



REPUBLIC OF KENYA



**COUNTRY: KENYA**  
**PROJECT: KENYA DIGITAL ECONOMY ACCELERATION PROJECT (KDEAP)**  
**IMPLEMENTING AGENCY: Information and Communications Technology Authority (ICTA)**  
**PROJECT ID: P170941; Credit Numbers 7289-KE and 7290-KE**

**TERMS OF REFERENCE FOR:**

**Request for Expression of Interest**

**For**

**Development of Government Digital Enterprise Architecture and E-Government Interoperability Framework (Consultancy Firm)**

**Contract No: KE-ICTA-404988-CS-CQS**

**Issue Date: 8<sup>th</sup> October 2024**

**Closing Date: 21<sup>st</sup> October 2024 at 1000Hrs EAT**

**Client:**

The Chief Executive Officer,  
ICT Authority

Telposta Towers 12<sup>th</sup> Floor, Kenyatta Ave

PO Box 27150 - 00100 Nairobi Kenya

Tel: +254 20 2089061/ 2211960 Fax: +254 20 2211960

Email: [procurement@ict.go.ke](mailto:procurement@ict.go.ke) , [info@icta.go.ke](mailto:info@icta.go.ke)

Website: [www.icta.go.ke](http://www.icta.go.ke)

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## 1. Background

The Government of the Republic of Kenya (GoK) has received financing in the amount equivalent to US\$390 Million from the World Bank towards the cost of the first phase of the Kenya Digital Economy Acceleration Project (KDEAP) and it intends to apply part of the proceeds to payments for goods, works, non-consulting services and consulting services to be procured under this project.

The project will include the following components.

**1.1 Component 1: Digital Infrastructure and Services-**The aim of this component is to increase access to high-speed internet for individuals, industry, and government—the ‘foundation of the foundations’ of a digital economy and strengthen Kenya’s role as regional digital leader—while leveraging investments from the private sector

**1.2 Component 2. Digital Government and Services-** This component will invest in the foundational digital services, platforms, architectures, and policies needed to transform the way the Government communicates and conducts its internal operations.

**1.3 Component 3. Digital Skills and Markets-** This component aims to equip young Kenyans with digital skills and strengthen their abilities to access and compete in domestic and regional markets through supporting skills development, to study mechanisms to improve access to affordable devices and through enhancing the enabling environment for e-commerce to support Kenya’s role as a regional digital hub.

**1.4 Component 4. Project Management-** This component will support project implementation, coordination, for the Project Implementation Unit (PIU) within ICTA and capacity building.

**1.5 Component 5: Contingent Emergency Response Components-**This component will be activated in the event of an emergency.

The Gok intends to apply a portion of the proceeds of the Credit to cover activities under component 2 (Digital Government & Services) to develop a Government Enterprise Architecture (GEA) and a Government Interoperability Framework (GIF). The consultant will work to build a holistic view of the use of digital technologies in Government. This includes areas such as business processes, information collection, storage, analysis and dissemination, and strategic use of technology used. The vendor will use this extensive knowledge of the Government to help ensure that the business and IT are aligned in respect to the future direction to be taken. Enterprise architecture should show the logic for IT infrastructure reflecting the integration and standardization requirements of the operating model.

## 2. Objective (s) of the assignment.

The objective of this project is to develop a GEA and GIF, which will be used to guide the deployment of the digitalization. Based on the framework, we examine the implications of practice, which is intended to improve service delivery through the deployment of the EA. The vendor should demonstrate how certain factors manifests themselves, to enable, and at the same time, constrain processes and activities of information systems and technologies.

The objectives of the government's modernization programme are to improve the service to citizens and business, and at the same time increase the efficiency of public administration, increase returns of ICT investments and enhance the culture of sharing information.

