



Global Indicators Workshop on Community Access to ICTs
Mexico City, 16-19 November 2004

Recommendation

The Member States of the ITU participating in the Global Indicators Workshop on community access to ICTs make the following recommendation:

Taking into account concerns expressed in Resolution 131 of the Plenipotentiary Conference of the International Telecommunication Union (Marrakech, 2002), as follows:

“recognizing

...b) that the basic indicator traditionally used in the telecommunication field was the number of fixed telephone lines per hundred inhabitants, but that that indicator no longer reflects the actual penetration of telecommunication services in those countries where community access programmes have been implemented,

bearing in mind

...b) that current indicators cannot serve to measure the real impact of the introduction of community connectivity;

...c) that new indicators are needed to analyse the development of communities where community connectivity is introduced, thereby enabling the true impact and effectiveness of each country's public policies to be measured;

resolve to instruct the Directors of the Telecommunication Development Bureau and the Telecommunication Standardization Bureau

1 to promote the activities required in their respective Sectors to define and adopt new indicators for the purpose of measuring the real impact of community connectivity on the development of communities;

invites Member States

to participate actively in the work to be carried out at the regional and world levels to prepare these new community connectivity indicators.”

Taking into account the outcome of the 2003 World Summit on the Information Society (WSIS) that states in its Plan of Action:

“B. Objectives, goals and targets

6. Based on internationally agreed development goals, including those in the Millennium Declaration, which are premised on international cooperation, indicative targets may serve as global references for improving connectivity and access in the use of ICTs in promoting the objectives of the Plan of Action, to be achieved by 2015. These targets may be taken into account in the establishment of the national targets, considering the different national circumstances:

a) to connect villages with ICTs and establish community access points;

j) to ensure that more than half the world's inhabitants have access to ICTs within their reach.

E. Follow-up and evaluation

28. A realistic international performance evaluation and benchmarking (both qualitative and quantitative), through comparable statistical indicators and research results, should be developed to follow up the implementation of the objectives, goals and targets in the Plan of Action, taking into account different national circumstances.

b) Appropriate indicators and benchmarking, including community connectivity indicators, should clarify the magnitude of the digital divide, in both its domestic and international dimensions, and keep it under regular assessment, and tracking global progress in the use of ICTs to achieve internationally agreed development goals, including those of the Millennium Declaration.

f) All countries and regions should develop tools so as to provide statistical information on the Information Society, with basic indicators and analysis of its key dimensions. Priority should be given to setting up coherent and internationally comparable indicator systems, taking into account different levels of development.”

Taking into account

The experiences and proposals of countries and international/regional organizations and the discussion on indicators within the Workshop's working groups, a set of indicators have been identified for measuring progress in community access to ICTs as presented in Annex 1 to this recommendation

Recommend to instruct the Director of the Telecommunication Development Bureau

... to promote at the various relevant regional and world meetings, the adoption of community access indicators agreed upon at this workshop and set out in Annex 1.

... to initiate the process of collecting the necessary data and information (in Annex I and II) to obtain the indicators in question periodically in a form that will highlight progress in the level of penetration of ICTs in the different countries and that will measure the real impact of community connectivity for the development of communities

...to provide technical assistance to developing countries having difficulties in the collection, analysis, processing and dissemination of ICT/community access data

... to present the results of the Global indicators workshop on community access to ICTs during the Global Meeting on ICT for Development in February 2005 and encourage inclusion of the community access indicators in the core set of ICT indicators that will be agreed during the meeting

... to promote, continued analysis and study of additional community connectivity indicators for measuring other aspects of such connectivity and gauging its impact on the population, using as a basis those identified in this workshop and set out in Annex 2;

...to create a Task Force on community access indicators, consisting of experts from Member States and international and regional organizations, for coordinating the continuous and systematic implementation of the work initiated at the 2004 Global Indicators Workshop on Community Access to ICTs and for further developing community access indicators from both technical and policy requirements.

Invites international and regional organizations that are mandated to collect and analyze ICT data and are interested in participating in this initiative.

