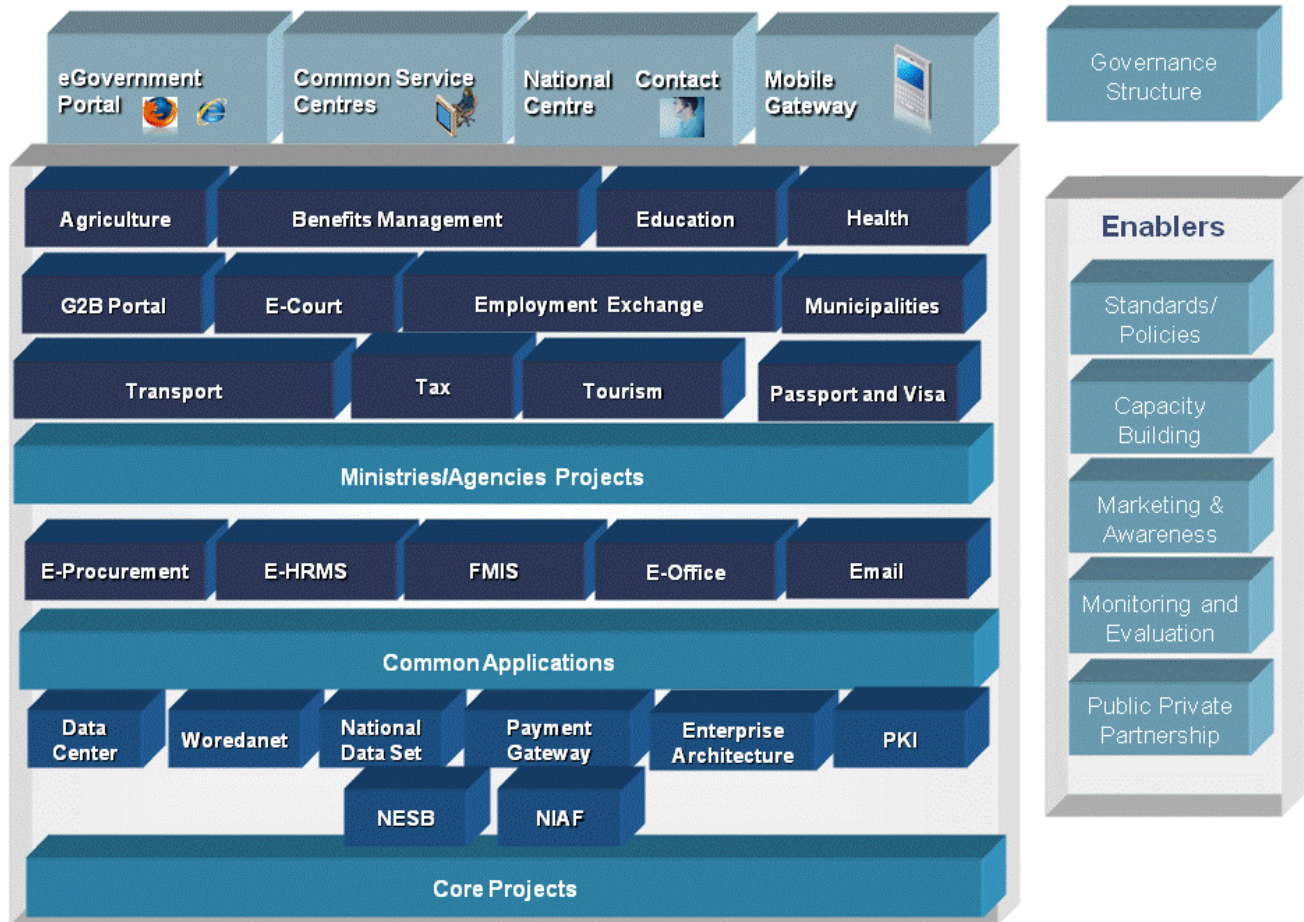
As can be seen from the figure above, the key dimension of the e-Government strategy for Ethiopia are Services enablement through the implementation of 12 Agency priority projects, delivery of services through 4 alternate channels of services delivery and the enablers which will facilitate the creation of a sustainable ecosystem for the implementation of the e-Government strategy. **All these dimensions are shrouded in the Governance structure to highlight the key role that the governance mechanism for the e-Government program is envisaged to play in ensuring that each of the strategic dimensions gets implemented in a way** that furthers the overall implementation of the e-Government program. The strategic components are explained as follows:

Strategic Dimension 1 -Service enablement

1. **Ministry's Priority Projects** - 219 services through implementation of 12 Ministry's Priority Projects that will facilitate service enablement of these services based on lifecycle based service requirements of customers. The key priority projects are mentioned in brief below:

i.   **Agriculture Services** - Given this overwhelming significance of Agriculture in the Ethiopian economy, it is imperative to leverage ICT to facilitate services provided for the agricultural sector. This project would be undertaken under the ownership of the Ministry of Agriculture and Rural Development.