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In order to promote the development of a national enterprise architecture, the developed GEA/GIF principles includes:

- Ensure the sustainability of flow of information and data among government institutions/entities, local communities and citizens, while respecting principle of protection of personal data and cybersecurity;
- Ensure the use and adaptation of applications and their responses to changing requirements and demand;
- Commitment to develop the necessary standards and contexts that facilitate re-use of data structures and related electronic services;
- Adopt open standards wherever possible in the development of technical specifications to encourage competition of all the sectors;
- Where necessary, adopt proprietary standards, which are acceptable and approved, supported by major specialized information technology and communications companies;
- Remain abreast of developing technological trends and seek to future-proof investments.

### **3. Scope of the consulting services and specific tasks.**

The Government Enterprise architecture (GEA) will provide a way for Ministries, Countries, Departments and Agencies (MCDAs) to understand their mission, the components required to perform that mission, and how those components are connected. This should include documenting, planning, and implementing data exchange and interoperability.

The GEA/GIF provides each agency with the information necessary to understand how planned changes will affect each of the architecture's components.

The Government of Kenya (GOK) has defined developing a GEA and GIF as one of the key priority projects of digital transformation to realize the e-Government vision of harnessing ICT tools to improve basic services to all and to promote all-round good governance, including increased public participation, better social equity and justice as well as a general enhancement of the transparency and effectiveness of public institutions.

#### **3.1. Scope of Services**

The scope of service of the consultant shall include, but not limited to followings.

- Provide technical inputs and develop the GEA and GIF in liaison with the relevant MCDAs including public and private sector stakeholders, as per the specification requirements given this document.
- Define and establish the governance structure of the GEA and GIF principles, methods, techniques standards, guidelines and for the use of information technology for MCDAs.
- Conduct analysis, evaluation and development of enterprise long-term strategic and operating plans to ensure that the GEA objectives are consistent with long-term business objectives of Government.

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## 3.2. General requirements

### 3.2.1. Government Enterprise Architecture Requirements

The GEA represents the collective set of knowledge relating to the e-Government architecture, technology standards, interoperability framework, and governance, and performance management.

The purpose of the GEA is to provide the government agencies with adequate reference material in order to:

- Support government agencies that want to develop their enterprise architecture.
- Provide the entities with guidelines that allow them to hook up with the central architecture.

The EA will be used primarily to facilitate processes and activities that can lead to growth and competitive advantage within Government. The EA approach will promote the belief that an enterprise, as a complex system, can be designed and managed in an orderly manner, achieving better overall organizational performance. The development and deployment of the EA will be carried out through the architectural domains, which will be guided by Government goals and objectives

The Enterprise architecture will classify enterprise components into distinct domains, which ranges from technical to non-technical. The domains will include:

1. **enterprise business architecture (EBA),**
2. **enterprise Data/information architecture (EDA),**
3. **enterprise application architecture (EAA),**
4. **and enterprise Technology architecture (ETA),**
5. **enterprise security architecture (ESA),**
6. **Enterprise Human capital architecture (EHCA),**
7. **Enterprise Governance architecture (EGA) and**
8. **Enterprise Integration architecture (EIA).**

These architecture domains are interdependent and are developed simultaneously will be supported by the identity management and single sign on authentication.

Within enterprises, resources and responsibilities are assigned to these domains and transformations are then coordinated towards organizational improved performance.

Each EA domain will be composed of distinct architecture building blocks, each domain consists of its architectural representations, definitions of entities, their relationships, and specification of function and purpose. The operation of one domain is influenced by the activities of the others. The domains describe the components that build up an entire enterprise, and they work together for the accomplishment of the business goals. Enterprise architecture considers all domains significant in an organization, and the relationship among them defines government success. Through the analysis of the interaction and relationship between the domains, the value of using EA as a management tool will be better understood.

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The EBA describes the core components of business processes that support the mission of the organization. All information about business structure, workflow for business concepts, processes and rules compiled into a structured format as government business reference model. This includes human resources, production, research, and financial management components. The domain provides requirements necessary for the operations of the other domains. It defines business architecture from an enterprise perspective to facilitate processes and activities towards achieving goals and objectives of the organization. Factors such as business strategies, performance metrics, business processes, and their relationships are embedded in business architecture Information, in its various forms, is a very important aspect in defining the organization's information requirements. suggest that the organization's information and data needs are described in information architecture. Information architecture defines policy, governance, and information products necessary for information sharing Precise and high quality information makes it easier for an organization to respond to changes and make informed decisions.