... to promote in their respective areas of influence the adoption of the indicators for community access to ICTs (included in Annex 1) that will allow measurement of the real impact that community connectivity represents for the development of communities, and to initiate the process of collecting the data and information necessary to obtain the referenced indicators in a periodic way, as well as to continue the analysis and study of additional indicators that allow measurement of other aspects of community connectivity and their impact on the population, identified in Annex 2, while taking into consideration the necessity to collaborate and coordinate efforts with both ITU and the other organizations involved, so as to avoid duplication of efforts;

...to develop and implement programs to assist developing countries with the standardization of concepts and technical methods related to the collection, analysis, processing, and diffusion of data on ICT/community access following the recommendations of the National Statistical Offices.

Urge ITU Member States:

- 1 to adopt the community access indicators agreed upon at this workshop
- 2 to begin collecting official data and information, for submission in the formats established by ITU-D, in close collaboration with National Statistical Offices and other national institutions involved in ICT/community connectivity issues
- 3 to continue participating actively in regional and global work being carried out on the elaboration of further community connectivity indicators

Request the Director of the Telecommunication Development Bureau

to submit this recommendation to all ITU Member States and international and regional organizations concerned by this subject.

Mexico City, 19 November 2004

ANNEX I

**List of core community access indicators adopted at the
ITU's Global Indicators Workshop on Community Access to ICTs**
Mexico City, Mexico, 16-19 November 2004

Explanatory overview

Universal access

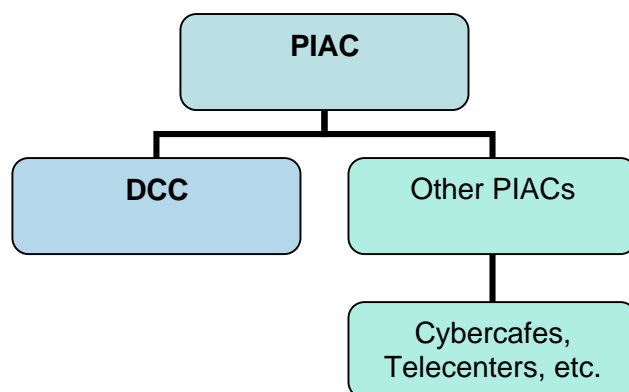
Universal access relates to the number of people in a country covered by information and communication technologies, to which end the necessary infrastructure is required for the provision of the various services, which constitute these new technologies. Universal access may be guaranteed in various ways, one being through public Internet access centres.

Public Internet access centre (PIAC)

Definition

A public Internet access centre (PIAC) is a site, location, centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. This may include digital community centres, Internet cafés, libraries, education centres and other similar establishments, whenever they offer Internet access to the general public. All such centres should have at least one public computer for Internet access. It is very useful to classify centres by type, as illustrated by way of example in Figure 1. A further breakdown into private and governmental establishments is also necessary.

Figure 1



Digital community centre

Definition

A digital community centre (DCC) is a place where the public can access Internet services from terminal facilities placed at their disposal. A DCC is an undertaking following the government framework on universal access. A DCC should offer equitable, universal and affordable access.

Minimum requirements for a PIAC to be considered as a DCC:

- At least one computer
- A minimum connection speed to the Internet service provider (ISP) of 64 Kbps per centre, with an acceptable amount of bandwidth available to users.
- At least one printer.
- Support and maintenance.
- Minimum opening hours per week: 20 hours.

Undertaking that do not fall under the above definition is classified as other PIACs.

Educative centres may be classified as DCC or Other PIACs depending on the conditions these centres satisfy.

Indicators

1) Number of villages¹ with PIACs

This is the number of villages with PIACs. This indicator should be given by number or range of inhabitants. Also, governmental and private PIACs should be identified, with both absolute and relative values. The following tables show a typical example (case of Mexico), although each country may classify data according to its own specific characteristics and statistics.

