CURRICULUM GUIDE ON
E-GOVERNANCE FOR AFRICAN GOVERNMENT INSTITUTIONS

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1. Executive summary

Improving governance and public administration has become a priority for sustainable socio-economic development. It has been recognized that no development can take place without sound and capable governance. In this perspective, most African countries have initiated improvements to public services aimed at the implementation of good governance.

It has also been recognized that in any setting, public or private, small or large, the efficient use of information and communications technology (ICT) can significantly improve institutional and organizational performance. This is also true for public administration and governance where ICT can simplify procedures, accelerate communication and facilitate decision- and policy-making.

African countries, through their commitment to achieve the Millennium Declaration Goals and implement the objectives of New Partnership for Africa’s Development (NEPAD), have recognized the positive impact of information, knowledge and skills in their development process. Consequently, they have embarked on the implementation of the e-Africa Initiative for Good Governance, through various regional and national activities, especially in e-governance.

For all countries resolved to fight poverty and accelerate overall social and economic development, the implementation of e-governance can make a valuable contribution. It can help to create new jobs, foster the development of business, enhance citizens’ participation in decision-making and improve the efficiency of government services. In that sense, e-governance can contribute to capacity-building in Africa, improve the accountability of governments and enhance citizens’ trust in them.

In this context, the African Training and Research Centre in Administration for Development (CAFRAD), and UNESCO have sought to develop a training guide to assist African countries in incorporating e-governance courses in the curricula of national training institutions, with particular accent on in-service short training courses, offering basic information to help training institutions to design e-governance courses for both central and local government.

Efforts are already being made at central and local levels in various African countries to implement e-governance programmes and projects, recognized as an appropriate means of ensuring transparency, accountability, performance and efficiency in managing public services and handling state affairs.

However, several studies carried out by local consultants under the supervision of CAFRAD have found that appropriate skills and capacity to efficiently implement e-governance programmes are lacking in other African countries. In particular, the studies reflected that the main challenges to be overcome in order to fully benefit from the e-governance programmes in the region are insufficient skills, equipment and facilities.

This was also the conclusion of a UNESCO study focusing on the training needs assessment to implement e-governance at local level in several African countries that was
carried out prior to the project implementation in 2002\(^1\). Among the recommendations, the study recommended that short in-service training courses in e-governance should be organized to enhance the capacity of local government institutions.

This *Curriculum Guide* for the development of specialized courses on e-governance in African countries is thus intended to develop capacities in the effective use of ICT in the public sector, improve the delivery of public services to citizens, and enhance overall transparency and government accountability.

1.1 Glossary of terms

‘Governance’ refers to the exercise of political, economic and administrative authority in the management of a country’s affairs, including the articulation of citizens’ interests and the exercise of their legal rights and obligations.

‘e-Governance’ may be understood as governance performance using electronic media to facilitate the efficient, speedy and transparent dissemination of information to the public and other agencies, and for carrying out government administrative activities.

e-Governance is therefore a new way of formulating and implementing decisions and policies relating to administration, services and public participation, using ICT as a tool for building trust in governments and improved transparency and service delivery. In the past few years ICT has also brought new opportunities for enhanced citizen participation in decision-making, and has thus contributed to the transformation of the relationship between governments and citizens. Advantages for the government are better and more efficient services in terms of time, lowering of transaction costs and improved overall transparency and accountability.

The framework of e-governance

A wide variety of terms occur when referring to the use and impact of ICT on the public sector - notably e-government, government online, digital government, e-governance and e-democracy. These terms are still new, and they often mean different things to different people. In this guide we refer to e-governance as a concept covering the following fields of application:

- **e-administration**: improving the internal workings of the public sector with new ICT-executed information processes. Examples of e-administration: integrated human resources and payroll systems, integrated financial management systems, intranet systems to improve information flows within governmental instances. Some authors refer to this dimension as back-office capability and it is generally recognized as a precondition for developing e-services and e-democracy.

- **e-services**: providing information and delivering services to citizens. Providing citizens with details of public sector activities increases the accountability of governments and citizens’ trust in them. Examples of information provision: information on public transport and the environment, information on working hours of government services, etc. Examples of interactive services: requests for public documents, requests for legal documents and certificates, issue of permits and licences, online tax payments, etc.

- **e-democracy**: the increased engagement of citizens in government decisions and actions using ICT tools such as online forums and petitions, online referendums, online voting, etc.
2. Background

e-Governance has its origins in the efforts that many countries have made to ‘modernize’ government in response to citizens’ criticism or disengagement, reflected in terms of falling numbers of voters and an overall low interest in government.

ICT offers concrete opportunities for local and national governments to improve their performance in terms of transparency, participation and decentralization. By narrowing the constraints of geographical isolation or insufficient time, ICT has the potential to invigorate political relations, allowing citizen participation in government.

Owing to its potential to integrate data in a more structured and comprehensive form, e-governance contributes to better knowledge management, improves information-sharing and helps to create conditions for a more open and transparent society based on trust and accountability. In this way, e-governance aids political, economic, social and cultural development through democratic, efficient and effective service delivery.

The integration of ICT in governance processes has the primary objective of transforming the relations between governments and their citizens, by improving the efficiency and accountability of governments and by allowing citizens to become active stakeholders in the decision-making process.