ii.   **Benefits Management** - Benefits are offered to Citizens by various agencies and departments. To improve satisfaction with the services, it is essential that the customers are able to get information about their eligibility for different schemes and file a single request to avail all the benefits. Such a common interface also enables better management and improved service levels of the services offered by such benefit schemes. This project would be undertaken under the ownership of the Social Security Agency or Ministry of Labour & Social Affairs and would also involve Addis Ababa city administration.

iii. **Education** - Education is one of the priority areas for the development of Ethiopia. Education related services have huge potential for leveraging ICT. The field of education is apt for initiating such a project as it has a direct impact on the future development of the country. This project would be undertaken under the ownership of Ministry of Education.

iv.   **E-Health** - Health is also one of the focus areas for the government of Ethiopia. It is imperative that the field of health is IT enabled not only to improve the efficiency and the effectiveness of the Hospitals and labs but also to build a base for gaining access to future advancements in medical science. The field of health is also a prime candidate for leveraging ICT for better service delivery to the citizens of Ethiopia. This project would be undertaken under the ownership of Ministry of Health.

v.   **Trade Portal** - The portal would serve the business community's need for information and services such as business registration, licensing, loans, penalties etc. Also investment related regulations and processes would be facilitated through the G2B Portal. The portal is also a medium of interaction and feedback on Government policies and regulations. It is imperative for the G2B space to be e-enabled for sustained economic growth of Ethiopia. This project would be undertaken under the ownership of Ministry of Trade and Investment.

vi.   **Employment** - Generation of adequate employment opportunities is imperative for the prosperity of Ethiopia. This project envisages facilitating the same through better information dissemination amongst the unemployed and by providing a forum for the companies and the individuals to interact. This will also help the businesses find the right people. This project would be undertaken under the ownership of the Ministry of Labour.

vii. **Transport** - This project would facilitate the electronic enablement of the services provided by the Ministry of Transport and Communication and the Transport Authority. Most of these services such as the services related to Drivers License and Registration of vehicles are high volume, high impact services that would improve the service experience of a large number of people. This project would be undertaken under the ownership of the Ministry of Transport and Communications.

viii. **Tourism** - The government is keen to leverage the same to enhance the contribution of the tourism sector in the national economy. This priority project is envisaged to be a facilitator towards this end. This project would be undertaken under the ownership of the Ministry of Culture and Tourism and participation of Ministry of Foreign Affairs.

ix.   **Tax** - The Government of Ethiopia has launched an ambitious government transformation plan aiming at double digit growth of the economy for the next 5 years. In order to support such a voracious growth, a huge number of resources need to be mobilized. In order to generate these resources, it is imperative to ensure that the cost of compliance to tax system in Ethiopia is

lowered so that tax collections may be enhanced. This project aims to facilitate the same. This project would be undertaken under the ownership of the Revenue and Customs Authority.

x. **e-Court** - e-Court project envisages leveraging ICT to facilitate the delivery of services provided by the judiciary. This project would be undertaken under the ownership of the Ministry of Justice. Services of the Federal Supreme court would also be covered under the project.

xi. **Municipalities** - This project envisages leveraging ICT to facilitate the delivery of services provided by the Municipalities. This project would be undertaken under the ownership of the Addis Ababa City Administration.

xii. **Passport & Visa** – This project envisages automation of services relating to issuance of passports and visa and the services would include application/renewal /replacement of passport, visa processing and ID Card issuance for Foreign Nationals. The project would be undertaken by Ministry of Foreign Affairs

> *The electronic enablement of services will be undertaken in a phase wise manner. It is expected that while all information services, grievance redressal mechanism and most information services will be provided electronically by the end of year 1 (2011), transactional services will be enabled progressively over the course of next 5 years (2015).*

The e-Services enablement plan for 219 services through the priority projects is provided below in figure

Figure 3: e-Service enablement Plan

Agency Priority Projects	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Agricultural Services	15	6	8			29
Benefits Management system		2	3			5
Education	5	3	5			13
Health		4	10			14
e-Trade		6	5	7		18
Employment		3	12			7
Transport	6	8				14
Tourism		4	2	4	4	14
Tax	7	6				13
e-Court		4	7			11
e-Municipality		25	13	19	5	62
e-Passport	2	4	5			11
Yearly Services	35	73	64	30	9	
Total Services (79 Informational,140 Transactional)						219

