

**10<sup>th</sup> World Telecommunication/ICT  
Indicators Meeting (WTIM-12)**  
Bangkok, Thailand, 25-27 September 2012



---

***Information document***

**Document INF/23-E  
31 August 2012**

**English**

**SOURCE:** Ministry of Transport, Communications and Infrastructural Development, Zimbabwe

**TITLE:** Coordination of national ICT statistics : The case of Zimbabwe

## **Coordination of national ICT statistics : The case of Zimbabwe**

James Mutandwa MADYA

Principal Administrative Officer (International) / Acting Deputy Director (Communications)

Division of Policy, Planning and Coordination

Ministry of Transport, Communications and Infrastructural Development, Zimbabwe

### **Introduction**

To improve the quality of ICT statistics, countries must take primary responsibility for the collection of ICT statistics. As in many areas of economic statistics, the collection of ICT data can be done in a centralized fashion by a National Statistical Office or on a decentralized basis, where each Government Department collects the statistics pertaining to its own activities. This paper examines organizational issues relating to the co-ordination of national ICT statistics. The current situation regarding ICT statistics collection in Zimbabwe is reviewed.

### **The need for ICT statistics**

On 20 December 1988, the United Nations General Assembly proclaimed the second United Nations Transport and Communications Decade in Africa (UNTACDA II) for the period 1991 - 2000 to focus African and international attention on the crucial role of the transport and communications sectors in Africa's economic and social development. The programme document for UNTACDA II highlighted, as Objective 5, the requirement to establish information systems on transport and communications as a basis for analysis and better planning and management of investments. In this regard, the following became areas of immediate concentration:

- a) Establishment of harmonized and statistical transport and communications data base systems at national, sub-regional and regional levels;
- b) Establishment of computerized management information systems in national transport and communications organizations to improve management; and
- c) Introduction of the United Nations Rules for Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) in all electronic data interchange communications.

In the same vain, a 2001 presentation document, that was crafted by the New Partnership for Africa's Development (NEPAD) - the planning and coordinating technical body of the African Union (AU), upholds this argument that intensive use of ICTs can bring unprecedented comparative advantages to the African continent. NEPAD's Short Term Action Plan - Infrastructure (STAP) considers ICTs as much important as other infrastructures (transport, energy and water) due to the important role that ICTs may play in regional and international integration and in reaching NEPAD's primary objectives.

## **Coordination of national ICT statistics in Zimbabwe**

### **The need for ICT statistics for planning and evaluation purposes**

The shortage of economic data in Africa in general and in Zimbabwe in particular extends to the ICTs Sector. We have been searching for the improvement in the quality, reliability and relevancy of ICTs data as an essential step towards building up the indigenous capacity to evaluate and to analyse ICTs policy. The performance monitoring essential for the development of effective policies and programs in the ICTs Sector has been adversely affected by the lack of reliable data. There is, therefore, an obvious need for ICTs statistics for planning and evaluation purposes.

### **Coordination with other institutions**

The ICTs sector has a wide range of stakeholders, here defined as ‘individuals, groups, communities or institutions which are affected by the impact of ICTs, or which can influence an activity’. The key stakeholders are categorised as:

- a) Suppliers of data (who are key players in the production of sectoral data and information). Here, both centralised systems of data collection and decentralized systems of data collection exist.
- b) Users of data (who use sectoral data and information). Here, these can be further categorised into:
  - operational management;
  - sector or sub-sector management;
  - national authorities; and
  - International organizations.

### **Data priorities and how they are determined**

Different user groups require a different degree of detail or disaggregation level as follows:

- a) Operational management requires detailed data for the monitoring and control of operations, the preparation of budget submissions and project investment identification. In many cases, such users are also producers of basic data.
- b) Sector or sub-sector management is mainly the responsibility of Government Line Ministries with the interest to monitor sector performance and needs in order to make resource allocation and planning decisions as well as to monitor and control the performance of operational entities.
- c) At the level of national authorities, the principal data needs relate to monitoring the performance and needs of different sectors and sub-sectors as an aid to decision-making on inter-sectoral allocations and national policy development.
- d) The need for international compilation of ICTs statistics stems from several factors:
  - International comparisons are useful as instruments of experience transfer;
  - An overall assessment of regional requirements and problems is needed to serve as an input for regional studies and development of regional programmes;

- Some ICTs problems are inherently international in scope and require performance comparisons of different national systems; and
- Internationally comparable data are often required for market research and planning.

### User liaison

- Given the present precarious position of the statistical programmes in Zimbabwe's ICTs Sector, there is inadequate user-producer collaboration. A strong case can thus be made for institutionalizing user-producer relations!
- Continuing liaison between the providers and users of data is essential for the sustainability and development of a statistical system.
- The users and the potential users should be drawn into the design of the system and establishment of priorities.
- The statisticians should be involved in advising users on data uses, pointing out data limitations and suggesting alternative methods of obtaining information.
- Statistics have no inherent value in themselves; their value depends on applications.
- Successful user liaison can result in a situation where users can be required to participate in meeting the cost of some of the surveys conducted by the Statistical Agency. In the same vain, the Statistical Agency should investigate the possibility of being hired as a consultant!