Numerous incentives towards introducing ICT to enhance good governance have already been undertaken in the African continent. However, challenges to effective implementation are still numerous. Several assessment studies and questionnaires carried out by UNESCO and CAFRAD have identified a lack of awareness of the potential of ICT to enhance governance, and consequently a lack of political will to embrace e-governance incentives.

As a response to this situation, UNESCO and CAFRAD have drawn up this guide on training curricula on e-governance for public servants, policy-makers and employees working in government institutions, based on the results of surveys identifying local needs and gaps in relation to e-governance carried out in fifteen African countries in 2006.
2.1 Methodology

The Curriculum Guide is intended to be used as a reference tool by African schools of public administration, when designing short in-service training courses for local government institutions. The purpose of the guide is to facilitate the development of curricula on e-governance and to enhance the capacity of local government institutions in African countries to adopt e-governance programmes.

The guide reflects the findings of the assessment study commissioned by UNESCO on current needs and trends in implementing e-governance in African countries. In particular, the study highlighted the need to enhance training and education opportunities regarding governance.

Research teams in fifteen African countries were responsible for collecting the relevant data and reporting on needs and opportunities in their respective countries. The teams distributed specially conceived questionnaires to African schools of public administration and other institutions involved in training and governance, in order to receive the feedback that was taken into consideration when designing the training curricula.

The surveys pointed out that knowledge and skills in computer applications for public service delivery in the African region need to be enhanced. Many government and private sector employees are not acquainted with basic computer skills. At the policy-making level, government officials are often not aware of the impact of ICT in improving the efficiency and accountability of governments.

Moreover, e-governance being a new area, even employees who have computer skills need to be trained to fully understand how it works, how to use it and how to fully integrate it in governing systems for improved and faster public service delivery and democratic purposes.

When designing the teaching modules, different levels of e-readiness in various local government institutions were taken into account, and modules of different duration and complexity have been designed for different target groups.

The methods were adapted to trainees’ needs and aspirations. Discussions and debates, combined with demonstrations and case studies are the privileged teaching method. Two main approaches are proposed:

(1) Theoretical approach illustrated by case studies and demonstrations. Efforts will be made to integrate e-governance issues into the general approach of innovating and modernizing public administration and governance.

(2) On-site practical exercises. Demonstrations on the use of ICT will be made on site. Depending on the level of target groups, trainees will analyse, network and evaluate various ways of better using ICT to improve public administration and governance.

A mechanism for follow-up and evaluation of the training will be put in place. Trainees will periodically be contacted to determine any change in their responsibilities, such as the impact of the training on their performance, the adaptation of the course content to their working environments, etc. Former trainees who have successfully accomplished the training
course(s) will be recruited to teach some aspects or deliver a lecture on their practical experience.
2.2 Objectives

The *Curriculum Guide* aims to provide basic knowledge on the use of e-governance and its importance to society. In particular, it examines the basics of e-governance and security measures; e-governance laws and policies; and the economy of e-governance. In addition, models of best practices in e-governance will be taught.

The guide aims to develop the ability and skills necessary for employees to use e-governance in their country, in local vernacular languages where applicable.

Specific objectives of the guide are to:

- build skills and provide knowledge on possible innovations in public administration through the use of ICT;

- develop capacities on the effective use of ICT in the public sector and of governance for improved delivery of public services to citizens;

- enhance the transparency and accountability of governments by providing them with timely and reliable information;

- enhance citizen participation in local government decisions using ICT tools.
2.3 Expected results

It is expected that the training guide in e-governance will enhance the capacity of African countries to use ICT for improved public administration and governance.

By increasing the accountability and transparency of governments, e-governance is expected to play a crucial role in the fight against corruption and bribery, particularly at local level.

The courses will also positively impact on the use of ICT to simplify manual working procedures and speed of work, which will contribute to the improvement of the overall efficiency of public administration.

Finally, ICT is expected to gradually transform the relations between governments and their citizens and to replace top-down, centralized regimes with openness and transparency.
3. Course modules

Based on the findings of the assessment studies and questionnaires, three main target groups have been identified:

- decision and policy-makers;
- managers or administrators;
- ICT professionals.

**Decision- and policy-makers**

This group consists of high-level elected and appointed officials working at central and local governance, holding positions of leadership and formulating socio-economic development policies. They also set development priorities and take strategic and visionary decisions for the country. They include ministers, heads of certain national institutions and corporations, members of parliament, commissioners, governors, mayors, councillors, etc.

**Managers or administrators of public services**

In this group, the courses will deal with the managerial and professional aspects of public services at central and local levels. This concerns the use of ICT in managing human resources; budgeting and accounting; procurement; records management and the implementation and evaluation of services and activities. This target group includes permanent secretaries, directors general, directors, heads of departments and services, etc. The courses will also be open to similar officials from NGOs and other organizations.

**ICT professionals and other government employees**

The training for this group will consist of updating and upgrading knowledge and skills in ICT. Courses are geared to those who design and manage information systems and services in the public sector. These include heads of information services/systems, technicians involved in various operations of the systems, etc. The courses are also open to similar professionals involved in the application of ICT in the public sector and NGOs.

