



**British Embassy Manila  
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**Championing Local eGovernance**



**The Asia Foundation**

# **Guidebook on Model ICT Organizational Structures for Local Governments**

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## **Preface**

In the years that we have been implementing Information and Communication Technology (ICT) programs in the local government, the most important issue that we had to deal with concerns about people. Where do we find the people who will manage and operate our ICT projects? What kind of competencies do we need? How do we set up a dedicated unit for these highly sought-after professionals?

These were some of the issues that we had to resolve. These and other concerns may now be addressed by this Guidebook.

Rare is the local government that can afford to establish a full-blown ICT unit overnight. The process is usually gradual, and as this Guidebook shows, incremental. The Unit grows with the level of involvement of the Local Chief Executive, the funding support provided, the availability of ICT management and technical expertise, and the complexity of the information systems being used by the local government.

It is then my hope that with this Guidebook, local governments that are starting out with ICT, or those working towards more applications of ICT, will be able to set up the appropriate organization for their particular conditions and needs.

I also hope that this Guidebook will allow the National Association of Local eGovernment Champions (NALeGoCI) to serve Philippine local governments in achieving greater effectiveness in the use of ICT to improve service delivery, internal operations, and interaction with constituents.

Association members contributed to the production of this Guidebook by sharing their experiences. This should, therefore, be considered as a work in progress. As more local governments discover and share the issues and opportunities in managing ICT units, updates to this Guidebook can be expected in the future.

**RAFAEL F. BARAAN**

President

National Association of Local eGovernment Champions, Inc. (NALeGoCI)

## **1. INTRODUCTION**

Information and Communication Technology (ICT) has become a potent tool for greater access to much needed information relative to improved delivery of government services. When used judiciously, it provides invaluable support in streamlining government operations and transactions.

The autonomy granted under the Local Government Code of 1991 gives local governments the authority to develop and implement ICT plans and programs suited to their own needs and aspirations. During the last decade, studies have shown that there is a growing appreciation in local governments for computerization towards more effective and efficient government operations. Thus, an increasing number of local governments have started to build their capacity to form ICT units, some in initial ad hoc form and others in the form of permanent units. Consequently, they have also started to build their technical capability on computer operations.

The National Association of Local eGovernment Champions (NaLeGoCI), with support from The Asia Foundation (TAF) and the British Embassy-Global Opportunities Fund, has initiated a program that aims to provide technical assistance to local governments in setting up their respective ICT units. This is in the form of a Guidebook that contains model Information and Communication Technology (ICT) organizational structures that local governments may choose from or use as guide in developing their own ICT units.

This Guidebook intends to assist, challenge, and inspire all types and classes of local governments towards accelerated development with the use of information and communication technology.

Republic Act 7160, otherwise known as the Local Government Code of 1991 and its Implementing Rules and Regulations provided the legal framework for the conceptualization of the model ICT organizational structures. In addition, Civil Service Memorandum Circular No. 19, series of 1992 (CSC MC #19, s. 1992) dated May 2, 1992 and Executive Order # 503 dated January 22, 1992 were used as guides to ensure administrative viability of the models.

The other basis, which provided invaluable insights on the ICT needs and capabilities of local governments, was a study on the experiences of local governments in developing and maintaining their eGovernment/eGovernance programs. The study also provided the study team with creative ideas on possible model ICT organizational structures for local governments. Please refer to “Annex C” for the report on observations, findings and recommendations made by the study team.

The model organizational structures range from the most simple ad hoc arrangement to the most complete, taking into consideration the varied needs and resource capabilities of the different local governments.

It is hoped that this Guidebook contains enough model options from which local governments may choose to suit their needs and program priorities. It is also hoped that if there is no one model that suits a specific local government need, it may opt to combine the features of various

models to enable them to come up with one that specifically fits or responds to their particular needs and resource capacities.

## **2. HOW TO USE THE GUIDEBOOK ON MODEL ICT ORGANIZATIONAL STRUCTURES FOR LOCAL GOVERNMENTS**

This Guidebook contains five (5) model ICT organizational structures that are suggested for various ICT needs of local government. As an introduction to the models, a ***“Guide on How to Find the Appropriate Model”*** is presented ahead of the organizational structures.

The model ICT organizational structures are presented in a simple language and format. Each model is composed of a brief description of its “Features”, and its rationale which includes “Key Considerations”, “Services that can be Provided by the model”, and a set of criteria that will guide the local governments in determining the model’s adaptability to its ICT structural needs. It also provides the “Functional Chart” and “Staffing Pattern” of each model. Another section of the Guidebook is devoted to the “Qualification Standards” of each position found in the staffing pattern.

The Annex “A” presents a sample format of an Executive Order creating the ICT unit of the local government to provide a guide on how to initiate the creation of ICT unit with the local government. Likewise, a sample format of a Municipal Ordinance authorizing the creation of the ICT unit in the municipality is included in Annex “B”.

A report on the findings and recommendations of the study team is also provided in Annex “C” to provide the user a glimpse of the state of ICT organizational units in the local governments visited by the study team and the resulting insights that guided them in creating the model ICT organizational structures.

### **A. Guide on How to Find the Appropriate Model**

The following matrix provides a comparative presentation of the proposed models focusing on key considerations of local governments in setting up an ICT unit such as funds, structure, and personnel. It also focuses on the desired ICT uses of the local government and the possible degree of commitment to ICT of the local chief executives.

#### **1. Features**

It provides a very brief description of the proposed ICT model and possible functions in the local government.

#### **2. Rationale for the Models**

This section enumerates the key considerations, services that can be provided by the model, and the set of criteria that local governments may use to determine the model’s adaptability to its needs.

**3. Model Organizational Structure and Functional Chart**

The corresponding functions and staffing required for each model organizational structure are also included in the respective model organizational structure. It provides the requisite personnel needed to operationalize the unit, as well as the functions assigned to each personnel.

**4. Qualification Standards**

A whole section of the Guidebook is devoted to the qualification standards of the various positions assigned to the model organizational structures. This includes information on the minimum qualification requirements of each position, and the salary grade assigned to it. The position titles are presented in alphabetical order to make it easy for the user to find each position.

### 3. GUIDE TO FINDING THE APPROPRIATE MODEL

Local Governments Considerations	Model A	Model B	Model C	Model D	Model E
<b>Funds</b>	<ul style="list-style-type: none"> <li>No funds to pursue even small ICT projects</li> </ul>	<ul style="list-style-type: none"> <li>Minimal funds available to pursue ICT projects</li> </ul>	<ul style="list-style-type: none"> <li>Annual budget includes limited ICT funds for equipment and personnel</li> </ul>	<ul style="list-style-type: none"> <li>Annual budget has enough funds to operate an ICT unit</li> </ul>	<ul style="list-style-type: none"> <li>Annual budget has enough funds to operate an ICT office and implement ICT programs and projects</li> </ul>
<b>Structure and Personnel</b>	<ul style="list-style-type: none"> <li>No technical personnel to operate a full-time ICT unit</li> </ul>	<ul style="list-style-type: none"> <li>Minimal competent personnel are available in other offices to do ICT projects</li> </ul>	<ul style="list-style-type: none"> <li>ICT unit has basic competent personnel</li> </ul>	<ul style="list-style-type: none"> <li>ICT division has more service units with competent staff</li> </ul>	<ul style="list-style-type: none"> <li>ICT division or department has complete services and well trained and competent staff</li> </ul>
<b>Desired Uses</b>	<ul style="list-style-type: none"> <li>Simple and basic purposes</li> </ul>	<ul style="list-style-type: none"> <li>Office automation and records management</li> </ul>	<ul style="list-style-type: none"> <li>Office productivity, computer maintenance, and systems development</li> </ul>	<ul style="list-style-type: none"> <li>Include Models A and B services plus maintenance and updating of website, analysis and design</li> </ul>	<ul style="list-style-type: none"> <li>Include the complete range of ICT services of Models A, B, and C plus software applications, MIS and GIS services, and full implementation of ICT projects</li> </ul>
<b>LCE Support</b>	<ul style="list-style-type: none"> <li>LCE is aware of ICT</li> </ul>	<ul style="list-style-type: none"> <li>LCE is interested in ICT</li> </ul>	<ul style="list-style-type: none"> <li>LCE is involved in ICT projects of the LGU</li> </ul>	<ul style="list-style-type: none"> <li>LCE is committed to ICT projects of the LGU</li> </ul>	<ul style="list-style-type: none"> <li>LCE is willing to invest in the future of ICT in the LGU</li> </ul>