EDA describes an overall framework for the information across the enterprise and describes the internal as well as external sharing principles and policies across organizational lines while respecting the security, privacy and appropriate use of that information; guidelines and standards for effective and efficient data sharing among government agencies to support the EBA.

The EAA is composed of ICT solutions and information systems to support the EIA and EBA; sets detail of unified and adopted view of solutions, applications and information systems to achieve benefits such as increase in reuse, reduction of solution complexities, fast and reliable management; applications developed and run by entities will be based on the idea of using standardized components that have reusability, applied as a core concept. This will help to integrate components together with minimal effort needed; It will be a blueprint of the individual applications systems to be deployed, their interactions and relationship with the core business processes. The architecture will also serve as a transparent communication and design tool to the applications' developers. The EAA will define applications needed for data/information management and business support. The management of organizational data will influence data integrity and consistencies across the MDAs.

The ETA represents an enterprise-wide model of hardware, software, and communications components as well as their dependencies and will provide a consistent set of principles for ICT lifecycle management, hence making ICT service delivery to be well controlled.

ETA will consist of guidelines, principles and standards guiding agencies in the design, acquisition, implementation and management of ICT; will contain a foundation of development and support platforms, tools, processes, practices and requirements that can implement business processes and meet the organizations' ever changing business needs; standards and best practice designs are necessary for the underlying infrastructure and platform components (systems and network hardware and operating systems), which enable the adequate functioning of all other layers; this will address aspects from strategic planning to implementation of technology infrastructures.

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EIA will address the inter-connection of all layers of the architecture and standards within and across the enterprise (Database Integration, Message Integration, Transaction Process Monitor Integration and Services, Enterprise Service Bus, Service-Oriented Architecture and Instant Messaging);

ESA - security layers is present and pervade through all the architectural areas and layers and covers access to data, systems and services along with other dimensions of protection from threat, vulnerability exploitation and intrusion; related standards should be clearly specified.

### **Enterprise Governance architecture (EGA)**

In addition, the expert will describe the governance process for GEA including decision processes and activities and providing the necessary set of standards for EA, roles and responsibilities of different parties towards its implementation and compliance within an individual agency and government as a whole.

The vendor will be required to develop standards and guidelines of each GEA domain in terms of the usage and compliance by MDAs and the aspect of monitoring and evaluation

### **3.2.2. Government Interoperability Framework Requirement**

This framework provides technical standards to streamline interoperability. It provides data standards to create unique standardized data dictionaries for common data elements across all entities. This will help in removing any confusion regarding the data ownership, type, relationship or structure

- It will describe the framework for standardized data exchange between government agencies for cross government services. This covers:
- The interoperability charter
- The interoperability blue prints covering the data standards, technical standards, and metadata standards.
- Technology standards that includes:
- SOA architecture principles standards
- Software development standards

The GIF approach to addressing interoperability is based on a proven approach of defining interfaces and interoperability between enterprises. It includes several architectural views including:

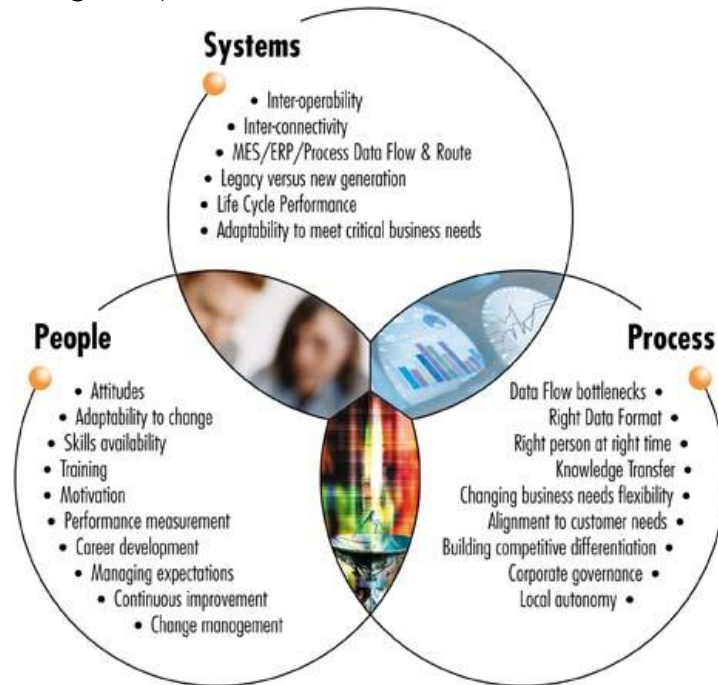
- A logical layered model of data and information that can depict and demonstrate how disparate raw and processed data is transformed into useable information and shared;
- A functional information exchange model that depicts the major types of entities along with the typical function-based information exchanges that are required to happen

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among the entities in order for them to perform their mandate(s) efficiently and effectively and that are enduring over time; and

- A physical interface model that incorporates the above two models and provides a more tangible description of how the entities need to interface using multiple but related dimensions which include applications, services, devices, networks, and facilities.
- The logical, 3-layered model (see Figure ES-1) presumes that existing legacy systems located in the data layer are not necessarily designed for sharing across platforms inside or outside the agency. They are more than likely stove-piped and closely-coupled to proprietary systems and applications. In addition, today's presentation layer tools are increasingly found in applications that reside on wireless smart devices. Thus, interoperability between these legacy data systems and the presentation of that data or information needed by MCDAs must be addressed by an integration layer where the data is discovered, accessed, transported, processed, aggregated, manipulated, and analyzed into useful information.
- The resulting information should then be transported/delivered in a standard fashion to the presentation layer so that any MCDA can consume the desired information in the application of their choice and improve their situational awareness.

The interoperability is comprised of three dimensions that must align: people, process, and technology (see Figure 2).



The people issues involve consensus across all the stakeholders on the need to share information (and in doing so, address the data interoperability issues).

The process issues involve having a protocol and governance or other mechanisms to guide the necessary information sharing.

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The technology issues involve infrastructure, software and security considerations that must be addressed.

Data and information sharing success only occurs when the people involved jointly agree to share their data, establish processes to do so, and have a standard, technological approach that enables that agreement.

Service Oriented Architecture will facilitate the integration of multiple IT application components through a custom-fit integration architecture Enterprise Service Bus (ESB), in order to eliminate silos and enable different government application software programs/systems to communicate with each other - these applications must be able to integrate with each other in ESB structure, to avoid quality inefficiencies, duplications, data silos.

The firm will be required to come up with this GIF and its related standards and guidelines and enforcement to ensure that MDAs are on boarded on the SOA.

### **3.2.3. Guidelines**

The general guidelines for GEA and GIF should include the following sections where applicable:

- Project initiation;
- Business layer;
- Access and presentation layer;
- Application layer;
- Data layer;
- Technical and Infrastructure layer;
- Security layer as cross-cutting architecture;
- Implementation layer;
- Migration layer;
- Operation (including IT operation framework, service desk, service delivery);
- Maintenance layer;
- Capacity building;
- Change and communication management layer;
- Integration Architecture layer;
- Service Architecture layer based on SOA.

Like other planning guidelines, ranging from general national planning to local planning, the guidelines of national enterprise architecture should be developed taking into consideration the following various level architectures:

- National level architecture;
- Individual public sector organisation;
- Sector/Cluster architecture;
- County government;
- Service architecture.