While the three types of course will focus on e-governance, the content will vary from one target group to another. Decision- and policy-makers’ courses will concentrate on the use of ICT for decision-making, policy formulation, strategic visioning and coordination. Managers’ courses will focus on managerial operations to be performed through the use of ICT. ICT professionals will be able to analyse the applications of ICT use in public administration and governance. Each group will be further divided into three subgroups, depending on trainees’ levels of ICT literacy.
3.1 Detailed description of course modules

Courses on e-governance for policy-makers

The following courses focus on awareness-building in the use of e-governance in formulating and implementing policies and programmes, in order to improve government efficiency and overall performance.

**e-Gov 500 Concept of e-archive and e-portal**

In this course, the students will learn to:
- use a one-stop-shop single window;
- understand the need for setting up e-government portal;
- understand the source of archived information (laws, policies and documents);
- access databases (e.g. internet access to downloadable information such as statistics).

**e-Gov 501 Use of data and e-governance**

In this course, students will learn about:
- e-governance services delivery by different sectors and access to information;
- understanding the quality and relevance of e-consultations and information-sharing;
- understanding the need for networking and collaboration with partner institutions through e-governance;
- setting up a regional network on e-governance.

**e-Gov 503 Requirements for e-governance implementation; law and training**

This course will provide the students with:
- understanding of the need for policies on e-governance;
- a review of legal texts, regulations, procedures, equipments, working environment and their adaptation to the efficient use of ICT for better productivity and performance;
- understanding of the need to provide a continuous training in e-governance;
- understanding of the need for electronic training in public administration and governance.

In addition to the core courses, prerequisite courses will be available for groups with intermediate or low computer skills. These courses will offer training in Visual Basic programming, design of databases, use of the internet and the World Wide Web and basics of computer applications.

Courses on e-governance for managers or administrators

The courses designed for this target audience will focus on managerial and professional aspects of public service at central and local levels. This concerns the use of ICT in managing human resources; budgeting and accounting; procurement; records management; planning, coordination, implementation and evaluation of services and activities.

In addition to introductory courses on e-governance, courses for this target audience will include the following modules:
Courses on e-governance for ICT professionals

Courses for this target group are geared to designers and managers of information systems and services, including heads of information services/systems, technicians involved in various operations of the systems, etc. The courses are also open to professionals involved in similar applications of ICT in the private sector and to NGOs.

ICT professionals will not only sharpen their thinking and diversify their knowledge but will also learn to analyse various applications of ICT in public administration and governance.

In addition to the courses on network creation and management, ICT professionals would be exposed to some of the courses listed for managers and decision-makers.
3.2 Learning objectives of particular courses

Through different core and prerequisite modules of specific courses the participants will gain expertise in the following areas:

- electronic service delivery and e-participation as the means of accessing information and being included in decision- and policy-making;
- online payments and submission of forms;
- online poll and surveys;
- understanding the quality and relevance of e-consultations and information-sharing;
- encouraging citizen participation in decision-making using ICT;
- understanding the need to establish a portal on public administration and governance;
- reporting cases of corruption;
- understanding the need for the establishment of policies and regulations on e-governance;
- understanding the need to provide continuous training in e-governance;
- understanding the need for regional networking and collaboration with partner institutions.
3.3 Teaching application of a course module

e-Gov 40: Application of ICT in public procurement

The purpose of this course is to help individuals to understand how to use ICT in the public procurement process, with the objective of minimizing the risks of corruption. Although rules and regulations are often in place, in practice they are often circumvented through collusion between public officials and suppliers.

For this reason, procurement is a primary area for attention. The main problems are the failure to observe the existing rules and regulations in place, inadequate monitoring and failure to impose sanctions for violations of the rules in practice. All these problems could be reduced with the use of ICT and e-governance applied at all stages of the procurement process.

The matrix below shows the different stages of the procurement process and how e-governance could improve efficiency and minimize corrupt or fraudulent practices.
An overview of typical problems at different stages of the procurement process and an illustration of how ICT can help to solve them

<table>
<thead>
<tr>
<th>Specification</th>
<th>Normal practice</th>
<th>Problems that may lead to corrupt practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Identify procurement needs based on budgeted activities to facilitate work.</td>
<td>• Procurement process is ignored and user units are not involved. If involved, submission is usually not on CTB Form 100 and may later be altered at management level.</td>
</tr>
<tr>
<td></td>
<td>• Procurement needs should originate from user units on procurement requisition form (CTB Form 100).</td>
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The use of ICT allows all stages of the procurement process to be monitored and thus reduces the likelihood of fraudulent practices. It also allows information to be monitored electronically and any change reported.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Normal practice</th>
<th>Problems that may lead to corrupt practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Make clear product or service specifications.</td>
<td>• In many organizations there is insufficient involvement of specialized human resources in the process of specifying and planning requirements. This leads to serious problems and unnecessary costs for the government in making urgent purchases. Emergency situations may also be used for fraudulent motives.</td>
</tr>
<tr>
<td></td>
<td>• State quantity required, date, place of delivery and any restrictions in delivering including transport, packing, etc.</td>
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<tr>
<td></td>
<td>• Establish costs involved in purchase price, ownership and basis on which the offer is evaluated.</td>
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<td></td>
<td>• Obtain basic contact information.</td>
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<td></td>
<td>• List any legislation and policies to be complied with.</td>
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</table>

ICT allows records to be kept of irregular practices and thereby helps to increase the overall transparency of the procurement process.