#### **4. ICT ORGANIZATIONAL STRUCTURES**

The Guidebook features five (5) model ICT organizational structures for local governments. It starts with Model A, which is the most simple in terms of structure, functions, and staffing, and culminates with Model E, which is probably the ideal structure for most local governments.

It is also important to note that in setting up the ICT unit, the Geographic Information Systems (GIS) services may be developed incrementally, starting with Model C. GIS application development may be considered as a subset of Information Systems Development.



## **MODEL A**

### **1. Features**

- The legal basis for its creation is an Executive Order issued by the Local Chief Executive.
- It has a simple structure with a minimum of three personnel.
- The ICT unit is directly under the Office of the Local Chief Executive.
- The ICT tasks and functions are assigned as added responsibilities to organic personnel who possess the minimum capability required to perform IT functions.
- Structural adjustments are possible at a later date, considering the emerging needs, priorities, and financial capability of the local government.

### **2. Key Considerations**

- The local government's ICT needs are simple and basic.
- The ICT unit has the full support of the Local Chief Executive.
- The local government has no funds to pursue even small ICT projects.
- It has no technical personnel appointed to fully operate an ICT unit.

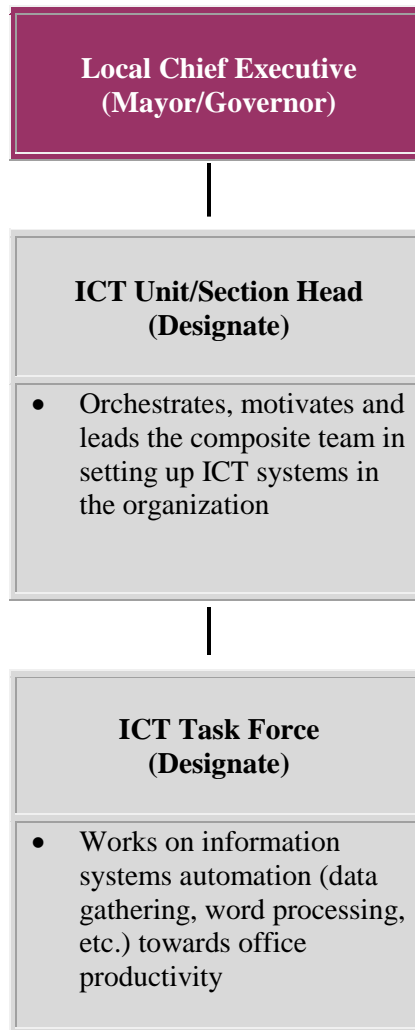
### **3. Services That It Can Provide**

- Using computers for simple applications, such as writing or simply encoding of correspondence, report writing, and records keeping.
- Generating simple computer reports.
- Maintaining simple data that may be used to provide basic information services to internal and external customers of the local government.
- Training of users on simple clerical tasks using MS Word, etc.
- Advising the LCE on ICT procurement, either or both hardware and software.
- Starting work on a medium-term information system plan.

### **4. Criteria for Adopting This Model**

- The local government is convinced that ICT is vital in the delivery of basic services to its customers.
- The local government is just starting to adopt ICT with minimal or no funds allocated for the purpose.
- It has no duly appointed IT personnel.
- Its budget for personal services is beyond the 45/55 limit set by the Local Government Code.

**MODEL A**



## **MODEL B**

### **1. Features**

- The legal basis for its creation is an Executive Order issued by the Local Chief Executive.
- It provides the same services as Model A but it has an added feature-- the ICT Management Committee, the result of which is a different set of key considerations, structure, and staffing pattern.
- It has a simple structure with a minimum of three personnel.
- The ICT unit is directly under the Office of the Local Chief Executive
- The ICT tasks and functions are assigned as an added responsibility to personnel who possess the minimum capability required to perform IT functions.
- Structural adjustments are possible at a later date, considering the emerging needs, priorities, and financial capability of the local government.

### **2. Key Considerations**

- The ICT unit has the full support of the Local Chief Executive.
- The local government's use for ICT is basically for office automation and records management.
- The local government has some organic personnel in other offices who can be designated to work on ICT functions.
- It has only minimal funds to pursue ICT programs.