Transactional

Informational

2. **Common Applications:** Common applications need to be made available across the Ministries and Agencies to enable smooth functioning and provide focus on implementation of the priority projects by reducing the effort required. The common applications would also facilitate collaboration and consistency across common processes such as procurement, HR management, Financial Management etc. The details of the common applications include

    i.   **e-Procurement:** Provide businesses and ministries with common platform to transact with features such as Demand aggregation, catalogue based procurement, dynamic pricing engine, etc (this project has been already started by the Ministry of Finance along with IFMIS project)

    ii.   **HRMS -** Government wide HRMS application to handle all functions related to leave, transfer, payroll, recruitment etc. (this project is in the process of initiation by Ministry Civil Service)

    iii.   **E-office-** To eliminate the paper-based interactions even within the government across different agencies by using a single solution

    iv.   **FMIS -** Enhancement of the existing Integrated Budget and Expenditure System (IBEX) addressing the core functions of public financial management. (this project has been already started by the Ministry of Finance and progressing well)

    v.   **Email Management System:** Email can be used as a very effective medium for the inter-office and intra-office communication. Since the email system will be common across the departments, the common system can be used across with the standardization in email addresses. (this project is to be implemented step-by-step, now the 13 Ministry and the 18 represented Institutions are on the process of implementation. This is one of the service of the 13 Ministry Project at MCIT)

The implementation plan for the common applications is provided below:

Table 2: Implementation Plan for common applications

Yr. v/s Project	Implementation plan				
	Year 1	Year 2	Year 3	Year 4	Year 5
e-Procurement	In process				
HRMS	In progress				
e-Office					
FMIS	In progress				
Email	In process				

3. **Core Projects:** The core projects, as mentioned are proposed to be implemented in the 1st three years of implementation of the strategy implementation, considering the fact that they would be building blocks/ or the facilitators for the priority project implementation.

I.   **National Data set:** Provisioning a national level data set of commonly used data elements across ministries, that can be used by all inter-ministerial applications as well as channels of delivery (national portal, mobile portal, CSC, NCC etc.) for delivering eServices

II. **National Enterprise Service Bus (NESB):** Provisioning a platform for seamless integration of ministry / agency applications and database at the back end; integrating all front end channels to deliver eServices

III. **National Integrated Authentication Framework(NIAF):** Provisioning of a unique identity based login to individuals for accessing the various electronic channels of government (National Portal, Mobile Portal, Common Service Centre (CSC) and National Contact Centre (NCC) & other ministry applications

IV. **National Payment Gateway:** Provisioning of a national payment gateway for Ethiopia to enable all modes of electronic payments to be transacted through all the electronic channels of delivery. (implemented by the national Bank)

V.   **PKI :** Provisioning of PKI based identification, integrity and non-repudiation for online transactions related to the e-Government projects in Ethiopia. (the guideline is finalized, implementation is to follow)

VI. **Woreda Network:** Provisioning of high bandwidth connectivity between ministries and agencies for sharing data, voice and video communication throughout the country. (done, but upgrading is in process)

VII. **National data Centre:** It is proposed that the Ethiopian National Data Centre (ENDC) would consolidate services, applications and infrastructure to provide efficient electronic delivery of G2G, G2C and G2B services. ENDC infrastructure shall provide adequate space to house ICT assets of various departments and Government agencies within the country in an environment that meets the need for reliability, availability, scalability, security and serviceability.

VIII. **National enterprise Architecture:** Unified architecture adoption across ministries enabling better integration of ministry applications. (the guideline is finalized, implementation is to follow)

The implementation plan for the common applications is provided in the table below:

Table 3: Implementation Plan for Core Projects

Yr. v/s Project	Implementation plan				
	Year 1	Year 2	Year 3	Year 4	Year 5
National Data Set	■	■			
National Enterprise Service Bus		■	■		
National Integrated Authentication Framework		■	■		
National Payment Gateway	In process				
Public Key Infrastructure		Guideline is ready			
Enterprise Architecture		Guideline is ready			

* WoredaNet and National data Centre is already being implemented by MINISTRY OF COMMUNICATIONS & IT

Strategic Dimension 2- Channel Enablement:

Implementation of the following **four** service delivery channel enhancement projects that will enable the customers to demand and avail services as per their choice and convenience: (The plan in the next years is indicated in Table 4)

1. **e-Government portal** where customers can use internet to request and avail services, search information, make payments, etc the national e-Government portal of Ethiopia – www.ethiopia.gov.et needs to be updated and enriched with the electronic enablement of 219 services over the next 5 years.