<table>
<thead>
<tr>
<th>e-procurement</th>
<th>Normal practice</th>
<th>Problems that may lead to corrupt practices</th>
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<tbody>
<tr>
<td></td>
<td>• The secretariat should be aware of what products - equipment and services - need to be purchased at an early stage. A module plan should be supplied of the major purchases to be handled by contract committees for a whole financial year.</td>
<td>• Emergency situations that may cause waiving of set standards. (The planning and scheduling of procurement electronically reduces so-called emergency claims, restricting them to urgent and unforeseeable circumstances rather than those caused by dilatory conduct.)</td>
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<tr>
<td></td>
<td>• Contract committees should have consolidated requirements to prioritize and schedule procurements.</td>
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With e-procurement the scheduling of the procurement process is computerized, and the computer indicates the deadlines to be met. In case of any changes, the tracking records are documented and recorded.
Choosing methods of procurement
- Prequalification of prospective tenders (short-listing and requesting expression of interest). Shortlist should be made from updated suppliers list.
- Advertise in at least two newspapers and provide detailed contents, as specified in regulations.
- Provide sufficient information in tender documents to enable competition.
- Tender in Request for Proposal (RFP) to be given adequate time to tender.

- Competitive procedures are not used (government officials may use biased shortlist of suppliers including people of their choice, or one strong supplier of their choice and other weak suppliers so as to minimize competition).
- Adequate information provided to some tenders and limited information to others.
- Emergency services used to cover up for not giving adequate time to all tenders. Information may be supplied to some tenders in advance while others receive it too late.
- Using ‘lack of funds’ as an excuse for not advertising.
- Procurement may be broken up into small lots, which fall below the threshold for contract committees.

The above processes are electronically stored and every action is recorded on computer. Advertising is posted on websites and sent to all short-listed firms to avoid non-competitive bidding.

<table>
<thead>
<tr>
<th>Expertise tenders</th>
<th>Normal practice</th>
<th>Problems that may lead to corrupt practices</th>
</tr>
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<tr>
<td>Choosing methods</td>
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<td>of procurement</td>
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<tr>
<td>- Prequalification</td>
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<td>- Provide sufficient</td>
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<tr>
<td>- Tender in RFP</td>
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</table>

- Contract committees are responsible for controlling contracts, tender security, submission and receipt of tenders, opening of tenders, examining and reading out names, keeping records of tender opening.

- Postponing the deadline for receiving tenders to enable those being favoured to submit.
- Receiving some tenders after the deadline and considering them along with the others.
- Leaking information after opening tenders and allowing some tenders to be changed.

Electronic document reception makes procedures transparent and easy to control.

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<td>Conduct tenders</td>
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<tr>
<td>in a professional and objective manner.</td>
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<tr>
<td>Develop a set of criteria for the specific tender being evaluated (e.g. design, technical acceptability, delivery time, efficiency in performance, productivity, technical know-how, etc.)</td>
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<tr>
<td>Look for conformity with TORS, soundness of objectives and aims of work, with a thorough analysis of all factors to be</td>
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- Professionalism may be compromised due to various pressures and hence appropriate steps may not strictly be followed.
- Conflict of interest may occur between committee members and officials in the organization or government. It is possible for the evaluation committee to receive solicitations or even instructions from senior government officials and politicians on how the tender

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- Professionalism may be compromised due to various pressures and hence appropriate steps may not strictly be followed.
- Conflict of interest may occur between committee members and officials in the organization or government. It is possible for the evaluation committee to receive solicitations or even instructions from senior government officials and politicians on how the tender
considered.
  • Keep evaluation process confidential.
  • Award recommendations should be made.
  • Bid evaluation committee may not include individuals with technical knowledge relevant to the type of goods or services being evaluated.
  • Information may be leaked among committee members.
  • Financial bids may not be in line with the prevailing prices of the goods to be procured in the country of supply and bribes are paid so that the prices are accepted during verification.

Controls are available electronically at this stage of the procurement process.

<table>
<thead>
<tr>
<th>Implementation and performance monitoring</th>
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<td></td>
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<td>Knowing and intentional supply of false information in order to appear responsive to tender documents or to obtain a contract.</td>
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<td></td>
<td>Failure to comply with terms and conditions of existing public procurement contracts.</td>
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<td>Collusion in approving unjustified cost escalation or variations, which could also be due to poor supervision.</td>
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<tr>
<td></td>
<td>• Keep a record of performance assessment.</td>
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<td></td>
<td>• Monitor to ensure that procedures are timely and in compliance with the regulations</td>
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<td>• Make genuine reports to contracts committees.</td>
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<td></td>
<td>• Reconcile and conclude contract.</td>
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Controls are available electronically at this stage of the procurement process.
ANNEX I