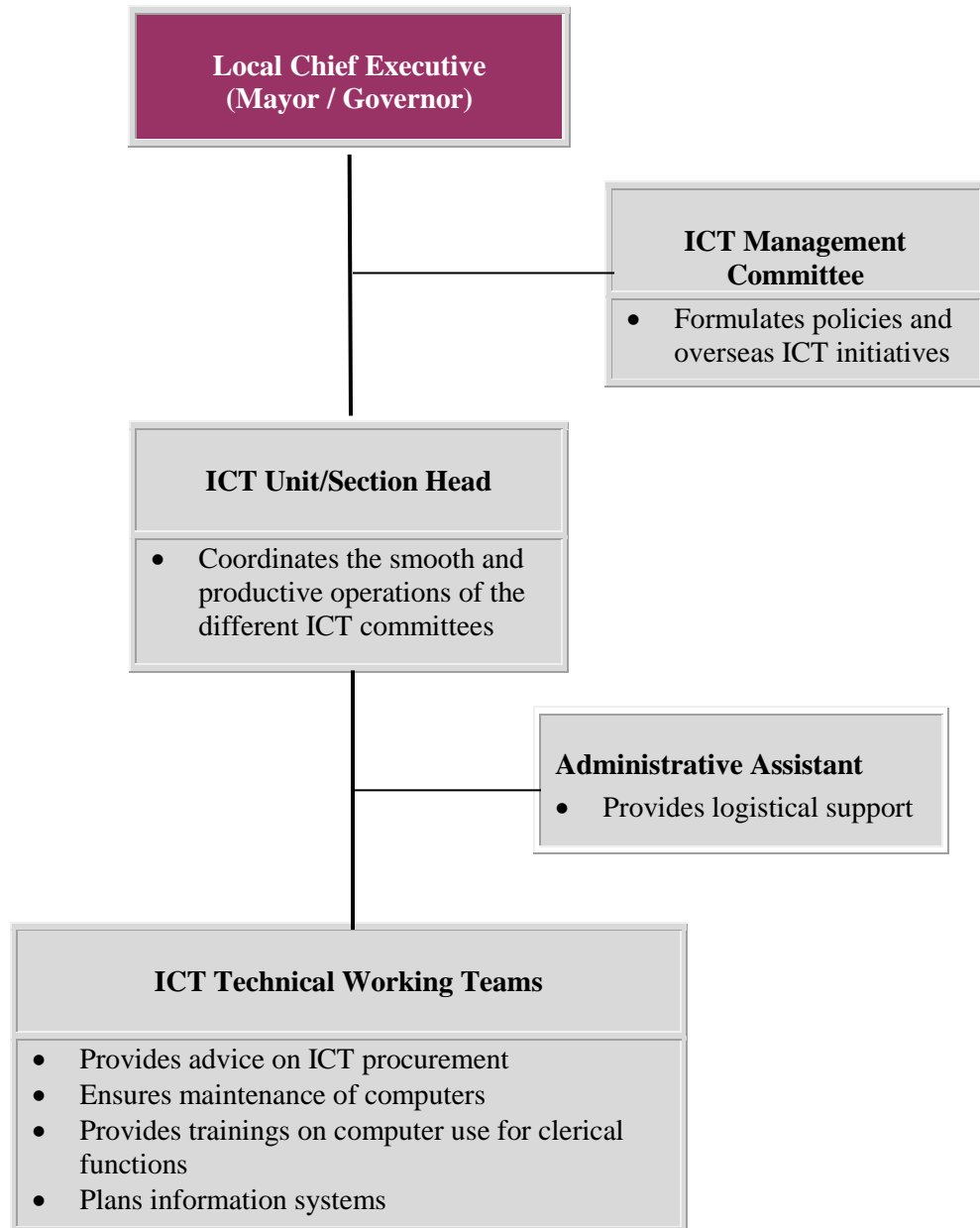
### **3. Services That It Can Provide**

- Using computers for simple applications, such as writing or simply encoding of correspondence, report writing, and records keeping.
- Maintaining simple data that may be used to provide basic information services to internal and external customers of the local government;
- Generating simple computer reports.
- Training of users on simple clerical tasks using MS Word, etc.
- Advising the Local Chief Executive on ICT procurement, either or both hardware and software.
- Starting work on a medium-term information system plan.

### **4. Criteria for Adopting This Model**

- The local government is convinced that ICT is vital in the delivery of basic services to its customers.
- The local government is just starting to adopt ICT, with minimal or no funds allocated for the purpose.
- It has no duly appointed IT personnel.
- Its budget for personal services is beyond the 45/55 limit set by the Local Government Code.

**MODEL B**



## **MODEL C**

### **1. Features**

- The legal basis for its creation is an Executive Order issued by the Local Chief Executive.
- It has four to five key personnel who are ICT competent, who have the potential of being appointed to ICT positions in the future; or who may be assigned to do ICT functions in addition to their current work assignments.
- The software applications may be outsourced.

### **2. Key Considerations**

- The ICT unit has the full support of the Local Chief Executive.
- The LGU aims to use computerization to enhance its productivity.
- Its current annual budget includes limited ICT funds for procurement of equipment and hiring of ICT personnel.
- It has an ICT unit with designated personnel who possess basic computer competencies.
- It is committed to promote computer maintenance and systems development.

### **3. Services That It Can Provide**

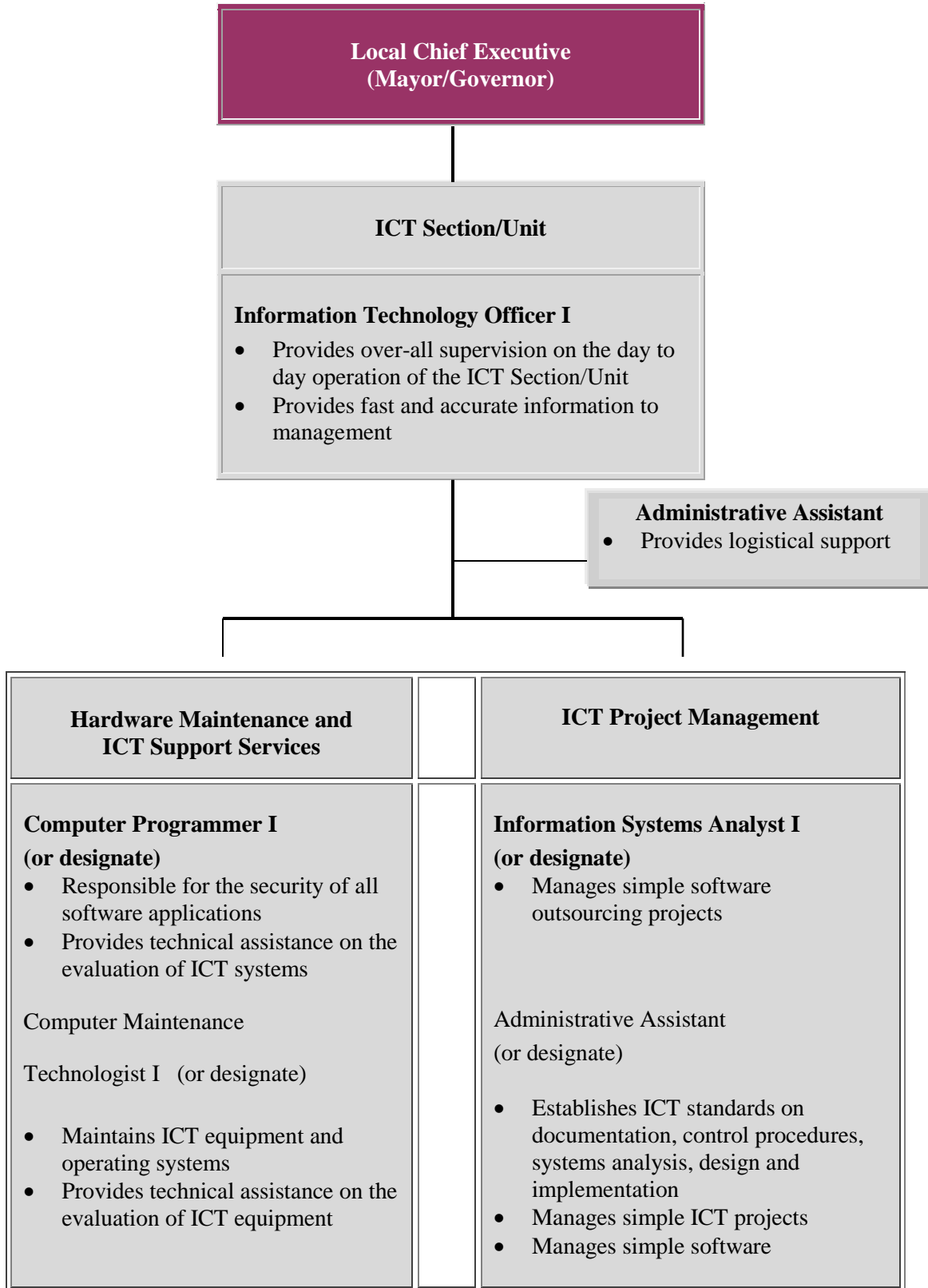
All the services that can be provided by Model B, and

- Managing simple ICT projects, whether outsourced or internal.

### **4. Criteria for Adopting This Model**

- The local government has some funds, though limited, to operate and maintain an ICT unit.
- It is already successfully operating using Model A or Model B.
- It is convinced that ICT is vital to the successful delivery of services to its customers.
- It aims to use ICT to enhance office productivity.
- It is committed to promote systems development and to ensure appropriate computer maintenance.

**MODEL C**



## **MODEL D**

### **1. Features**

- The legal basis for its creation is an Executive Order issued by the Local Chief Executive.
- It has a more complex structure than Model C.
- It has about eight (8) or more ICT competent personnel, a majority of whom are duly appointed to IT positions.