> *Given the high cost of ownership of internet, PC and mobiles and the relatively low ICT literacy in Ethiopia, Common Services Centers are expected to be the primary vehicles of electronic services delivery during the initial part of the implementation of the e-Government Strategy. Mobile channel is also expected to become a key channel for delivery of services over the next 5 years if the projection of the number of subscribers of mobiles in Ethiopia were to be realized.*

Currently Ethiopia's e-Portal is managed in-house. Based on the current assessment of the existing portal and websites of various departments, it is suggested that the government continue with the "in-house portal" model. However, the portal must be enhanced to be able to provide eServices. Additionally, the Government must consider options to allow private sector participation in the provision of related value-added services through the e-Government portal. (1st phase completed, hosted, upgrading is in process)

2. **Phone (Call Center)** where customers can call up to request services and information and access the same through call center agents and 'Interactive Voice Response' technologies. Government of Ethiopia has set up an in-house government call center. Since the exiting set-up is very basic and not a full-fledged call center, it is suggested that as part of the e-Government strategy implementation, the government establish an "Outsourced Call Center" to facilitate e-Services. It is planned to provide around 77 Informational and 40 transactional services through the call centre channel. (federal and Oromia level centers are established, other region to follow, upgrading the centers is to be done)

3. **Mobile Gateway** where customers can request services and information through mobile phones and hand-held digital personal assistants. The departments can send customers regular alerts through SMS. It is recommended that the Government of Ethiopia should review options of Outsourced Mobile gateway and ASP model (vendor managed) gateway for its services as current number of transactions may not warrant a dedicated in-house mobile gateway. It is planned to provide around 77 Informational and 40 transactional services through the Mobile channel. (the gateway is on the development, will be ready with upgraded portal version)

4. **Common Service Centers (CSC)** where services like Information dissemination, acceptance of service requests and delivery of services is provided to the customers at a single point of service delivery. It is recommended that the 92 existing ICT Community Centres and the proposed 42 Unified Billing Centres are leveraged as CSCs for offering government services. In addition it is proposed to set-up around 800 centres (equal to approx. number of Woredas) on a PPP model. These centres would provide access to the 219 services – across the country. (more community centres are to be established, 15 has started this year to be established, the same will follow)

The implementation for e-Services through the channels is provided below

Table 4: e-Services Implementation Plan for the Channels

Channel	Year I	Year II	Year III	Year IV	Year V
Portal	35	73	64	30	9
Contact Centre	35	42	20	20	
Mobile		35	42	20	20
ICT Centres	35	73	64	30	9

Strategic Dimension 3- Enablers:

It is essential that the various components of the e-Government strategy are supported by the following **Five key enablers** to assure successful and timely implementation of the e-Government strategy and ensure the sustainability of the initiatives:

- **Common standards and policies** would enable an integrated and connected Government and facilitate standardization and efficiency across all key elements of the e-Government Components
- **Capacity building activities** such as training, career planning and change management would ensure the availability of personnel resources and skill sets required to achieve the strategy
- **Marketing and awareness** campaigns are key enablers in generating awareness and communicating with external and internal stakeholders to generate sufficient demand for the electronic services and reduce possible resistance to e-Government
- **Monitoring and evaluation** would enable the High Committee/Technical Committee, through the project office, to monitor progress, customer satisfaction and government transformation which would be important in assessing if the desired outcomes are being achieved
- **Public Private Partnership** models facilitate private sector participation for effective and efficient delivery of services

Overall Cost Estimates: Budgetary estimates for the implementation of the Strategy over a period of five years are approx. 3328.18 Mil. Birr or approx. 201.46 Mil USD. Details are provided in section 8 of the full e-government report. This cost includes the cost of the projects started or initiated by Ministries.

Overall Implementation Plan: The E Government Strategy along with all its components is to be implemented and monitored and assessed over a period of five years.

The components essentially comprise of the core projects – which are the infrastructure projects, the identified twelve priority projects and the Enablers. The enablers would actually be implemented over a period of 1 year – but they will be used on a recurring basis for the entire five year period.

The brief of the proposed overall implementation plan is provided below. The details of the implementation are in the full strategy document.

Table 5: Overall Implementation Plan

S No.	Project	Year 1	Year 2	Year 3	Year 4	Year 5
	Core Projects					
1	National Data Set	� bar	▮			
2	National Enterprise Service Bus		▮	▮		
3	National Integrated Authentication Framework		▮	▮		
4	National Payment Gateway	In process				
5	Public Key Infrastructure	Guideline ready				
6	Enterprise Architecture	Guideline ready				
	Priority Projects					
1	Agriculture services	▮	▮	▮		
2	Benefits Management System		▮	▮	▮	
3	Education	▮	▮	▮		
4	Ehealth		▮	▮	▮	▮
5	G2B Portal		▮	▮	▮	▮
6	Employment	▮	▮	▮		
7	Transport	▮	▮	▮	▮	▮
8	Tourism	▮	▮	▮	▮	▮
9	Tax	▮	▮		▮	▮
10	Ecourts		▮	▮	▮	▮
11	Municipality	▮	▮	▮		
12	Passport & Visa	▮	▮	▮		
	Enablers					
	Marketing & Awareness Campaign					
1	Marketing & Awareness Campaign	▮	▮	▮	▮	▮
2	Capacity Building	▮	▮	▮	▮	▮
3	Monitoring & Evaluation	▮	▮	▮	▮	▮
4	Standards & Policies	▮	▮	▮		
	Common Applications					
	E-Procurement	In Process				
	HRMS	In Progress				
	E-Office	▮	▮	▮		
	FMIS	In Progress				
	E Mail	In Process				