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### **3.3. Specific Tasks**

The GEA will classify enterprise components into distinct domains, which range from technical to non-technical. The domains will include:

1. **enterprise business architecture (EBA),**
2. **enterprise data/information architecture (EDA),**
3. **enterprise application architecture (EAA),**
4. **enterprise technology architecture (ETA),**
5. **enterprise security architecture (ESA),**
6. **Enterprise human capital architecture (EHCA),**
7. **Enterprise governance architecture (EGA) and**
8. **Enterprise integration architecture (EIA).**
9. **Development of standards, guiding principles for all these architectures**

**Working closely with the ICTA team, and in consultation with relevant MCDAs, the firm is expected to undertake the following specific tasks:**

1. Undertake a quick survey (desk review) of the best international practices on organizational and legislative frameworks of the GEA and GIF coordination, including information security and personal data protection issues, and elaborate on those practices and standards that are applicable for introduction in GOK, taking into account the current local context, needs and conditions;
2. Undertake a quick survey (desk review) of the existing situation in Government on organizational and legislative setup of the GEA and GIF with recommendations on needed changes (“AS IS” and “TO BE”);
3. Propose drafts of required Government’s regulations and guidelines that might be needed to setup GEA&GIF coordination activities in Government and organizational duties for management of GEA&GIF;
4. Conduct a brief situation analysis, design, prepare and submit the suggested guidelines for introduction and structure description that implement a context-specific adaptation to the Kenyan scenario and Government-wide best practices;
5. Assist the Government in conducting a Business Transformation Readiness Assessment, by designing and submitting a survey questionnaire, along with the survey guidelines of how to conduct, capture and analyze the survey.
6. Undertake a quick survey (desk review) of the best international practices on the Government Enterprise Architecture methodologies and frameworks model’s (e.g. the Zachman Framework for EA, the Open Group Architectural Framework (TOGAF), the Federal EA (FEA), the Gartner Methodology, etc.) and elaborate on those practices and standards that are applicable for introduction in the Government, taking into account the current local context, needs and conditions, or recommend to use a “blended methodology” (using parts from a selection of the above mentioned methodologies, modify and merge them according to the GOK’s specific needs);

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7. Perform a review of the current GEA, including the new draft of GEA & GIF, against the backdrop of business needs and in accordance with the GoK e-Government Strategy and Master Plan for 2022-2023;
  8. Draft a GEA and GIF roadmap, which should include the following deliverables:
    - Development of a first draft of the GEA and GIF
    - Development of Guidelines for defining, designing, developing and utilizing the GEA and GIF;
    - Framework and principles for GEA defined and designed based on international best practices, including EBA, EDA, EAA, ETA, ESA, EHCA, EGA, EIA, as outlined above;
    - Elaboration of requirements for sharing and integrating existing government information systems, processes, resources, applications and IT infrastructure (GI frameworks);
    - Create a Meta-model; content meta-model and the reference model from business, data and technology services perspective defining step-by-step architecture process and interoperability between agencies for moving to the envisioned architecture.
    - Develop an Integrated Architecture;
    - Training plan for government staff to be able to apply enterprise architecture framework;
  9. Post a draft of the GEA and GIF for public consultation, and conduct stakeholder workshops to discuss the initial draft of the GEA and GIF and gather feedback and inputs;
  10. Prepare a final draft of the GEA and GIF, taking into account feedback received from the stakeholders consultation process, and share with the Government;
  11. Conduct an induction training for selected government personnel with regard to the implementation of the GEA and GIF;
  12. Prepare a Presentation and narrative report of the final GEA and GIF and their related documentation;
  13. Prepare and submit the final narrative report on all conducted activities under this assignment, with full documentation, in electronic and hard copy format.

#### **4. Duration and location of the assignment.**

##### **4.1. Duration**

The consulting services assignment for the development of the GEA and GIF is expected to have a duration of four (4) calendar months from the commencement date of the contract. This timeline includes the various phases of the project, such as planning, analysis, design, implementation, testing, and documentation, as well as induction training.

##### **4.2. Location**

The location for the consultancy assignment will be the premises of the ICT Authority (ICTA) in Nairobi Kenya, specifically at Teleposta Towers 12<sup>th</sup> floor. The ICTA will seek to provide a conducive environment, equipped with the necessary infrastructure, to facilitate the successful execution of the project.

