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**QUICK SCAN SURVEY**  
**PART B: PRIORITY AREAS FOR DEVELOPMENT**



*Developing Information and Communication Technology (ICT) services  
for institutes of higher education and research.*

**QUESTIONNAIRE**

**January 2000**



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**0. General Information**

**0.1 UNIVERSIDAD NACIONAL AUTONOMA DE NICARAGUA - LEON  
(UNAN LEON)**

**1. Responsibility for strategic management**

**1.1** Which group (office, directorate, department, committee, council others) is the main responsible body of the university for strategic planning and decision making concerning university wide developments:

**UNIVERSITY COUNSEL**

**1.2** What is the composition (who are members) of the groups mentioned in the answer of 1.1:

**Members of the our scientific counsel are:**

**Is the maximum organ of government of the UNAN-León (20 members); it integrate the Rector that it presides, the Vicerrector General, Vicerrector Academic, Vicerrector of Relations External and Development, the Deans of every Faculty, the Secretary General, a Representative from the Labor union Educational, a Representative from the Labor union not Educational and seven representatives student.**

**1.3** Does the university have a recently updated and well-documented strategic plan? If the answer is yes, can a copy be made available to the consultants?

**Yes**

**1.4** Does the university have a group (office, directorate, department, committee, other) directly responsible for the development of ICT based university wide applications? If the answer is yes, what is the name of this group and who are members:

**Yes, the committee for information policy development. Members of this committee are:**

- **Director of Informatic**
- **Director of Computer Department of Sciencies Faculty**
- **Sub-Director of Informatic**
- **Leader of unit of Internet**

- **Leader of unit of technical support**
- **Leader of unit of capacitation**
- **Leader of academic unit in Informatic Division**

**1.5** Does the university have a computer centre (or other ICT oriented entity) what provides ICT services to the administrative and academic sector? If the answer is yes, name the main services the centre is providing to internal clientele:

**Yes, main services provided by Division of Informatic are:**

- **hardware maintenance (PC's)**
- **provision of Web, Ftp, e-mail services**
- **basic ICT training**
- **installation of PC's**
- **development of information systems**
- **installation of networks**
- **installation of software**
- **Web Page design**

**1.6** Does the computer centre provide services to external clientele? If the answer is yes, which services does it provide?

- provision of Web, Ftp, e-mail services
- basic ICT training
- Web Page design

**Priority areas for development**

**2.1** What are the main areas for development identified in the strategic plan or (if such a plan is not available) defined by the university management?

- **establishment of an new Schools of agroecology and veterinary**
- **rehabilitation of the administrative system**
- **to upgrade existing capacities for education and research**
- **building the New Hospital school**
- **Installation of a communication system of voice and data between campus**

- 2.2 Please define priorities for the following (possible) areas for development by ranking the areas with a number in the range of 0 to 10. The number 0 will indicate “no priority/need at all” and the number 10 will indicate the highest (top) priority. Please try to avoid to give same numbers to different areas

Possible area for development	Priority 10 = top priority 0 = no priority
Setting up (or upgrading) of university wide <b>Internet/e-mail</b> facilities (Intranet)	<b>9.5</b>
Setting up (or upgrading) of university wide <b>telephone system</b>	<b>8.0</b>
Implement (or rehabilitate) a computerized <b>financial information system</b>	<b>9.4</b>
Implement (or rehabilitate) a computerized <b>library information system</b>	
Implement (or rehabilitate) a computerized <b>human resource management information system</b>	<b>9.0</b>
Implement (or rehabilitate) a computerized <b>academic register information system</b>	<b>9.2</b>
Implement (or rehabilitate) a computerized <b>public and external relations information system</b>	<b>7.0</b>
Implement (or rehabilitate) specific, ICT based, applications for education and research such as <b>GIS</b> and <b>CAD</b>	<b>7.5</b>
Implement (or rehabilitate) <b>ICT based (distant) learning programs</b>	
Enlargement from the access to the informatic services to the educational and students	<b>10</b>
Support in the creation of the Engineering in systems	<b>6.5</b>
Development of a system of information managerial to the decisions support	<b>8.5</b>

- 2.3 In case *setting up university wide Internet/e-mail* is ranked as one of the 5 top priority areas for development, what impact (or benefits) can be expected of making access to the Internet available to management, administration and service support:

**Improved internal communications**  
**Access to data bases through the World Wide Web (WWW)**

- 2.4 In case *setting up university wide Internet/e-mail* is ranked as one of the 5 top priority areas for development, what impact (or benefits) can be expected of making access to the Internet available to education and research.