These components of the e-Government Strategy must be looked at in totality and the dynamic nature of the same must be acknowledged. Towards this end, the Governance Structure put forward in this document would provide an institutional mechanism responsible for coordinating and monitoring the implementation of the strategy and ensuring benefit realization

Funding Framework

To enable proper implementation of the Strategy Program, a **proper funding and spending system needs to be developed,** approved and implemented to ensure that the funds are sufficiently allocated for the different development domains. Funding options need to be considered carefully to ensure that

- Transparency and accountability is maintained in allocation and utilization of funds
- Adequate funds are available for the implementation of the project
- utilization of allocated funds is monitored
- Strategic control of the government is maintained

E-Government Strategy funding and spending process and the life cycle across the different stages of IT initiatives are explained in the pages that follow. More specifically the following areas have been addressed:

- Funding options identified during the Assessment Phase and the planning activities.
- Funding and Spending Framework including percentages distribution and link to Governance Structure
- Fund allocation and utilization process for core, common, Ministry/Agency specific and Ministry/Agency owned initiatives.
- The annual procedure for short-listing vendors.

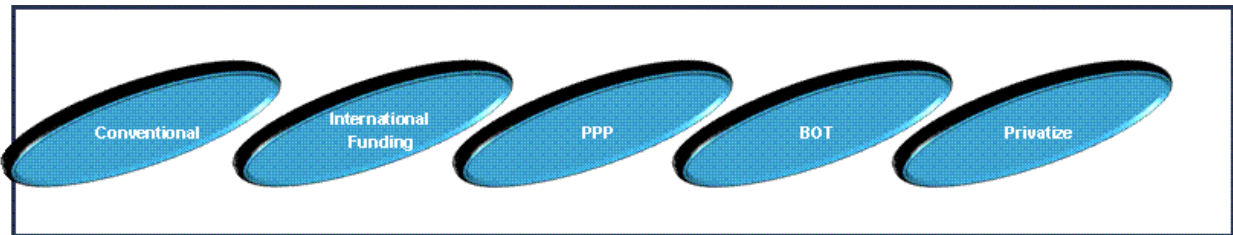The key options available for MCIT to fund the Strategy are:

Figure 4: Key Options for MCIT

OPTION 1 - (Conventional) - Government Funded: The source of the fund is the Government annual budget, where the Government of Ethiopia invests the whole project/initiative amount as capital expenditure

OPTION 2 - International Funding Agencies: Several international donor agencies provide financial support to development projects in developing countries. Bilateral development agencies facilitate the provision of grants and loans from one national government to other governments or NGOs in order to help implement development projects. Multilateral development agencies also provide resources and carry out development projects with governments and NGOs and include numerous UN agencies (such as UNDP, UNFPA, UNIFEM), development banks (such as the World Bank, African Development Bank), and other inter-governmental bodies

OPTION 3 - (PPP) - Public Private Partnerships: Government and Private sector can collaborate on different models for the implementation and success of the model

(BOT) – Build Operate and Transfer (BOT): For some of the initiatives the private sector can build the infrastructure, own the operations for a fixed period of time and transfer it to government once the fixed period is over.

OPTION 4 - (Privatise) – In a longer timeframe when the system is mature and basic infrastructure is in place, some of the services can be completely privatised where Government funding will not be done and it will be controlled by parties in private sector