### Statistical Advocacy

Statistical advocacy is about making the case for statistics. A large proportion of time, cost and effort, of ICTs studies and project evaluation, is spent on ad hoc data collection; furthermore, such efforts are not always consistently followed, requiring subsequent repetition of essentially similar work a few years later. This makes advocacy difficult.

No one in the Ministry of Transport, Communications and Infrastructural Development of Zimbabwe, save for the efforts, first, of the Zimbabwe Statistics Database (ZIMDAT) Team, and now, of Zimbabwe National Statistics Agency (ZIMSTAT) has been championing ICTs statistical advocacy save for our current interest and participation.

### Data development

The sector has a regular data production programme. Much of the information is generated as "administrative statistics", i.e. data collected to serve particular managerial needs of operating entities in the Sector or as a by-product of administrative activities, e.g. licensing of operators. ICTs enterprises produce such data consistently for monitoring and control of their operations. There are several indicators. Only a few of these have been captured in ZIMDAT.

### Data sources

- "Administrative statistics" are produced as a by-product of administrative activities, e.g. licensing of operators, et cetera.
- The product of successive aggregation of more detailed data collected at the level of operational management required for planning and decision-making at a senior level.
- Other data production programmes.

- The revision of data collection instruments is regular. ICTs enterprises produce “administrative statistics” consistently for monitoring and control of their operations. If monitoring and control of operations are taken seriously, i.e. the users actually employ the data in discharging their managerial responsibilities – there is a virtually automatic system of quality control.

### Documentation

The Central Statistics Office of Zimbabwe used to produce an Annual Digest of Statistics covering all sectors, including the ICTs Sector. No annual statistics report was produced particularly for the sector.

### Dissemination strategy

The principal methods of statistical dissemination in the ICTs Sector are:

- Standard publications (monthly, quarterly, annually);
- Special tabulations and reports; and
- Organized “machine to machine” or “computer to computer” access.

### SWOT analysis

<u>Strengths</u> <ul style="list-style-type: none"> <li>• Existence of a regular data production programme.</li> <li>• Will to learn from ZIMSTAT’s statistical advocacy.</li> <li>• Staff in the Division of Policy, Planning and Co-ordination</li> </ul>	<u>Opportunities</u> <ul style="list-style-type: none"> <li>• Existence of the Division of Policy, Planning and Co-ordination, that will, among other functions, maintain a database for the sector.</li> <li>• Membership of the ZIMDAT Taskforce for the sake of statistical advocacy.</li> <li>• To learn from international best practices.</li> </ul>
<u>Weaknesses</u> <ul style="list-style-type: none"> <li>• Absence of a single Statistical Unit.</li> <li>• Outdated IT equipment and under-developed statistical software.</li> <li>• Poor co-ordination of information flow within the sector.</li> </ul>	<u>Threats</u> <ul style="list-style-type: none"> <li>• Absence of a budget item on production of statistics.</li> <li>• Duplication of efforts by various organizations.</li> <li>• Change of Government Ministry Structures, especially after a Cabinet Re-shuffle.</li> </ul>

## Gap analysis

These include among others:

- Resource gap;
- Capacity gap; and
- Skills gap, *et cetera*.

## Challenges

- If data is to be collected for the ICTs Sector on our behalf, there is a particular format we require.
- ICTs data must be collected on a comparative basis over time to trace the evolution of the Sector.

## Available ICTs databases in Africa

Considerable progress has been made in advocating regionally for ICT indicators, and several countries in the region have undertaken statistical operations to investigate ICT readiness for households and businesses. The launching of ICT regional policies, such as the ICT component of the NEPAD, carried out by the International Telecommunications Union (ITU), the African Initiative for the Information Society (AISI) and the associated National Information and Communication Infrastructure (NICI) plans, have fostered demand for ICT indicators in the region.

Except for Tunisia and Morocco, where the Ministries responsible for Telecommunications carried out surveys on home PCs, ICT firms and investments, use of ICTs in businesses, government and higher education, all statistical operations were carried out by the National Statistical Offices (NSOs). Other institutions that provide ICT-related information in the region are Telecommunication Regulatory Authorities, the National Internet Agency (Tunisia) and the Association of ICT Professionals (Morocco). The main source of ICT data still remains ITU which conducts annual data surveys and includes them on a database commented by a report.

## Conclusion

This conclusion consists of some general recommendations based on the assumptions that a comprehensive program will be developed to improve national ICTs statistics and that an adequate organizational framework will be established. In order to meet the quality and coverage of ICTs statistics, designation should be done by each national government of a lead agency in ICTs statistics, either a Government Ministry or a Central Statistical Office, while ensuring cooperation of other government agencies. Parallel with the work of upgrading national ICTs statistical systems, the development of a regional ICTs database will be required to meet the objectives of UNTACDA II and NEPAD. Finally, there will be need to establish the format for ICTs data dissemination by electronic methods and through the production of a ICTs Statistics Yearbook for the region.

## References

1. Adams, 2007, African Technology Forum, ATDF Journal.
2. Global Information Technology Report (GITR), 2006.

3. Government of Zimbabwe, 2005, National Information and Communication Technology Policy, September 2007.
4. UNDP and World Bank, 2004, Economic and Social Context : ICT Zimbabwe.
5. [www.choice.org](http://www.choice.org)
6. [www.comminit.com](http://www.comminit.com)