2) Percentage of the population with access to a PIAC:

PERCENTAGE OF THE POPULATION WITH ACCESS TO A PUBLIC INTERNET ACCESS CENTER (PIAC) [*]												
	Number of villages	Population		PIAC Coverage					Others PIAC's		Total 6/	
		Total	Potential (1)	Villages		Population			Villages	Potential Population (1)	Villages with service	Population with service 3/
				Number of villages served	% of villages served	Target Population with DCC services 2/	Target Population served	% of accomplishment				
Total	17,034	86,860,794	75,377,798	2,374	13.9	65,872,106	4,389,516	6.7	3,041	63,140,974**	3,884	64,423,562
Urban	3,041	72,759,822	63,140,974	1,531	50.3	53,635,282	3,106,928	5.8	3,041	63,140,974	3,041	63,140,974
Rural	13,993	14,100,972	12,236,824	843	6.0	12,236,824	1,282,588	10.5	n/d	n/d	843	1,282,588

^{*} For a detailed definition of the term PIAC, refer to Annex VII. ^{**} This population corresponds to the urban part.

Note: When entering the data in table, countries with different categories/classifications/definitions (for example of the population size for urban and rural) should indicate this, and if necessary, adapt the table.

This indicators measure the number of inhabitants who enjoy PIAC coverage as a proportion of the total population of the country. It is considered that when a village has at least one PIAC then the entire population in the community will be served by that PIAC.

Users

Whereas the number of households with access to ICTs and ICT coverage reveal the number of potential users of the technologies, we have to count the actual number of users. This should be broken down according to the number of users utilizing the PIACs. The only reliable way of obtaining this information is through surveys carried out by National Statistics Offices or specialized companies.

Number of Internet users through PIACs

This is the number of people who use the Internet from PIACs, taking into account the technical records used in the different surveys. The data should at least show the age of the users and the frequency with which they use the service, for better international comparison.

The following data are suggested as an example:

Public Internet centre users:

Number of Internet users: 1'585'000

Percentage accessing Internet from public centres: 38%

Number of users accessing Internet from public centres: 602'300

Users indicators:

- Potential population** = A potential DCC user is anyone of age 6 years or more.
- Target Population for DCC services** = Potential population minus Number of non-community Internet users (non-community Internet users are those citizens of a country that have Internet access at a point different from a PIAC).

USAGE AND INFRASTRUCTURE INDICATORS							
NUMBER OF PIAC's BY TYPE *					USAGE BY TYPE (number of users) **		
Total	Digital Community Center (DCC)**	Others (PIAC's) **	Number of computers in DCCs	Average number of computers per DCC	Total	Digital Community Center (DCC)****	Others (PIAC's)**
53,200	3,200	50,000 E	19,119	6	n/d	1,024,383	n/d

Usage and Infrastructure indicators:

- Total number of DCCs.**
- Total number of Other PIACs.**

¹ In this recommendation the term "villages" refers to a country's villages, towns and cities.

- 7) Total number of computers in DCCs.
- 8) Average number of computers per DCC.
- 9) Number of users per type of PIAC (DCCs, Other PIACs).

USAGE OF INFRASTRUCTURE		
	Actual Usage (4)	Average DCC Usage Rate (5)
TOTAL	n/d	49.61%

Usage of Infrastructure indicators:

- 10) **Actual Usage Percentage** which is the Actual users / Target population for DCC services (an actual user being one who accesses Internet at least once a month).
- 11) **Average DCC Usage Rate** which is the Total DCC usage time / Total available DCC time (includes efficiency rates such as equipment failure rate, power outages, etc.).

DCC TARGETS (optional)									
	Rural			Urban			Total		
	Installed	Target	% of progress	Installed	Target	% of progress	Installed	Target	% of progress
DCC's	886	10,877	8.2	2,304	40,121	5.7	3,200	50,998	6.3

DCC Targets (optional information)

- 12) Number of DCCs as target of the particular country separated for urban and rural segments.
- 13) Number of DCCs broken down by urban and rural segments.
- 14) Percentage of progress in DCC target which is the number of DCCs installed / number of target DCCs.