The various funding options mentioned above differ in terms of the ownership by Government and the risk transferred to the private sector as shown in the diagram below
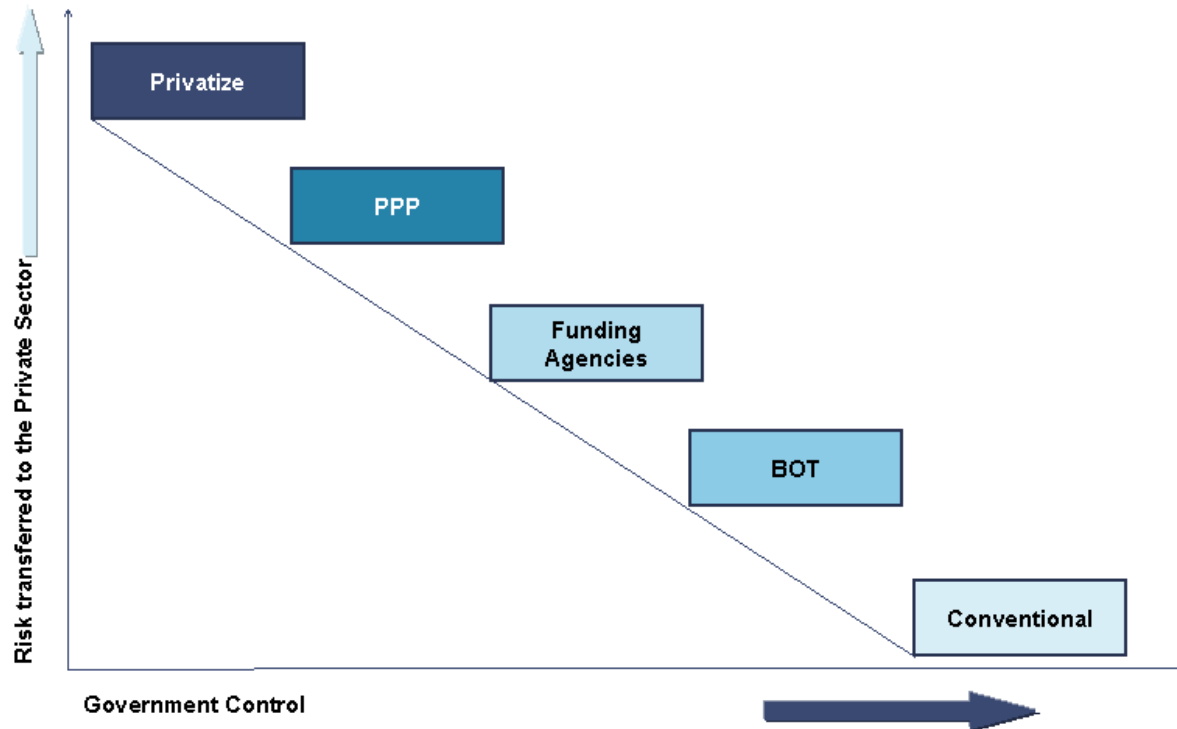

Figure 5: Government Control/Risk

Some of the key factors to be considered during the design include:
- The e-Government Program will be initially funded through Government funds.
- Other funding options (mainly BOT and Funding Agencies) can be explored in parallel
- PPP can be consider at a later stage once PPP models become more mature in Ethiopia

Privatization is a long term target that can start once services have taken a mature shape or became well defined.

Program Funding Options

The E-Government Strategy implementation may be funded by a combination of funding sources – including Government's own budgetary allocations, finance from multilateral institutions like the World Bank or by partnering with the private sector.

Partnering with the private sector would provide a two-fold benefit – in terms of providing finance as well as it will help the development of the private sector and develop indigenous capacity and skills.
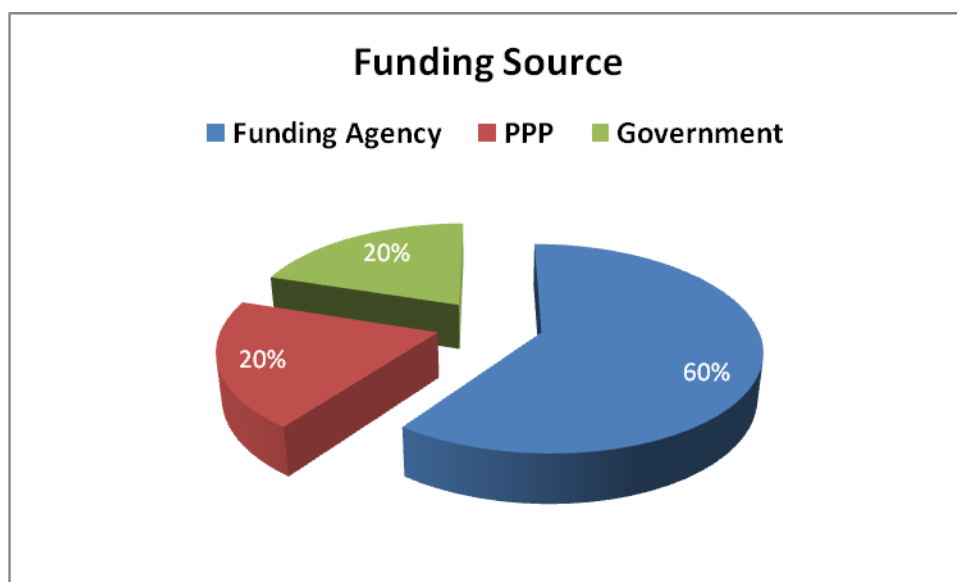
The above diagram depicts the probable quantum of funding of the E-Government strategy program from different sources, including Government funds, institutions like the World Bank (funding agency) and through the PPP (Public-Private Partnership) route.