## 5. Reporting requirements and timelines for deliverables.

Table 1: Reporting requirements and timelines for deliverables.

NO.	OUTPUTS/ DELIVERABLES	DESCRIPTION	TIMELINE FOR SUBMISSION OF DELIVERABLES AFTER CONTRACT COMMENCEMENT	FORMAT OF PRESENTATION
1.	Inception report	Submission of the inception report	1 week	3 hardcopies, 2 electronic copies Flash drive
2.	Situation analysis report	Situation analysis report on the international best practices against current scenario (“AS IS” and “TO BE”); and the methodologies and frameworks model’s proposed for GOK	4 weeks	3 hardcopies, 2 electronic copies Flash drive
3.	Readiness Assessment tools and proposed regulations to support GEA & GIF	Development of Business Transformation Readiness Assessment tools and identification of regulations needed to adopt the GEA&GIF and management of of the same;	7 weeks	3 hardcopies,
4.	Draft GEA and GIF related guidelines	Developed GEA and GIF roadmap, which includes the following o: <ul style="list-style-type: none"> <li>• Develop first draft GEA and GIF</li> <li>• Guidelines for defining, designing, developing and utilizing GEA and GIF;</li> <li>• Framework and principles for GEA defined and designed based on international best practices, including EBA, EDA,</li> </ul>	11 weeks	2 electronic copies

NO.	OUTPUTS/ DELIVERABLES	DESCRIPTION	TIMELINE FOR SUBMISSION OF DELIVERABLES AFTER CONTRACT COMMENCEMENT	FORMAT OF PRESENTATION
		EAA, ETA, ESA, EHCA, EGA EIA; <ul style="list-style-type: none"> <li>• Elaborate requirements for sharing and integrating existing government information systems, processes, resources, applications and IT infrastructure (GI frameworks);</li> <li>• Meta-model;</li> <li>• Integrated Architecture;</li> <li>• Training plan for government staff to be able to apply enterprise architecture framework;</li> </ul>		
5.	Report on requirements for sharing and integrating government systems	Elaborated requirements for sharing and integrating existing government information systems, (interoperability frameworks);	12 weeks	3 hard copies Flash drive
6.	Training report	Conduct an induction training of the government personnel with regard to the implementation of the GEA and GIF;	14 weeks	3 hardcopies 2 electronic copies
7.	Final approved GEA & GIF and related documents	Engagement with stakeholders and Finalization of GEA & GIF and Submit with related documents for approval	16 weeks	3 hard copies

All draft and final reports (in specified formats and copies) shall be submitted in the prescribed format to:  
 The Chief Executive Officer (CEO),

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ICT Authority  
Telposta Towers 12<sup>th</sup> Floor, Kenyatta Ave  
PO Box 27150 - 00100  
Nairobi Kenya  
Tel: +254 20 2089061/ 2211960 Fax: +254 20 2211960  
Email: [procurement@ict.go.ke](mailto:procurement@ict.go.ke) , [info@icta.go.ke](mailto:info@icta.go.ke)  
Website: [www.icta.go.ke](http://www.icta.go.ke)

Attention:  
The Project Coordinator  
KDEAP

Upon submission of every report, the consultant is expected to make a presentation of the submitted report to the Client in a scheduled meeting. The acceptance of the report shall be recorded in the minutes of the meeting.

## 6. Payment schedule/Remuneration.

The proposed payment schedules based on satisfactory performance of the contract which will be negotiated with the successful consultant will be as presented in Table 2 below.

**Table 2: Proposed payment schedule**

NO.	DELIVERABLE	TIMELINE FOR SUBMISSION OF DELIVERABLES AFTER CONTRACT COMMENCEMENT	PERCENTAGE OF THE CONTRACT AMOUNT
1.	Submission and acceptance of the Inception report	1 week	10%
2.	Submission and acceptance of the Situation analysis report	4 weeks	20%
3.	Submission and acceptance of the Readiness Assessment tools and proposed regulations to support GEA & GIF	7 weeks	10%
4.	Submission and acceptance of the Draft GEA and GIF and related guidelines	11 weeks	20%
5.	Submission and acceptance of the Report on requirements for sharing and integrating government systems	12 weeks	10%
6.	Submission and acceptance of the Training report on training conducted	14 weeks	10%
7.	Submission and acceptance of the Final approved GEA & GIF and related documents	16 weeks	20%

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## 7. Minimum requirements for Consulting Firm qualifications and experience.