### **2. Key Considerations**

- The ICT unit has the full support of the Local Chief Executive.
- The local government's ICT plans and programs are now part of the Annual Investment Plan of the local government.
- The local government's ICT plans and programs have a corresponding approved budget.
- It has an ICT unit with personnel who possess basic computer competencies.
- It aims to use computerization to enhance its productivity.
- It is committed to promote computer maintenance and systems development.

### **3. Services That It Can Provide**

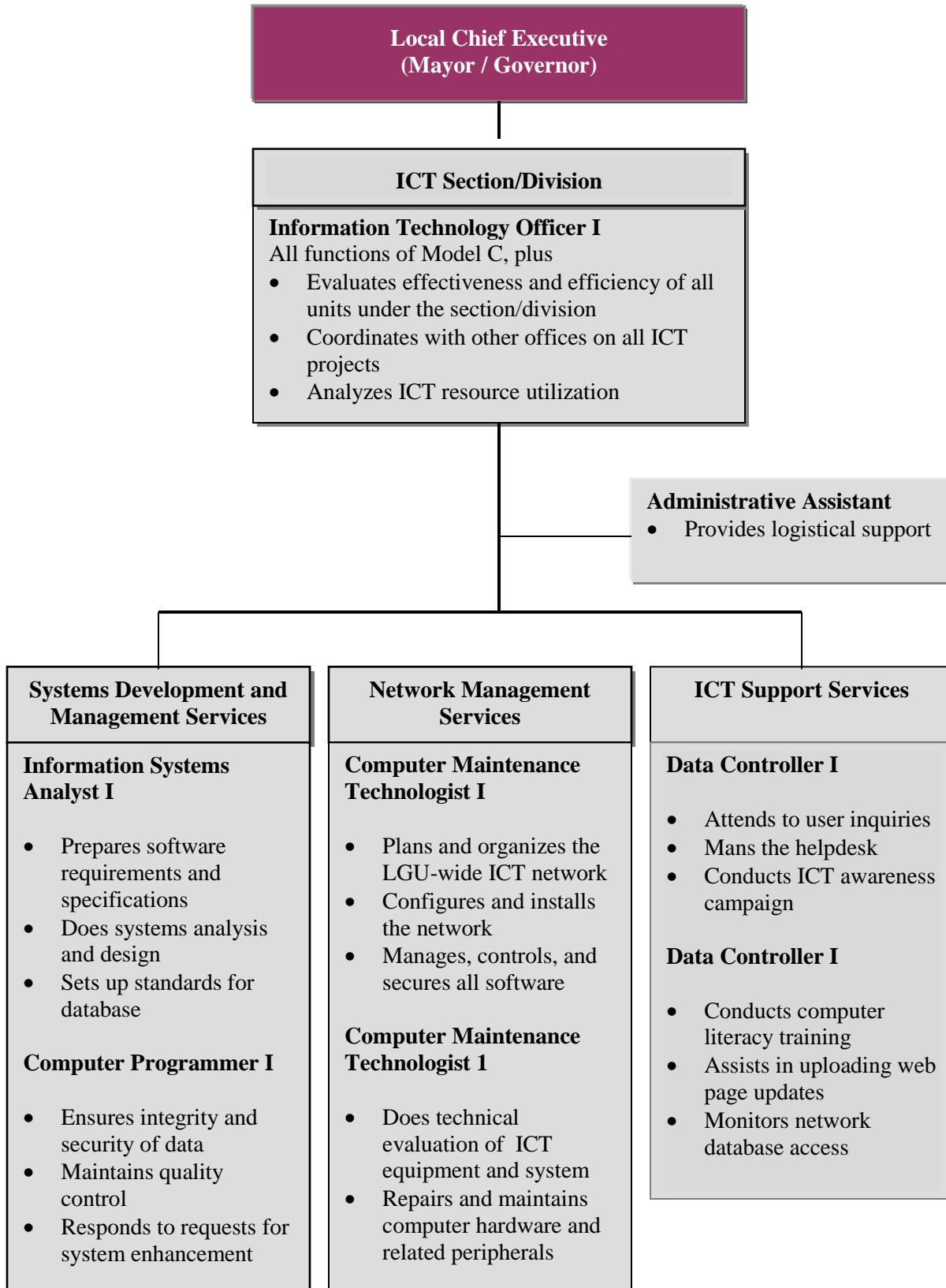
All services provided by Model C, and

- Managing more complicated ICT projects, whether in-house or outsourced.
- Systems Analysis and Design
- Systems Maintenance
- Database Administration
- Network Management
- Website Maintenance

### **4. Criteria for Adopting This Model**

- The local government has an annual budget that provides for the operation of an ICT office.
- The ICT unit is a division that has several sections with enough competent personnel.
- The ICT will be used to enhance productivity of the organization.
- It will also be used to analyze, design, implement, and maintain the local government website.

**MODEL D**





## **MODEL E**

### **1. Features**

- The legal basis for its creation is an Executive Order issued by the Local Chief Executive.
- It is capable of conducting user's training.
- It does website development and maintenance.
- It does in-house software development.
- It is capable of doing strategic ICT management.

### **2. Key Considerations**

- The ICT unit ranks high in the priorities of the Local Chief Executive and the local government.
- The local government's ICT plans and programs are now part of the Annual Investment Plan of the local government.
- The local government's ICT plans and programs have a corresponding approved budget.
- It has an experienced manager and full time personnel who are ICT competent.
- It aims to use computerization to enhance its productivity.
- It is committed to promote computer maintenance and systems development.