Recommended Governance Structure

By assessing the different scenarios (assessment report is included in full version of the strategy) of possible governance structure, envisaged governance structure is placed below:

Figure 6: Recommended Structure

As shown in the figure above, the ultimate responsibility for the implementation of the Ethiopian e-Government program lies with the Council of Ministers under the Ethiopian Prime Minister. The High Committee will be assisted by the PMO in Ministry of Communications & IT for monitoring, coordinating and directly following up the execution of IT initiatives. Ministries and other Government Agencies are the owners of their respective core and cross Government projects and will get the support for delivering these projects from the PMO.

In addition, Ministries and other Government Agencies are responsible for developing their vertical IT Strategies and implementation plans in coordination and under the direct supervision of the Technical Committee, in line with the e-Government Strategy and are responsible for deploying their Ministry/Agencies specific IT vertical projects. The Technical Committee will report on the progress and the issues of the strategy implementation to the High Committee.
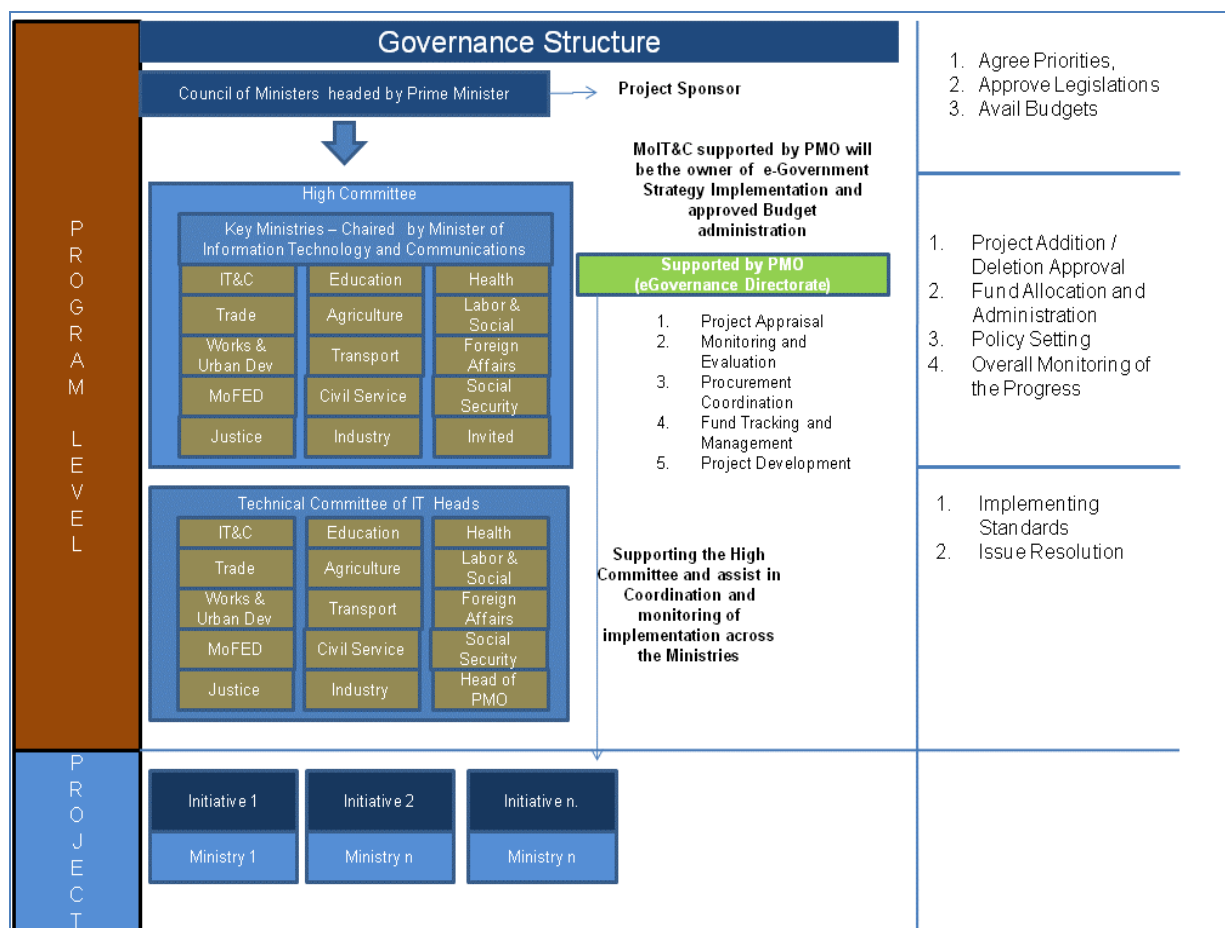
Progress on vertical plans execution will be reported to the PMO to ensure alignment amongst all e-Government initiatives. All work initiated and conducted by Ministries/Agencies should be in compliance with the approved Strategic Directions. Any deviation – during implementation – from the directions provided in the Strategy document should be pre approved by the High Committee.