Illustration of course modules for each target audience

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Core in-service courses</th>
<th>Prerequisite courses</th>
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</thead>
</table>
| Policy-makers with competent computer skills        | - e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training                                                                                       |                                                                                                                                                        |
| Policy-makers with average computer skills          | - e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
- e-Gov 201 Visual Basic programming course  
- e-Gov 300 Database design fundamentals                                                                                                                      | - e-Gov 100 Introduction to computers  
- e-Gov 101 Basics of computer applications  
- e-Gov 102 Operating platforms  
- e-Gov 201 Visual Basic programming  
- e-Gov 300 Database design fundamentals                                                                                                                     |
| Policy-makers with few or no computer skills        | - e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training                                                    | - e-Gov 100 Introduction to computers  
- e-Gov 101 Basics of computer applications  
- e-Gov 102 Operating platforms  
- e-Gov 201 Visual Basic programming  
- e-Gov 300 Database design fundamentals                                                                                                                     |
| Managers and administrators with competent computer skills | - e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
**And**  
- e-Gov 401 Application of ICT in human resources management and development  
- e-Gov 402 Application of ICT in financial management, budgeting and accounting  
- e-Gov 403 Application of ICT in procurement  
- e-Gov 404 Application of ICT in promoting gender equality  
- e-Gov 405 Application of ICT in module preparation and management  
- e-Gov 406 Application of ICT in public information and communication                                                                                   | - e-Gov 100 Introduction to computers  
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- e-Gov 404 Application of ICT in promoting gender equality  
- e-Gov 405 Application of ICT in module preparation and management  
- e-Gov 406 Application of ICT in public information and communication  
- e-Gov 407 Application of ICT in environment management  
- e-Gov 408 Application of ICT in general management and auditing  
- e-Gov 409 Application of ICT in records management  
- e-Gov 410 Application of ICT in democracy (voting, reforms)  
- e-Gov 420 Application of ICT in service delivery: e.g. health, education, etc.  
- e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
And  
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| Managere and administrators with no computer skills | - e-Gov 500 Concept of e-archive and e-portal  
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And  
- e-Gov 401 Application of ICT in human resources management and development  
- e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
And  
- e-Gov 401 Application of ICT in human resources management and development  
- e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
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- e-Gov 401 Application of ICT in human resources management and development  
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And  
- e-Gov 401 Application of ICT in human resources management and development  
- e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training  
And  
- e-Gov 401 Application of ICT in human resources management and development | - e-Gov 201 Visual Basic programming course  
- e-Gov 300 Database design fundamentals | - e-Gov 100 Introduction to computers  
- e-Gov 101 Basics of computer applications  
- e-Gov 102 Operating platforms  
- e-Gov 201 Visual Basic programming  
- e-Gov 300 Database design fundamentals |
| human resources management and development | - e-Gov 402 Application of ICT in financial management, budgeting and accounting  
- e-Gov 403 Application of ICT in procurement  
- e-Gov 404 Application of ICT in promoting gender equality  
- e-Gov 405 Application of ICT in module preparation and management  
- e-Gov 406 Application of ICT in public information and communication  
- e-Gov 407 Application of ICT in environment management  
- e-Gov 408 Application of ICT in general management and auditing  
- e-Gov 409 Application of ICT in records management  
- e-Gov 410 Application of ICT in democracy (voting, reforms)  
- e-Gov 420 Application of ICT in service delivery: e.g. health, education, etc. |
| ICT professionals | - e-Gov 310 Internet concepts and applications  
- e-Gov 320 Network creation and management  
- e-Gov 321 Data base systems analysis, design, creation and management  
- e-Gov 322 Portals and websites creation and management  
- e-Gov 330 Hardware and maintenance  
**And**  
- e-Gov 400 Introduction to e-governance  
- e-Gov 500 Concept of e-archive and e-portal  
- e-Gov 501 Use of data and e-governance  
- e-Gov 503 Requirements of e-governance implementation; laws and training |
Illustration of teaching application of course modules

Course title: Introduction to e-governance
Course code: e-Gov 400
Course prerequisites: Basic computer knowledge
Course duration: 3 working days
Target group: Senior and middle-level civil servants

Purpose of the course
This course introduces participants to the concept of e-governance within the context of democratic governance

Objectives of the course
By the end of the training programme, participants should:

- understand the concept of e-governance in the overall context of democratic governance;
- distinguish the conceptual and practical differences between e-governance and e-government;
- appreciate the importance of e-governance in their work as public servants;
- be more client-focused in the performance of their duties.

Course modules
- Module 1: Overview of governance (global, political, administrative, corporate, socio-economic)
- Module 2: The links between advances in ICT and global governance
- Module 3: Understanding e-governance and differentiating it from e-government
- Module 4: e-Corporate governance, e-political governance, e-socio-economic governance;
- Module 5: e-Governance and the civil servant
- Module 6: The link between e-governance and state legitimacy

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise

Course title: Application of ICT in human resources management and development
Course code: e-Gov 401
Course prerequisites: e-Gov 400
Course duration: 3 working days
Target group: Directors of human resources management

Purpose of the course
This course aims at equipping HRM directors with enhanced capacities to better manage the HRM function in the civil service using e-applications

Objectives of the course
By the end of the training programme, participants should:

- appreciate the value of e-applications in managing human resources in a coherent and coordinated mode;
- appreciate the value of e-applications in ensuring open, participatory transparent and objective performance appraisal modalities;
- appreciate the value of e-software in linking person profiles to job descriptions;
- aim at setting up comprehensive and easily accessible HRM data bases in their ministries to permit rational deployment of personnel.