### **3. Services That It Can Provide**

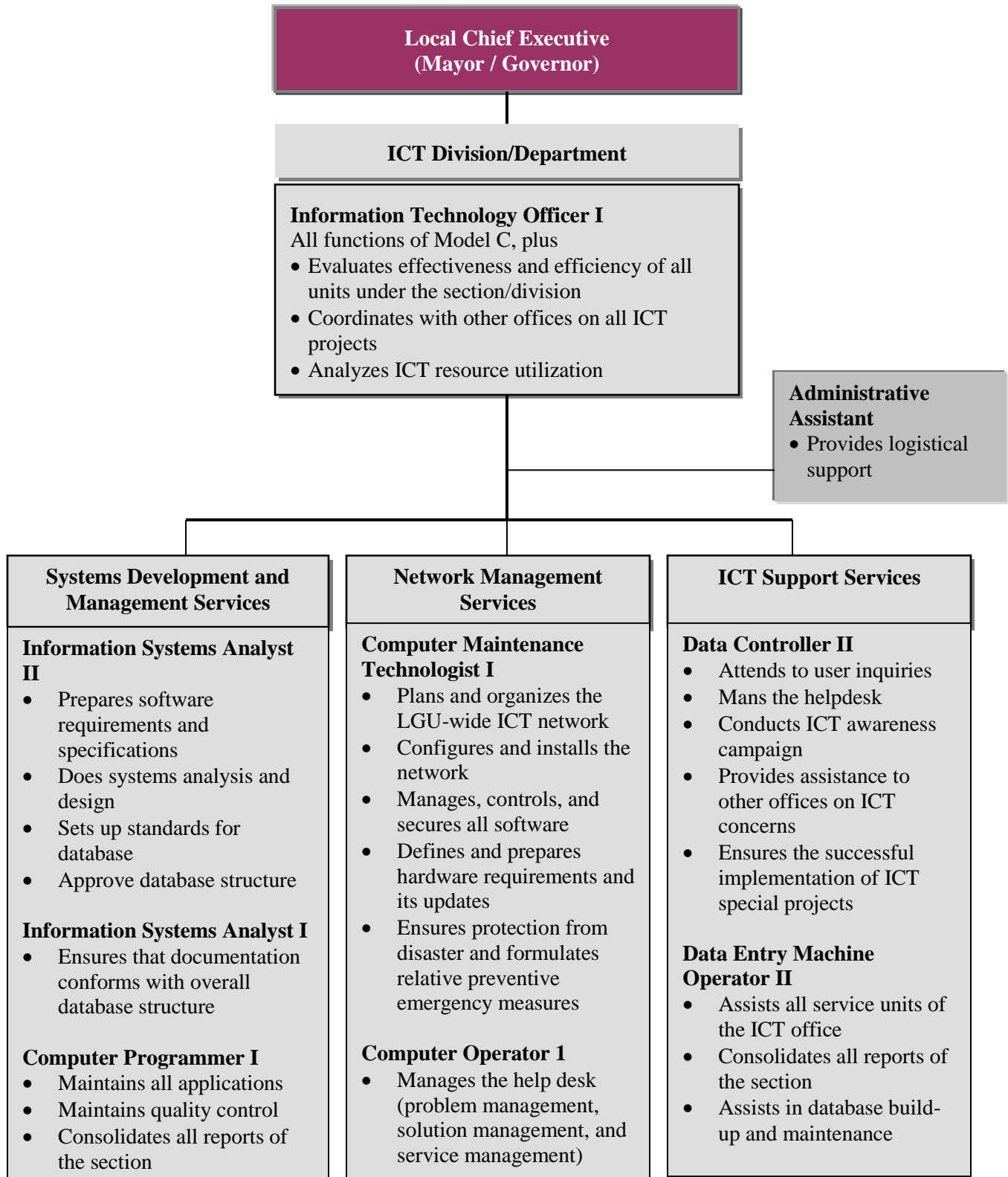
All services provided by Model D, and

- ICT Strategic Management-- continuous alignment of ICT investments and activities with local government priorities.

### **4. Criteria for Adopting This Model**

- The local government annual budget has enough funds to operate ICT programs and projects.
- The ICT Division or Department offers complete services.
- It has well-trained and competent personnel.
- The local government intends to have a complete range of ICT services from those found in Models A, B, C, and D, plus software applications, MIS and GIS services, and full implementation of ICT projects.

**MODEL E**



## 5. QUALIFICATION STANDARDS OF POSITIONS ASSIGNED TO THE VARIOUS MODELS

The following qualification standards will guide the local government in designating the personnel requirement of the ICT unit during its initial stages of development. It will also be very useful when the local government finally decides to strengthen its ICT unit and starts to recruit, select, and appoint personnel thereto.

<b>Position Title</b>	<b>Administrative Assistant</b>
<b>Salary Grade</b>	8 (PhP8, 706.00 per month)
<b>Eligibility</b>	Career Service (Subprofessional); First Level Eligibility
<b>Education</b>	Completion of two years studies in college
<b>Experience</b>	1 year of relevant experience
<b>Training</b>	4 hours of relevant training
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Computer literate - MS Word, Excel</li> </ul>

<b>Position Title</b>	<b>Computer Maintenance Technologist I</b>
<b>Salary Grade</b>	11 (PhP 10,535.00 per month)
<b>Eligibility</b>	Career Service Subprofessional; Second Level Eligibility
<b>Education</b>	Bachelor's Degree, preferably in ICT related courses
<b>Experience</b>	None required
<b>Training</b>	None required
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Skill in computer maintenance and hardware trouble shooting</li> <li>• Basic computer literacy</li> </ul>

<b>Position Title</b>	<b>Computer Operator I</b>
<b>Salary Grade</b>	7 (PhP 8,139.00 per month)
<b>Eligibility</b>	Career Service Subprofessional; Data Encoder (MC11, s. 1996 - Cat I); First Level Eligibility
<b>Education</b>	Completion of 2 years studies in college or High School Graduate with relevant vocational/trade course
<b>Experience</b>	None required
<b>Training</b>	None required
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Skill in computer maintenance and hardware troubleshooting</li> <li>• Technical skill in hardware diagnosis</li> <li>• Software installation</li> <li>• Basic computer literacy</li> </ul>

<b>Position Title</b>	<b>Computer Programmer I</b>
<b>Salary Grade</b>	11 (PhP 10,535.00 per month)
<b>Eligibility</b>	Career Service (Professional); Second Level Eligibility
<b>Education</b>	Bachelor's Degree, preferably in computer sciences or ICT related courses
<b>Experience</b>	None required; but experience in actual software development is an advantage
<b>Training</b>	None required; 4 hours relevant training is an advantage
<b>Competencies</b>	<p>Knowledge and skills in:</p> <ul style="list-style-type: none"> <li>• Application development technology, computer architecture, client-server and networking concepts</li> <li>• Relational database design/data modeling, data structures</li> <li>• Operating systems, utilities and data management</li> </ul> <p>Programming languages specifically object-oriented programming such as VB.Net, Oracle 2000, Power Builder, Visual Basic and SQL</p>

<b>Position Title</b>	<b>Data Controller I</b>
<b>Salary Grade</b>	6 (PhP 7,606 per month)
<b>Eligibility</b>	Career Service Subprofessional, Data Encoder (MC 11, s. 1996 - Cat. I); First Level Eligibility
<b>Education</b>	Completion of 2 years studies in college or High School Graduate with relevant vocational/trade course
<b>Experience</b>	None required
<b>Training</b>	None required
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Computer literate</li> </ul>

<b>Position Title</b>	<b>Data Controller III</b>
<b>Salary Grade</b>	11 (PhP 10,535.00 per month)
<b>Eligibility</b>	Career Service (Subprofessional); Data Encoder (MC 11, s. 1996 - Cat. I); First Level Eligibility
<b>Education</b>	Completion of 2 years studies in college or High School graduate with relevant vocational/trade course
<b>Experience</b>	2 years of relevant experience
<b>Training</b>	8 hours of relevant training
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Computer literate</li> <li>• Oral and written communication skills</li> <li>• Analytical thinking and reasoning skills</li> <li>• Proficiency in ICT operations</li> </ul>

<b>Position Title</b>	<b>Data Entry Machine Operator I</b>
<b>Salary Grade</b>	6 (PhP 7,606.00 per month)
<b>Eligibility</b>	Career Service (Subprofessional); Data Entry Encoder (MC 11, s. 1996 - Cat. I); First Level Eligibility
<b>Education</b>	Completion of 2 years studies in college or High School graduate with relevant vocational/trade course
<b>Experience</b>	None required
<b>Training</b>	None required
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Skill in hardware trouble shooting and maintenance</li> <li>• Basic computer literacy</li> </ul>

<b>Position Title</b>	<b>Information Systems Analyst I</b>
<b>Salary Grade</b>	12 (PhP 11,167.00 per month)
<b>Eligibility</b>	Career Service (Professional); Second Level Eligibility
<b>Education</b>	Bachelor's Degree, preferably in ICT related courses
<b>Experience</b>	None required
<b>Training</b>	None required
<b>Competencies</b>	<p>Knowledge and skills in:</p> <ul style="list-style-type: none"> <li>• Data systems analysis and management</li> <li>• Systems documentation, analysis, and design</li> <li>• Database design and management</li> </ul>