The shortlisting criteria for the Consulting Firm will involve the following:

- a) **Core business and years in business:** The firm shall be registered/incorporated as a consulting firm with core business in delivering advisory/consulting services on Open Data or related ICT projects for at least ten (10) years.
- b) **Relevant experience:** The firm shall demonstrate having successfully executed at least two (2) assignments of similar nature and complexity in the ICT sector in similar operating environment in the last five (5) years. Details of the assignments (name and address of the client, scope, value, and period) should be provided.
- c) **Technical and managerial capability of the firm:** The firm shall demonstrate having the requisite technical and managerial capacity to undertake the assignment (attach company profile). **Key Experts will not be evaluated at the shortlisting stage.**

## 8. Team composition and qualification and experience requirements for the key experts.

The firm shall demonstrate well qualified and experienced experts as required and appropriate for the execution of the assignment. They should possess necessary resources to undertake assignments of such nature, including equipment and software required. The key experts shall personally carry out (with any assistance of other experts deemed appropriate) the services as described in this TOR.

Key Experts	Minimum qualification and experience requirements
Project Manager	<ol style="list-style-type: none"><li>a) <b>Academic Qualification:</b> - A minimum of Masters degree in IT/ Computer Science or in relevant field from a university recognized in Kenya.</li><li>b) <b>General Experience</b> A minimum of 8 years' professional and consultative experience in complex, multi-tiered IT system applications or integration architecture</li><li>c) <b>Specific Experience:</b> - Minimum 2 years professional experience in similar assignments within an Enterprise Architecture Organisation, and experience in relevant technologies enterprise architecture layers (data, process, technology, application, security, etc.) the service oriented architecture and user interface design; Working knowledge of Enterprise Architecture Frameworks (TOGAF or equivalent);</li><li>d) <b>Registration and/licensing by Professional body:-</b><ul style="list-style-type: none"><li>• Currently valid registration as a member of a relevant professional body recognized Internationally/Nationally with a valid annual practising license</li></ul></li></ol>

Enterprise Architect	<ul style="list-style-type: none"> <li>• <b>Academic Qualification:-</b> A minimum of bachelor’s degree in Information Technology / Computer as specialization /Engineering or equivalent</li> <li>• <b>General Experience:-</b> Minimum of 8 years’ professional and consultative experience within an Enterprise Architecture Organisation, complex, multi-tiered applications or integration architecture experience in relevant technologies and enterprise architecture layers (data, process, technology, application, security, etc.)</li> <li>• <b>Specific Experience:-</b> Minimum 2 years professional experience within the service oriented architecture and user interface design; Working knowledge of Enterprise Architecture Frameworks (TOGAF or equivalent);</li> <li>• <b>Certification :-</b> TOGAF certification or equivalent,;</li> </ul>
Solution Architects, and Business Architects (2No.)	<p><b>Experience</b></p> <p>a) <b>Academic Qualification:</b> - A minimum of bachelor’s degree in Information Technology / Computer as specialization /Engineering or equivalent</p> <p>b) <b>General Experience:</b> - Minimum 10 years progressively responsible professional and consultative experience within an Enterprise Architecture Organisation, complex, multi-tiered applications or integration architecture experience in relevant technologies</p> <p>c) <b>Specific Experience:</b> - Minimum three (3) years professional experience within the service oriented architecture and user interface design; enterprise architecture layers (data, process, technology, application, security, etc.) at medium and large scale organisations, of which 3 years should have been at the international level in the public sector; Working knowledge of Enterprise Architecture Frameworks (TOGAF or equivalent); Experience with at least one of the commonly-used methods, notations and tools (e.g., Enterprise Architect, UML, BPMN, etc.); Experience in the policy development process associated with e-governance/GIF/GEA development;</p> <p>d) <b>Certification :-</b> TOGAF certification or equivalent,;</p>

## 9. ESTIMATED TIME INPUTS FOR KEY EXPERTS

The number of key experts and the estimated time input for each key expert for the assignment are presented in Table 4.