**Course modules**
- Module 1: Linking e-human resources management to client-focused government
- Module 2: e-Recruitment; e-placement, e-job evaluation and classification
- Module 3: e-Performance and compensation appraisal
- Module 4: e-Management of separation
- Module 5: e-Training needs assessment in the public service
- Module 6: Human resources information system (HRIS)
- Module 7: Visit to good practices HRM department in government or private sector

**Reading resources**
Policy-relevant e-teaching manuals to be prepared by trainers

**Assessment**
Online practical demonstration exercise

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**Course title:** Application of ICT in financial management, budgeting and accounting  
**Course code:** e-Gov 402  
**Course prerequisites:** e-Gov 400  
**Course duration:** 3 working days  
**Target group:** Senior and middle-level managers charged with financial management in central government and municipal/local authorities

**Purpose of the course**
This course aims at equipping managers in line ministries and municipal/local authorities with enhanced capacities to better track deployment of public resources using e-applications

**Objectives of the course**
By the end of the training programme, participants should:

- appreciate the value of e-applications in managing public financial resources in a coherent and coordinated mode;
- appreciate the value of e-applications in enforcing standard governmental financial regulations;
- appreciate the value of relevant e-software in facilitating tracking of movement and disbursement of financial resources;
- aim at setting up comprehensive and easily accessible financial resource data bases in central government ministries and sub-national governments to permit cost-effective expenditure patterns.

**Course modules**
Module 1: Securing e-access to relevant government legislation governing financial regulations
Module 2: Exposure to e-software to prepare the national budget
Module 3: Application of e-software to track post-budget public expenditure patterns
Module 4: Introduction to integrated financial information systems (IFIS)
Module 5: ICT applications in asset management
Module 6: Exposure to e-software to harmonize and track external resource mobilization in government operations

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise

Course title: Application of ICT in procurement
Course code: e-Gov 403
Course prerequisites: e-Gov 400
Course duration: 3 working days
Target group: Senior and middle-level public servants

Purpose of the course
This course aims at sensitizing senior and middle-level civil servants to the utility of e-applications to ensure integrity and transparency in public procurement in the context of improving the quality of public services to citizens

Objectives of the course
By the end of the training programme, participants should:
- appreciate the value of e-applications in managing the procurement function in line with standing government procedures and regulations;
- appreciate the value of e-applications in ensuring open, transparent and objective evaluation and selection of bids;
- be more aware of the dangers of fraud in public procurement and their negative impact on service provision;
- be prepared for specialized higher courses to detect and combat fraud and other public procurement-related vices.

Course modules
- Module 1: Securing e-access to procurement regulatory and institutional framework
- Module 2: Application of ICT in inviting tenders
- Module 3: e-Application of ICT in evaluating tenders
- Module 4: Application of ICT in detection of procurement fraud
- Module 5: Application of ICT in monitoring and evaluation of public procurement
- Module 6: Donor perspectives on procurement

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers
**Assessment**

Online practical demonstration exercise

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**Course title:** Application of ICT in promoting gender equality  
**Course code:** e-Gov 404  
**Course prerequisites:** e-Gov 400  
**Course duration:** 3 working days  
**Target group:** Senior and middle-level civil servants and gender focal points in government

**Purpose of the course**

The purpose of the training is to sensitize senior and middle-level government managers on utility of ICT in promoting gender equality in the civil service, in the wider context of building a society anchored on democratic values and norms

**Objectives of the course**

By the end of the training programme, participants should:

- be able to use ICT to access websites that outline major international, regional and national instruments devoted to promoting gender equality;
- be able to use ICT to better grasp concepts of gender empowerment, gender mainstreaming and other analytical tools;
- appreciate the utility of ICT in exposing gender-biased or insensitive policies, modules, programmes, behaviours and attitudes in government and in wider society;
- be more aware of both overt and subtle gender inequalities that characterize African societies and agree on ICT-based plans, strategies and ‘road maps’, etc. to challenge such inequalities.

**Course modules**

- **Module 1:** applying ICT to grasp gender equality international, regional and national instruments/conventions (e.g. CEDAW); applying ICT to grasp gender mainstreaming approaches and principles
- **Module 2:** Using ICT in gender analysis
- **Module 3:** Deploying ICT to support gender planning and mainstreaming within module cycle
- **Module 4:** Using ICT for gender planning and mainstreaming within government policy formulation and implementation

**Reading resources**

Policy-relevant e-teaching manuals to be prepared by trainers

**Assessment**

Online practical demonstration exercise

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**Course title:** Application of ICT in module preparation and management  
**Course code:** e-Gov 405  
**Course prerequisites:** e-Gov 400  
**Course duration:** 3 working days
Target group: Senior and middle-level government managers and module managers running government modules

Purpose of the course
This course aims at exposing participants to the utility of using ICT to formulate and manage Modules as well as carrying out appropriate monitoring and evaluation (M&E) to ensure Modules deliver envisaged impacts in line with government’s socio-economic development vision

Objectives of the course
By the end of the training programme, participants should:
- appreciate the value of e-applications in carrying out needs assessment mapping;
- appreciate the value of e-applications in preparing strong module documents that can be sold to development partners to leverage resources;
- be able to take advantage of e-applications in designing the module cycle;
- be capacitated to apply e-methods of monitoring and evaluation in support of conventional techniques such as field ‘fact-finding’/’evaluation’ missions to track module impacts on designated populations;
- be sensitive to gender implications of ICT applications in module formulation and management.