<b>Position Title</b>	<b>Information Systems Analyst II</b>
<b>Salary Grade</b>	16 (PhP 14,096.00 per month)
<b>Eligibility</b>	Career Service (Professional); Second Level Eligibility
<b>Education</b>	Bachelor's Degree, preferably in ICT courses or applied sciences
<b>Experience</b>	1 year of relevant experience, preferably in ICT in a microcomputer environment and PC-based local area network.
<b>Training</b>	4 hours of relevant training
<b>Competencies</b>	Knowledge and skills in: <ul style="list-style-type: none"><li>• Application, development technology, computer architecture, client server and networking concepts</li><li>• Relational database design/data modeling, data structures</li><li>• Operating systems, utilities and data management</li><li>• Programming languages specifically object-oriented programming such as VB. Net, Oracle 2000, Power Builder, Visual basic and SQL</li><li>• Oral communication and technical writing</li><li>• Supervisory skills</li><li>• Familiarity with government procedures</li></ul>

<b>Position Title</b>	<b>Information Technology Officer I</b>
<b>Salary Grade</b>	19 (PhP 16,792.00 per month)
<b>Eligibility</b>	Career Service Professional; Second Level Eligibility
<b>Education</b>	Bachelor's Degree relevant to ICT, preferably in IT applied sciences and computer systems
<b>Experience</b>	2 years of relevant experience, preferably in IT project planning, implementation, control and monitoring, and systems analysis
<b>Training</b>	8 hours of relevant training
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Knowledge in government administration, policies, procedures, and systems</li> <li>• Leadership and supervisory skills</li> <li>• Oral communication and technical writing skills</li> <li>• Interpersonal relations skills</li> <li>• Ability to lead group sessions</li> <li>• Proficiency in network administration</li> </ul>

## 6. TRAINING FOR ICT PERSONNEL

It will be advantageous for the local government to conduct a *Training Needs Assessment* (TNA) of its ICT personnel as soon as the ICT unit is installed and positions are filled up. The results of the “Training Needs” will serve as the baseline training needs data upon which appropriate training courses may be developed and conducted. Training needs may be appropriately responded to through coaching or mentoring or through formal training courses, which may be in-house or sourced outside the organization.

Service contracts shall be required when an ICT personnel avails of an ICT scholarship or specialized training grant. The terms and conditions of such contract shall be in consonance with prescribed government standards.

Without pre-empting the results of the TNA, the attendance of ICT personnel to the following courses are recommended to enable the ICT unit to move from one Model to the next higher Model.

- A. To move from either Model A or Model B to Model C, the following training courses are recommended:



Systems Development

- Data Modeling
- Introduction to Structured Systems Analysis and Design
- Systems Analysis and Design for Practicing Programmers
- Program Logic Formulation
- Information Systems Project Management Course
- Information Systems Strategic Planning

Database Administration Staff:

- Data Modeling
- Structured Query Language

- B. To move from Model C to Model D, the following training courses are recommended:

Systems Development

- Introduction to Object Oriented Programming
- Data Modeling
- Visual Basic for Beginners
- Advanced Visual Basic Programming
- Visual Basic: NET Programming
- Structured Query Language
- Unix Operating System
- Oracle Programming
- Java Programming

Web Site Development and Maintenance

- Active Server Pages
- HTML/Web Pages Development
- Desktop Multimedia Authoring
- Web-based Multimedia Authoring

Network Administration

- Introduction to Networking
- Networking Seminar
- Networking Specialist
- A+ Training
- Advanced Networking
- Hardware Troubleshooting, Repairs and Maintenance

Database Administration

- Data Warehousing
- Database Security
- Relational Database Management
- Managing Database for Web-based Application

- Certification

C. To move from Model D to Model E, the following training courses are recommended:

Strategic ICT Management, which may include:

- Information Systems Strategic Planning
- Information Systems Management Best Practices

## **7. RECRUITMENT, SELECTION, AND APPOINTMENT OF ICT PERSONNEL**

The recruitment and selection of personnel for positions under the ICT Unit shall be the responsibility of the Human Resource Development (HRD) unit of the local government. Upon request of the ICT Chief, and in conformance with Civil Service law, rules and procedures, the HRD unit shall initiate the recruitment and selection of qualified personnel to the vacant position. As such, it shall adhere to the duly approved qualification standards set by the Civil Service Commission and exert best effort in ensuring that competency requirements of the positions to be filled up are considered.

The following steps shall guide the recruitment, selection, and appointment of ICT personnel:

- A. The HRD unit shall post/announce the recruitment of personnel for specific positions, together with the corresponding qualification standards and competency requirements.
- B. The announcement shall also include the deadline for filing of applications and documents required relevant to such applications;
- C. The HRD unit shall process the applications and administer relevant test(s) to determine the competencies of applicants;
- D. The ICT unit shall interview and conduct the appropriate hands-on test(s) for all qualified applicants;
- E. The Personnel Section Board (PSB) of the local government shall screen and may conduct further interviews/tests to all qualified applicants as submitted by the PSB Secretariat;
- F. The PSB shall submit to the Local Chief Executive the list of names of all the qualified applicants. Furthermore, it shall apprise the Local Chief Executive of the comparative qualifications of the applicants;
- G. The Local Chief Executive shall select from the list of applicants, submitted by the PSB, who will be appointed to the position under consideration;
- H. The HRD unit shall prepare the appointment papers of the selected applicant, and then submits it to the Local Chief Executive for his/her signature;

- I. If the local government is CSC accredited, the Local Chief Executive shall approve and sign the appointment without any need for Civil Service Commission approval; and
- J. If the local government is not CSC accredited, the Local Chief Executive shall sign the appointment then endorses it to the Civil Service Commission for approval.

## **8. TECHNICAL ASSISTANCE**

The ICT Chief/Manager may recommend the services of a technical consultant for projects needing personnel competencies that are not readily available within the ICT unit. In such cases, the Consultant shall directly report to the ICT Chief/Manager or his designated representative.

## **9. HANDLING ICT PERSONNEL WHO ARE LEAVING THE ORGANIZATION**

ICT personnel, especially the most talented ones are in demand and turnover in ICT offices are quite high. Whatever the reason for leaving the organization, the following steps may be instituted by the ICT unit.

Before signing the clearance of the personnel who is leaving the ICT unit, the ICT Chief/Manager must see to it that:

- A. A one-month notice is given to the ICT Chief/Manager prior to the actual departure of the personnel. This will allow the ICT Chief/Manager to assign another personnel to get familiar with ICT projects handled by the incumbent who is leaving.
- B. Projects assigned to the personnel who are leaving are properly turned over.
- C. Project documentation are in order and up to date.
- D. An exit interview is conducted either by the ICT Chief/Manager or the HRD personnel assigned to do such work.
- E. The personnel who are leaving have all the necessary clearances required for exiting personnel.

## **10. GLOSSARY OF ABBREVIATIONS AND TERMS USED IN THE GUIDEBOOK**

Ad Hoc	for a particular purpose only, for the meantime
Competencies	may consist of knowledge, skills, motives, traits, interpersonal relations and reasoning ability.
CSC	Civil Service Commission
eGovernance	The processing and transmission of digitized government information, especially using computer networking and the internet. It includes the use of ICT to improve interaction or dialogue between the local government and its constituents
eGovernment	It includes the use of ICT to improve service delivery and internal operations
EO	Executive Order
GIS	Geographic Information System
ICT	Information and Communication Technology
IT	Information Technology
IS	Information System
HRD	Human Resource Development
LCE	Local Chief Executive – refers to the highest ranking executive official of the LGU – Provincial Governor, City Mayor, Municipal Mayor
LGU	Local Government Unit
MC	Memorandum Circular
MIS	Management Information System
NALEGOCI	National League of eGovernance Champions
PSB	Personnel Selection Board
TNA	Training Needs Assessment

**ANNEX A: Sample Municipal Ordinance**

MUNICIPAL ORDINANCE NO. \_\_\_ series of 2007

**AN ORDINANCE CREATING A SECTION WITHIN THE LOCAL GOVERNMENT UNIT TO BE KNOWN AS THE INFORMATION AND COMMUNICATION TECHNOLOGY UNIT**