**Table 4: Estimated Time Inputs for Key Experts**

S/No	Key and support Staff	No	Estimated Time Input (staff-months)
1)	Project Manager	1	4
2)	Enterprise Architect	1	4
3)	Solution Architects, and Business Architects	2	4
<b>Total</b>		<b>4</b>	<b>12</b>

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## **10. Management and accountability of the assignment.**

### **10.1. Responsibilities of the Client.**

The ICT Authority is committed to providing the necessary services, facilities, and property to facilitate the successful execution of the consultancy assignment. The following specific services, facilities, and property will be made available to the Consultant: Working space, pertinent files, documents and working papers.

The ICT Authority will also assign professional and support counterpart personnel to collaborate with the Consultant throughout the consultancy assignment. This includes individuals with expertise in government policy and ICTA standards, ensuring a collaborative and knowledge-sharing environment. The designated personnel will be available to provide insights, coordinate efforts, and address any queries the Consultant may have during the course of the assignment.

### **10.2. Responsibilities of the Consultant.**

The vendor will assist in coming up with is a set of policies, guidelines and standards of information and communication technology, which ensures sharing and integration of information and services among the governmental institutions from one side, and between citizens and the business sector and national and global organizations from the other side. The GIF will address technical, semantic interoperability policies and specifications. The GEA WILL address high level nation-level architecture that helps connect public information systems across Government and facilitates the interoperability of e-services for citizen. This GEA/GIF should be based on open standards. The categorization of the standards in this GEA/GIF should be based on international best practices.

Through this project ICTA will be able to set the national enterprise architecture guidelines that define standards and policies to be followed by all government entities. Each entity within the Government will be required to define their enterprise architecture for provisioning of e-Governance Services and improving the efficiency and effectiveness of the public sector. This would allow integration and collaborative government through implementation of common standards and policies across. The adoption of enterprise architecture is also focused on increased interoperability, better asset management, reduced risk and lower costs of procurement.

The Firm will elaborate guidelines for defining, designing, developing and utilizing the GEA & GIF to enable interoperability across the Government, resource sharing among agencies, cost reduction for IT and business operations, shared processes and seamless e-services.

The GEA&GIF developed should describe how organizational, information and technology structures support the high-level government strategy and its operation.



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The GEA&GIF should provide descriptions of the organizational goals, business and administrative process, information requirements, as well as the supporting applications and technology infrastructure of the enterprise.

These descriptions will be captured in the form of models, diagrams, narratives etc.

## 11. Propriety rights of Client in reports and records.

The ICT Authority, herein referred to as the Client, shall hold full proprietary rights over all reports and records produced as part of the consultancy assignment. The following stipulations govern the proprietary rights:

**Ownership:** Any reports, records, documents, or intellectual property generated during the course of the consultancy assignment are deemed the exclusive property of the Client.

**Usage Rights:** The Client is granted unlimited and perpetual usage rights for the reports and records. This includes the right to reproduce, distribute, display, and modify the materials for internal purposes, public dissemination, or any other lawful use as deemed appropriate by the Client.

**Confidentiality:** The Consultant shall treat all reports and records as confidential information and shall not disclose, reproduce, or use them for any purpose other than the consultancy assignment without the explicit written consent of the Client.

**Transfer of Rights:** The Consultant hereby transfers and assigns to the Client all rights, title, and interest, including any copyrights, in and to the reports and records. This transfer is effective upon the creation of each deliverable.

**Non-Exclusivity:** This grant of proprietary rights to the Client is non-exclusive, allowing the Consultant to retain the right to use the knowledge and experience gained during the consultancy assignment for their general business purposes, excluding any specific confidential information of the Client.

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