Course modules
- Module 1: ICT applications in module/programme formulation
- Module 2: ICT applications in mainstreaming gender into module formulation
- Module 3: ICT applications in module implementation and management
- Module 4: ICT applications in module monitoring and evaluation
- Module 5: ICT applications in resource mobilization and management

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise

Course title: ICT Application in public information and communication
Course code: e-Gov 406
Course prerequisites: e-Gov 400
Course duration: 3 working days
Target group: Senior and middle-level government managers in ministries of public service; ministries of information; commissions of civil service reform

Purpose of the course
This course aims at exposing participants to the utility of using ICT in improving the flow of information between government ministries and departments, and to the general population so as to mobilize public opinion in favour of administrative and governance reforms.

Objectives of the course
By the end of the training programme, participants should:
appreciate the utility of ICT applications in designing national communication and information policies;
be sensitive to the advantages of utilizing ICT to communicate information on governance priorities; such as civil service reform to make government more responsive to citizens;
appreciate the value of ICT in conveying information to the population to enhance visibility of the government, hence scaling up the legitimacy of the state;
appreciate the importance of user-friendly web-design to enable the general public to interactively communicate with government policy-makers over performance of government policies and programmes.

Course modules
- Module 1: Introduction to national ICT policy
- Module 2: Utilizing ICT to enhance circulation of information within government
- Module 3: Optimizing ICT to communicate major government programmes and policies to citizens
- Module 4: Optimizing use of ICT to enable ministers and senior civil servants to gauge popularity or unpopularity of government programmes and policies

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise

Course title: Application of ICT in environment management
Course code: e-Gov 407
Course prerequisites: e-Gov 400
Course duration: 3 working days
Target group: Senior and middle-level managers tasked with implementing environmental policy

Purpose of the course
This course aims at equipping senior and middle-level managers in government with a broad understanding of the relevance of ICT applications in formulation and implementation of environmental policy in order to enhance sustainable development

Objectives of the course
By the end of the training programme, participants should:
- appreciate the value of ICT applications in the formulation of sound environmental policies;
- grasp the utility of ICT in providing global/regional and national perspectives on environmental challenges and priorities (climate change, biodiversity, etc.);
- appreciate ICT applications in assessing the extent to which national environmental legislation is consistent with international environmental law;
- be able to use ICT in tracking enforcement and implementation of national environmental legislation.

Course modules
Module 1: Applying ICT to understand the state of the world’s environment
Module 2: Applying ICT to grasp key international and regional environmental laws
Module 3: Applying ICT to determine synergies and gaps between national laws and international and regional instruments
Module 4: Applying ICT to formulate or assess efficacy of National Environmental Action Plans

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise

Course title: Application of ICT in general management and auditing
Course code: e-Gov 408
Course prerequisites: e-Gov 400
Course duration: 3 working days
Target group: Senior and middle-level managers tasked with managing the public sector

Purpose of the course
This course aims at equipping senior and middle-level managers in the civil service/public sector with an enhanced appreciation of the value of ICT applications and tools in promoting more coherent and accountable management of public service

Objectives of the course
By the end of the training programme, participants should:
- appreciate the utility of ICT in setting precisely defined outputs for all levels of the civil service;
- be able to use ICT to hold all senior managers accountable for the performance of their administrative jurisdictions;
- be aware of the advantages ICT can offer in ensuring that the results-based management (RBM) methodology is implemented in an orderly and coherent way;
- recognize the potential of ICT in cultivating an administrative culture of results-based management

Course modules
- Module 1: Optimizing use of ICT to define outputs and wider outcome arising from government operations
- Module 2: Optimizing ICT to ensure that all ministries, departments and sub-national governments are focused in their operations
- Module 3: Optimizing ICT to hold senior government managers (permanent secretaries/under-secretaries, etc.) accountable for the performance of their administrative jurisdictions
- Module 4: Optimizing ICT to encourage knowledge-sharing and career development in the public service

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers
**Assessment**

Online practical demonstration exercise

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**Course title:** Application of ICT in records management  
**Course code:** e-Gov 409  
**Course prerequisites:** e-Gov 400  
**Course duration:** 3 working days  
**Target group:** Senior and middle-level managers tasked with managing government records; the government’s institutional memory

**Purpose of the course**
The course aims at exposing participants to the utility of ICT in the orderly maintenance of governmental records, with a particular focus on best practices that enhance the credibility and legitimacy of the civil service;

**Objectives of the course**
By the end of the training programme, participants should:
- be familiar with the concept of e-records management/e-archiving;  
- appreciate the utility of ICT in maintaining government institutional memory;  
- appreciate the utility of e-archiving in tracking and prevention of corrupt practices detrimental to good governance;  
- appreciate the utility of ICT in ‘distilling’ and storing ‘good administrative practices’ that translate into citizen satisfaction.