**BE IT ORDAINED** by the Sangguniang Bayan of (       Name of LGU       )

**Section 1. Declaration of Policy** – It is hereby declared the policy of the (*Name of Local Government Unit*) to develop, enhance and improve its services and, in the process streamline the performance of the local government in its duties and shall, therefore, provide the appropriate environment to achieve these goals. In furtherance of this policy, (*Name of the Local Government Unit*) shall take advantage of the capabilities of information technology and enable itself to be fully capable of embracing said technology so it may attain the following objectives:

- a) To optimize the operations of the municipality through the application of information technology to further streamline its operations;
- b) To encourage the development of an area-wide information system for data gathering and banking to provide data needed for decision-making for the municipality’s planning, development and other efforts;
- c) To ensure that, in the procurement of equipment and services regarding the municipality’s computerization efforts, public interest is safeguarded in terms of quality, benefits, and economy;
- d) To rationalize the development and maintenance of application systems and data storage; and
- e) To promote the development, retention and optimum usage of qualified technical and managerial information technology personnel.

**Section 2. Creation of the Section on Information and Communication Technology** – There shall be a section within the (*Name of Local Government Unit*) under the Local Chief Executive’s Office, to be known as the Information and Communication Technology (ICT) to be headed by one Section Head whose salary and functions shall be that of a section head. The ICT Head shall be in charge of overseeing computer operations and the programmers and other technical personnel, identify and recommend to the department head of the concerned municipal office, areas where computerization may best be utilized; handle requests falling within his/her area of responsibility and represent the office in meetings and committees where development and implementation of computer systems are required or necessary.

**Section 3 – Functions and Powers of the ICT Section** – The Information and Communication Technology Section shall be charged and vested with the following functions and powers:

- a) Formulate and ensure the implementation of an area-wide information system for planning and decision making;
- b) Provide necessary computer services to all other departments in support of their respective operational services;
- c) Assist all existing departments with computer facilities in the effective supervision, management and utilization of said facilities;
- d) Provide a mechanism for the transfer of basic operational concepts and operational knowledge to rank and file personnel of all departments and offices which are potential users through a continuous in-house training program;
- e) Formulate policies and standards on the acquisition and utilization of computers and related devices, data, communication and information systems.

Section 4 – **Composition** – (this depends on the model chosen by the LGU – please refer to the ICT model organizational structures in this Guidebook)

Section 5 – Separability Clause – if, for any reason, any part or provision of this ordinance shall be held to be unconstitutional or invalid, other parts or provisions thereto which are not affected thereby shall continue to be in full force and effect.

Section 6 – Repealing Clause – any and all ordinances or parts thereof that are inconsistent with the provisions of this ordinance are hereby deemed modified or amended accordingly.

Section 7 – Effectivity Clause – this ordinance shall take effect after fifteen (15) days following the completion of its publication in a newspaper of general circulation in the municipality.

CARRIED UNANIMOUSLY.

I hereby certify to the correctness of the aforequoted resolution/ ordinance.

\_\_\_\_\_  
(Municipal Secretary)

Attested: \_\_\_\_\_  
(Presiding Officer)

Approved:

\_\_\_\_\_  
Municipal Mayor

**ANNEX B: Sample Executive Order**

Republic of the Philippines  
Province of \_\_\_\_\_  
OFFICE OF THE PROVINCIAL GOVERNOR

Executive Order No. \_\_\_\_\_, Series of 2007

**CREATING THE INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIT UNDER THE OFFICE OF THE GOVERNOR, AND  
FOR OTHER PURPOSES**

WHEREAS, the Provincial Government of \_\_\_\_\_ has recognized the importance of Information and Communication Technology (ICT) as an indispensable tool for providing greater access to information and improving delivery of government services;

WHEREAS, the Provincial Government of \_\_\_\_\_ aims to achieve its vision, mission and goals through the use of quality ICT resources and services and enhance performance of its government operations and transactions.

WHEREAS, there is no existing unit/office/department that has the legal mandate to undertake the ICT functions;

NOW THEREFORE, by the powers vested in me by the laws of the Republic of the Philippines, I, \_\_\_\_\_, Provincial Governor of \_\_\_\_\_ do hereby promulgate:

Section 1. CREATION – There is hereby created the ICT Division under the Office of the Governor to take charge of, implement, oversee and provide for the ICT needs and requirements of the Provincial Government of \_\_\_\_\_ and its departments, offices, and divisions. The ICT Division shall be headed by an Information Technology Officer.

Section 2. FUNCTIONS/ SERVICES – The ICT Division shall have the following services:

1. Information Systems Service – Designs, develops, implements, documents, and evaluates information systems.
2. Project Management – Manages outsourced information systems.
3. Computer Facilities Acquisition, Installation and Maintenance Services – Acquires computer facilities and application systems, which cannot be developed in-house; installs and maintains network and other computer

facilities; recommends and deploys hardware and software and computer accessories, including information systems to the different departments, offices, and divisions.

4. User's IT Training Services – Conducts trainings, seminars and workshops on computer literacy and application systems.

Section 3. COMPOSITION and ORGANIZATIONAL SET-UP – The ICT Division shall be temporarily manned by a core group composed of personnel, from various offices, who have ICT competencies, knowledge and skills as identified and nominated by their respective heads of department/office/division, either full-time or on a time-sharing scheme, pending the official adoption by the Sangguniang Panlalawigan of the proposed organizational set-up of the Division.

The proposed organizational and functional charts are hereto attached as Annex 1.

Section 4. SUPERVISION and OFFICE – This Executive Order may be reviewed and amended from time to time to suit, conform to, and complement the needs or requirements from laws, rules or regulations and ordinances that may be passed and enacted after its effectivity.

Section 5. SEPARABILITY CLAUSE – if for any reason or reasons, any provision of this Executive Order is declared by any competent court or tribunal to be invalid or contradictory to law, rules or regulations, any provisions not affected thereby shall continue to be in force and effect.

Section 7. EFFECTIVITY – This Executive Order shall take effect immediately. Copies of the Order shall be furnished to the Presiding Officer, Sangguniang Panlalawigan and other Chiefs of Provincial Offices and all concerned, for their information, cooperation and coordination in order to provide the ICT Division with the appropriate budge, equipment, facilities, provisions for continuous learning and capacity building to effectively carry out its mandated functions in the interest of public service.

DONE this \_\_\_\_ day of \_\_\_\_\_, 2007 in \_\_\_\_\_, Philippines.

\_\_\_\_\_  
Governor



## **ANNEX C: A REPORT ON THE STUDY ON ICT ORGANIZATIONAL STRUCTURES AND FUNCTIONS IN SELECTED LOCAL GOVERNMENT UNITS**

### **I. Introduction**

The National Association of Local eGovernment Champions (NALeGoCI) with funding support from The Asia Foundation (TAF) and the British Embassy, undertook a study of the experiences of local governments in creating and maintaining their ICT units. The purpose of the study is to formulate prototypical Information and Communication Technology (ICT) organizational and functional structures that may be used by local governments as guide in developing their own ICT units.

The study included documentation of experiences of LGUs with active and on-going eGovernment/eGovernance Programs. The documentation is intended to serve as reference in formulating model ICT organizational structures that will be the subject of the “Guidebook on Model ICT Organizational Structures for LGUs”.

Upon completion, the Guidebook intends to assist the local governments, whether large or small, in setting up an ICT unit within the local government to facilitate the implementation and management of eGovernance initiatives at the local level.