Description of the Entities presented in the Governance Structure

1. **Overall Sponsor:** The e-Government Strategy Sponsor is the council of Ministers under his Excellency, the Prime Minister. Ownership at this level is mandatory to ensure that the program receives sufficient support, which is necessary to ensure the success of the Program taking into consideration the size and nature of the change to take place. It is envisaged that the Prime minister as the Program owner will sponsor the program across the Government, push for change and resources, publicly take "ownership" of the projects and commit his time on a sustained basis.

2. **The High committee** chaired by Minister of Communications & IT will have the following members:
   1. The Minister of Finance and Economic Development
   2. The Minister of Labor and Social Affairs
   3. The Minister of Transport
   4. The Minister of Agriculture
   5. The Minister of Education
   6. The Minister of Trade

7. The Minister of Industry
8. The Minister of Foreign Affairs
9. The Minister of Works and Urban Development
10. The Minister of Justice
11. The Minister of Civil Services
12. Representative(s), PMO
13. DG, Social Security Agency

The High Committee would be responsible to:

- Agree on priorities among Program initiatives;
- Lead the implementation of the e-Government Strategy across the Government covering all tracks defined within the Strategy and the implementation Roadmap. This includes submitting strategies for final approval by the High Committee, initiatives and projects approval and the monitoring and control activities;
- Harmonize the Strategy implementation across all the components and manage interdependencies; and
- Specify required funding and administer the allocated funds as part of Program management activities.

3. The **Technical Committee** is responsible for the Program implementation management through initiatives implementation management and provides Program integration, interdependency management and delivery assurance. The Technical Committee will report to the High Committee and will contain IT heads from the following Ministries/Agencies:
1. Ministry of Minister of Communications & IT
2. Ministry of Finance and Economic Development
3. Ministry of Labor and Social Affairs
4. Ministry of Transport
5. Ministry of Education
6. Ministry of Agriculture
7. Ministry of Education
8. Ministry of Trade
9. Ministry of Industry
10. Ministry of Foreign Affairs
11. Ministry of Works and Urban Development
12. Ministry of Justice
13. Ministry of Civil Service
14. Social Security Agency
15. Head of PMO

The Technical Committee will be responsible for the following:

- Identify technical assistance requirement at project implementation units;
- Assist in developing program level training schedule for project teams, general IT skills, technology etc ;
- Identify competent technical as well as administrative resources (within the Government and externally) for specific requirements of stakeholders;
- Lead the development of IT related policies and standards and submit drafts for High Committee sign-off;

- Lead the development of IT related regulations and submit drafts for High Committee sign-off;
- Lead the discussions with the private sector organization; and
- Support resolving conflicts whenever they arise and escalate conflicts to High Committee whenever resolution is not possible.

4. **Ministry of Communications & IT** will own the implementation of e-Government Strategy with support from Programme Governing Body or PMO. Some of the important functions of Ministry of Communications & IT and the PMO are as follows:

- Specify required funding and administer the allocated funds as part of e-Government Strategy activities;
- Lead the development of IT related policies and standards and submit drafts for High Committee sign-off;
- Lead the development of IT related regulations and submit drafts for High Committee sign-off
- Lead the discussions with the private sector organizations; and
- Facilitate implementation of the IT initiatives across the Ministries/Agencies.

5. The Project Management Office (PMO) will be **part of the E-Government Directorate** of Ministry of Communications & IT and will support the e-Government Strategy implementation through monitoring projects delivery, controlling the relation with vendors, managing the procurement process, ensuring compliance with policies and standards, auditing projects at hand over, knowledge management and sharing for areas related to project management. The PMO will play the following roles:
- Monitoring the implementation of the e-Government Program on the different aspects (technical, administrative and financial);
- Project Addition/Deletion Approval
- Supporting with evaluating requests received from the different Ministries/Agencies for implementations, and Supporting projects execution tasks through the identification and allocation of required resources; and
- Knowledge sharing for experiences gained through executing the different Program components
- Procurement and contracting process management.

The organization structure of the PMO (described in diagram in next page) was developed based on the above mandate, where the following key departments will have the core teams tasked to deliver listed roles:
- Project Coordination
- Knowledge Management
- Appraisal
- ITSG (IT Services Group)
- Marketing & Awareness
- Monitoring & Evaluation
- Cadre Control

The core teams will be supported by the following support teams which will report to the respective departments in the MCIT
- Financial Control

- Procurement

The PMO will contain a pool of resources that can be assigned different tasks depending on work load, projects nature and projects level of maturity. Accordingly, one team member can play several roles that can be of monitoring, support, and knowledge or procurement nature. **The details regarding PMO Staffing requirements have been provided in full version of the strategy.**