**Course modules**
- **Module 1:** Introduction to e-records management/e-archiving  
- **Module 2:** Optimizing use of ICT to build government’s institutional memory  
- **Module 3:** Optimizing use of e-archiving in the fight against corruption and administrative fraud  
- **Module 4:** Optimizing use of ICT in ‘identifying’ and ‘distilling’ ‘good administrative practices’ that translate into citizen satisfaction

**Reading resources**
Policy-relevant e-teaching manuals to be prepared by trainers

**Assessment**
Online practical demonstration exercise

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**Course title:** Application of ICT in democracy (voting, reforms)  
**Course code:** e-Gov 410  
**Course prerequisites:** e-Gov 400  
**Course duration:** 3 working days  
**Target group:** Senior and middle-level civil service managers, political decision-makers, etc.

**Purpose of the course**
The purpose of this course is to orient senior and middle-level civil service managers to better understand how ICT can facilitate their roles as ‘neutral technocrats’ in a competitive multi-party democratic dispensation.

**Objectives of the course**

By the end of the training programme, participants should:

- appreciate how ICT can help them to grasp relevant constitutional and political developments in the country;
- appreciate how ICT can equip the civil service to support the independent electoral commission to organize free and fair elections;
- appreciate the utility of ICT in enabling the civil service to smoothly manage the transfer of power from an outgoing government to the successor regime;
- appreciate the utility of ICT in making government and all its arms more accountable to parliament, political parties and civil society, as required by democratic norms.

**Course modules**

- **Module 1: Optimizing the utility of ICT in constitution-making and constitutionalism**
- **Module 2: Optimizing utility of ICT in organizing free, fair, transparent and credible elections**
- **Module 3: Optimizing utility of ICT to assist senior civil servants in ensuring orderly post-electoral political succession**
- **Module 4: Optimizing utility of ICT in promoting interface between elected parliamentarians, opposition political parties, civil society organizations, think tanks, etc. and the civil service**

**Reading resources**

Policy-relevant e-teaching manuals to be prepared by trainers

**Assessment**

Online practical demonstration exercise

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**Course title**: Application of ICT in service delivery: e.g. health, education, etc.  
**Course code**: e-Gov 420  
**Course prerequisites**: e-Gov 400  
**Course duration**: 3 working days  
**Target group**: Senior and middle-level public servants and officials drawn from local/sub-national governments

**Purpose of the course**

This course aims at sensitizing senior and middle-level public servants in line ministries and sub-national governments to the utility of e-applications in ensuring client satisfaction in regard to delivery of essential public services such as water and sanitation services, health care, education and electricity, etc.

**Objectives of the course**

By the end of the training programme, participants should:

- appreciate the value of e-applications in building a climate of trust between service providers and consumers;
appreciate the value of e-applications in enabling decision makers to be more accessible and responsive to concerns and priorities articulated by core clientele; the general public;
be able to take advantage of e-applications in gauging the social, economic and political impacts of government modules and programmes;
be capacitated to implement e-dissemination of citizens/client charters.

Course modules
- Module 1: Application of ICT to improve citizens’ access to public policy-makers and implementers
- Module 2: Applications of ICT to carry out client satisfaction surveys
- Module 3: Applications of ICT in assessing social, economic and political impacts of essential service provision or lack of it
- Module 4: Applying ICT to secure citizen inputs into formulation of client charters as well as monitoring implementation of charters

Reading resources
Policy-relevant e-teaching manuals to be prepared by trainers

Assessment
Online practical demonstration exercise
ANNEX III

Teaching outline for prerequisite and ICT courses

General learning objectives

The following is a broad list of objectives that participants will achieve upon completion of the courses in each category.

- Describe and relate the purpose of the course in relation to the ICT program and e-governance in their respective employments
- Identify how the material learned within the programme will help in the use of ICT and e-governance in executing their work in public service delivery
- Identify and enhance their operational efficiency and competence
- Identify efforts required to fully understand the use of ICT and e-governance in public service delivery

Specific learning objectives

e-Gov 100: Introduction to computers
In this area, participants will learn:
- the basics of computers and software components;
- to apply software at work;
- to identify the components of the system unit;
- to identify input devices.

e-Gov 102: Operating platforms
This course will provide participants experience in a variety of operating platforms. Emphasis will be placed on support personnel interaction with the platform to assist users in business environments.

e-Gov 310: Internet concepts and applications
This course introduces the participants to the internet and its uses in the real world of business. It includes basic and advanced features of the internet, World Wide Web (WWW), browsers, list servers, and creating web pages. Upon completion of this course, participants will be able to understand and create a personalized home page and upload it to the internet, download files using a browser and File Transfer Protocol (FTP) program, and send e-mail messages.

e-Gov 320: Network creation and management
The following is a detailed list of objectives that participants will achieve upon completion of the network creation and management course with 100% accuracy. In this module, learners will be able to:
- describe communication services;
- describe the internet;
- understand network concepts;
- describe Local Area Networks;
- distinguish between Wide Area and Metropolitan Area Networks;
- describe network management and security;
• describe data communications;
• understand the fundamentals of data communications;
• describe communications media, servers and clients;
• identify communication equipment;
• describe data transmission;
• describe protocols;
• list e-governance or e-business applications and the business data communications industry;
• address the challenge of living in a connected world.

_e-Gov 322: Portals and websites creation and management_

The following is a detailed list of objectives that participants will achieve upon completion of the portals and websites creation and management course with 100% accuracy. In this training area, learners will understand:
• infrastructure and operations;
• information and communications systems and technologies;
• web applications, access to information and security measures;
• access, linkages and use of portals;
• how to obtain hosting for a website.