**Staff and students will be exposed to ICT;**  
**Internet/e-mail will allow cost efficient communication with lectures and researchers in other parts of the world;**  
**The students and staff will get access to external data bases and electronic information resources.**

- 2.5 Describe in brief on the following pages for the five areas for development having the highest ranking, the problems the application of ICT may address and the benefits you expect to gain from successful application of ICT in these areas. If the setting up of university wide Internet/e-mail belongs to the top five areas, refer to the question given in 2.4

2.5.1 First priority area for development:

Description:
<b>Enlargement from the access to the informatic services to the educational and students</b>
Problems to be addressed
<b>Insuficient access of the students and professors to the services informáticos Drop quality of some tesis works by fault of access to the technology</b>
Benefits expected:
<b>Increase in the quality of the teaching Major development in the investigations scientific</b>

2.5.2 Second priority area for development:

Description:
<b>Setting up (or upgrading) of university wide Internet/e-mail facilities (Intranet)</b>
Problems to be addressed:
<b>Drop quality of the services Drop capacity of response in case of fall from the sitema Drop velocity of access Saturación from the traffic in the network</b>
Benefits expected:
<b>Increase in the quality of the services Increase in the capacity of response in case of fall from the sitema Increase of velocity of access Better traffic in the network</b>

**2.5.3** Third priority area for development:

Description: <b>Implement (or rehabilitate) a computerized financial information system</b>
Problems to be addressed:  <b>At present the financial system of the university is mainly characterised by:</b> <ul style="list-style-type: none"><li>• <b>Duplication of same information in various registers and also sections;</b></li><li>• <b>Up to date and reliable information not readily available;</b></li><li>• <b>Situation of backlogs of works with an increasing trend each year</b></li></ul>
Benefits expected: <ul style="list-style-type: none"><li>• <b>Shortened processing cycles</b></li><li>• <b>Direct availability of up to date and reliable financial data for decision making</b></li><li>• <b>Budget holders within the faculties will have direct access to the central financial database for budget queries</b></li></ul>

**2.5.4** Fourth priority area for development:

Description: <b>Implement (or rehabilitate) a computerized academic register information system</b>
Problems to be addressed:  <b>Slow processing of data</b> <b>Not there is integration between the systems of pre matrícula, matrícula,</b> <b>control of students that concluded their career</b>
Benefits expected: <ul style="list-style-type: none"><li>- <b>A system more reliable</b></li><li>- <b>increase in the velocity of processing of data consultation on line of the data academic</b></li></ul>

**2.5.5** Fifth priority area for development:

Description: <b>Implement (or rehabilitate) a computerized human resource management information system</b>
Problems to be addressed: <b>the system actual was developed in a MS DOS platform slow processing not it are able to do changes rapidly</b>
Benefits expected: <b>A system strong and integrated that might be consulted on line</b>

**2.5** In case an comprehensive project on ICT will be started for your university, who will be assigned the role of project supervisor (or director) with the responsibility to supervise and monitor the whole implementation:

Name project supervisor: **Ing. Marcos A. Cárcamo N.**

Present function:

**Director of Informatic**

**Telephone number: 505 0311 0608 / 505 0311 0603 / Cel. 088 52854**

**Fax number: 505 0311 4970**

**E-mail address: marcos@unanleon.edu.ni**

**2.6** In case such an ICT project will span five areas for development with the highest ranking, mention the names of the persons who possible will be assigned the responsibility as sub-project managers for project management of the respective areas of development?

<b>First</b> priority area for development:  Name sub-project manager: Present function: Leader of unit of Internet Telephone number: Fax number: E-mail address:
<b>Second</b> priority area for development:  Name sub-project manager: <b>Ing. César Real Lechado</b> Present function: <b>Leader of unit of Internet</b> <b>Telephone number: (+505) 0311 0603</b> <b>Fax number: (+505) 0311 4970</b> <b>E-mail address: creal@unanleon.edu.ni</b>
<b>Third</b> priority area for development:  Name sub-project manager: <b>Benito Morales</b> Present function: <b>Leader of unit of system in accounting department</b> <b>Telephone number: 505 0311 5013</b> <b>Fax number: 505 0311 4970</b> <b>E-mail address: contabilidad@unanleon.edu.ni</b>

**Fourth** priority area for development:

Name sub-project manager: **TsC. Raúl Ruiz Cabrera**

Present function:

**Leader of academic unit in informatic division**

**Telephone number: 505 0311 0608**

**Fax number: 505 0311 4970**

**E-mail address: di@unanleon.edu.ni**

**Fifth** priority area for development:

Name sub-project manager: **Msc. Danilo Padilla C.**

Present function:

**Sub Director of Informatic and developer of system for human resources**

**Telephone number: 505 0311 0608**

**Fax number: 505 0311 4970**

**E-mail address: danilop@unanleon.edu.ni**

## **2. Recurrent cost for operation and maintenance of ICT services**

- 2.1** Please give an estimate of the annual cost for (national and international) communication in the past year

**Cost for international communication (telephone calls, fax, other) in 1999 US\$ 20.000,-**

**Cost for national communication (telephone calls, fax, other) in 1999: was subsidized by the, state, but in the year 2000 this service will be privatized.**

- 3.2** For many counterpart universities in development the main bottleneck for operating Internet services are the recurrent cost for bandwidth. For a modest facility (for instance: an Internet channel with a bandwidth of 128 Kbps out, 512 Kbps) serving the whole university, the recurrent costs may vary in the range of US\$ 5.000- 7.000/month.

In case financial support can be attracted from an external donor organisation for setting up a comprehensive data communication network and advanced Internet facilities, but no external financial support can be expected covering the recurrent costs, what would be possible scenario's for the university to solve this problem of high recurrent cost.

**Taking into account the strategic importance of Internet for education and research, our university will make budget reservations for this purpose.(60 % of total)**

**The university intends to provide ICT services to external clientele with the aim to generate income which will be used for covering the recurrent costs . (30-40 % of costs)**

<end part B>