The research was undertaken in the months of November and December 2006 and the ICT prototype/models were formulated in January 2007. Designing and full production of the guidebook is expected to be by end of February 2007. The aforementioned tasks were undertaken by a study team, which was commissioned to do the work thru consultancy contract no. 200611-001 between NALEGOCI and Ms. Belinda Navascues.

To enable the study team to formulate a realistic set of model ICT Prototype Functional and Organizational Structures for LGUs, the study team visited several municipalities, cities and provinces to observe and document existing ICT Units of local governments.

The study team noted an array of best practices, commonalities, and unique situations present in the local governments.

The findings of the research are summarized in the table below:

LGU	The ICT Unit is attached to	Headed by	Status of Office	No. of Staff	Formal Documents
Province A	HRDO	HRDO Officer	Ad Hoc	7 fulltime 8 time sharing 15 Total	Created through an Executive Order
Province B	Provincial Administrator	Information Systems Analyst II (Center Manager- designate)	Ad Hoc	15	Created through an Executive Order
Province C	The ICT Unit is a Department by itself	Information Technology Officer II	Regular Unit (MIS-EDP)	14	Created through an Executive Order
City A	City Administrator's Office	Information Systems Analyst III	Ad Hoc	21	Created by a Memorandum of the Mayor
City B	Separate ICT Division	ICT Division Chief	Regular Office	16	Created by a City Ordinance
City C	Office of the City Mayor	Information Technology Officer II	Ad Hoc	12	Based on ISSP
Municipality A	Office of the Municipal Assessor	Municipal Assessor	Full time	4	Created by Municipal Ordinance
Municipality B	Office of the Municipal Budget Officer	Municipal Budget Officer	Ad Hoc	2	Based on ISSP
Municipality C	Office of the Municipal Planning Officer	Municipal Planning Officer	Ad Hoc	2	Based on ISSP

## II. Observations

1. The existing ICT Units take on many forms. Some ICT Units are simply an ad hoc collection of officials and employees coming from different offices but working together on eGovernance or ICT matters. A few ICT Units are formally structured Departments or Offices. Other ICT Units fall somewhere in between these two forms.
2. The ICT Units are usually attached to different offices in the local government. In only one visited local government is the ICT Unit a separate Department by itself. In another local government, the ICT Unit is a formal Division.
3. When the ICT units are not separate Departments or Divisions by themselves, it is usually attached to Departments or Offices that are implementing the most important ICT projects in the local government.
4. The ICT Units are either headed by the Head of the Department to which they are attached, or by Information Technology Officers. In one Province the IT Officer responsible for the ICT Unit holds a Department Head's rank.

5. Most of the ICT Units were Ad Hoc organizations, but a good number of the local governments visited had ICT Units that were operating as regular Sections, Divisions or Departments.
6. The size of the ICT Unit does not seem to have any link as to whether the organization is Ad Hoc or Regular. There are Ad Hoc ICT organizations that have more staff than Regular ICT organizations.
7. Even in Ad Hoc organizations where the staff comes from different offices, there can be full-time personnel working solely on ICT matters.
8. The ICT Units were created either by Executive Order, by Ordinance, or on the basis of the Information Systems Strategic Plan.

### **III. Findings**

The team looked at the historical development of the ICT Units, and sought to identify the factors that affected the way these units were formed. The following insights were generated in the course of gathering and analyzing the information:

#### **1. Starting the ICT Unit**

- Local governments usually start to form their ICT Units by pooling together existing personnel who have IT skills. The ICT-related assignments are added on to the existing assignments of selected personnel.
- This practice is also partly due to budget constraints that prevent them from setting up full Departments dedicated to ICT. Budgetary constraints take on at least two forms: 1) there is not enough money to pay for full time ICT positions, or 2) the current budget has already hit the limit of the ratio between Personnel Services and other budgetary items. The ratio limit varies according to the class of the local government unit. In some cities, the ratio limit is 45% of the total budget. One local government visited by the study team had the money but had hit the ratio limit. The LCE decided to abolish some plantilla positions to make room for the new ICT positions).
- The formation of the ICT Unit is usually covered by an Executive Order that spells out the purposes of the unit and the duties and responsibilities of the assigned personnel.

#### **2. Workspace for the ICT Unit**

- All ICT Units, regardless of form, are given their own workspace.

### **3. Strong LCE Support**

- The stronger the support of the Local Chief Executive, the more active the ICT Units are. LCE support for ICT depends on how relevant it is to LCE's executive agenda. If ICT is used in such a way that it allows the LCE to pursue his/her executive agenda, it gets more support.

### **4. Presence of ICT Champions**

- The presence of an ICT Champion contributes to the eventual creation of the ICT unit. The ICT champion could be any official who has the authority (position) and enjoys the confidence of the Local Chief Executive. Sometimes the ICT Champion may not even have the rank, but the LCE's trust would confer on him the authority to pursue eGovernance.

### **5. Work Done by ICT Unit depends on which office it is attached**

- The work done by the ICT Units vary according to the office or Department to which it is attached (e.g., if the Unit is in the Treasurer's Office, the work is mainly related to revenue generation). The work done on ICT is also usually related to the priorities and thrust of the local officials.

### **6. Complexity and Size of ICT Units**

- The level of complexity of ICT use varies across local governments. While computers are used for clerical work in all of the visited local government units, specialized information systems are installed, operated and maintained in a good number of these LGUs
- In municipalities and small cities, ICT is used for common clerical work, such as word processing, spreadsheet calculations and presentations.

### **7. ICT Competencies**

- The size of the ICT Units and the skills found in these units relate to the complexity of ICT use. The minimum competency found in ICT Units is for computer maintenance and repair. ICT Units with more complex applications have network administrators, systems analysts and developers.
- The level of management skills and knowledge for ICT matters varies considerably between local governments that are just starting out and those that have been doing eGovernance for some time. Most ICT managers start out with their own core competency, which is related to their respective fields of local governance (planning, real property tax administration, etc). Over time they acquire, mostly by experience, competencies in ICT project management or facility management.

### **8. Information System Strategic Plans**

- Most of the Municipalities visited have their own Information System Strategic Plans. These were formulated with the technical assistance of the NCC and other funding agencies. These plans influenced the creation of the ICT Units.

In summary, the following four factors were identified to have influenced the formation, composition, activities, and institutionalization of ICT units in the local governments that were visited:

1. The level of support of the Local Chief Executive;
2. The presence of an experienced ICT manager and personnel with ICT skills;
3. The availability of budget for personnel services and procurement of ICT resources; and
4. The identified complexity of the desired ICT use.

#### **IV. Recommendations**

##### **A. ICT Units be created in stages and phases**

As an initial stage, a local government may create an ad hoc or interim core group composed of existing personnel to do IT tasks. This may be covered with an executive order to define functions and purposes.

As the need of the local government progresses, the function and services may also be scaled up. Along with it, the technical capability must also be developed to cope with the demand.

From an ad hoc or interim group, the unit may transcend into a section, or division, until it eventually develops into a full-blown department.

##### **B. Major Activities/ Processes Involved in Establishing an ICT Office for local governments**

1. Conduct a local government ICT inventory and needs assessment study.
2. Organize the ICT core team.
3. Formulate a strategic ICT Plan for the local government.
4. Create the ICT Office (unit/section/division).
5. Organize and mobilize the ICT personnel.
6. Identify local government ICT priorities.
7. Design and define technical specifications based on priority needs and availability of funds.
8. Install and test run hardware and software packages.
9. Formulate and utilize an ICT operational manual.
10. Implement the ICT plans, programs, and projects.