Additional community access indicators to be collected

	Source
15) DDC Distribution per access cost type in % (free, subsidized, at cost price)	DCC
16) Users Distribution by socio-demographic category (gender, age, profession, education level, ethnicity)	Users
17) Main purpose of use of Internet by user (education, communication, information, commerce, business, administration, recreation)	Users
18) Number of access terminals (connected and non connected)	DCC
19) Bandwidth per connected computer in DCC	DCC

Community Access to ICTs: QUESTIONNAIRE

Return questionnaire to ITU Indicators (email: indicators@itu.int, Fax: +41 22 730 6449)

Administrations who do not have the requested information, should indicate this with *not available (N/A)* in the corresponding fields. At the same time Administrations are urged to take the appropriate measures to obtain the requested data in the next survey period.

PERCENTAGE OF THE POPULATION WITH ACCESS TO A PUBLIC INTERNET ACCESS CENTER (PIAC)*											
	Number of villages ^d	PIAC Coverage									
		Population		DCC's					Others PIAC's		Total ²
		Total	Potential ³	Villages		Population			Villages	Potential Population	Villages with service
Number of villages served	% of villages served			Target Population with DCC services ⁴	Target Population served	% of accomplishment					
Total											
Urban											
Rural											

* For a detailed definition of the term PIAC, refer to Annex I.

Note: When entering the data in table, countries with different categories/classifications/definitions (for example of the population size for urban and rural) should indicate this, and if necessary, adapt the table.

a) Please provide national definition of village:

b) Please provide national definition of target population served:

USAGE AND INFRASTRUCTURE INDICATORS

NUMBER OF PIAC's BY TYPE *					USAGE BY TYPE (number of users) **		
Total	Digital Community Center (DCC)**	Others (PIAC's) **	Number of computers in DCCs	Average number of computers per DCC	Total	Digital Community Center (DCC)****	Others (PIAC's)**

* For a detailed definition of the terms PIAC and DCC refer to Annex

** Only available the data of DCC'S users.

*** Only when open to the general public, outside teaching hours.

**** Includes users of educative centers.

E Estimated

USAGE OF INFRASTRUCTURE

	Actual Usage ⁶	Average DCC Usage Rate ⁷

DCC TARGETS (optional)

	Rural			Urban			Total		
	Installed	Target	% of progress	Installed	Target	% of progress	Installed	Target	% of progress
DCC's									

⁸ The term "village" here refers to villages, towns and cities.

² Total number of villages and population with service are not arithmetic additions of "DCCs" plus "Other PIACs". They must be a logical addition due to overlaps.

³ Potential Population = A potential user is anyone of age 6 years or more.

⁴ Target Population for DCC services = Potential population minus Number of non-community Internet users (non-community internet users are those citizens of a country that have internet access at a point different from a PIAC).

⁵ Population with PIACs service.

⁶ Actual Usage = Actual users/Target population for DCC services (an actual user being one who accesses Internet at least once a month).

⁷ Average DCC Usage Rate = Total DCC usage time/Total available DCC time (includes efficiency rates such as equipment failure rate, power outages, etc.)

ANNEX 2

List of supplementary community access indicators adopted at the ITU's Global Indicators Workshop on Community Access to ICTs

Mexico City, Mexico, 16-19 November 2004

TARRIFS AND FINANCING	Source
1) Cost by hour for use PC (with and without Internet access)	DCC
2) DCC Revenue Distribution per kind of activity (internet, fax, photocopy, VoIP, telephony, TV, PC usage, others)	DCC
3) Financial Sustainability Index ((subsidies/ grants received per month + average total revenue generated by DCC per month) - average operational cost of DCC per month)	DCC
4) DDC Distribution by management type in % (government, private, local communities or association)	DCC
USERS	
1) Percentage of DCCs equipped to offering services to the handicapped people	DCC
2) Average number of users by DCC by month	DCC
3) Average Frequency of use of DCC by users by month	Users
4) User Satisfaction in % (excellent, good, medium, low)	Users
SERVICES AND CONTENT	
1) Percentage of DCCs offering the services of Internet Access, VOIP, classic telephony, Fax, photocopy, content hosting, training, Visio conferencing, others	DCC
2) Distribution in % of the most used services in DCCs (internet, PC, telephone, fax, photocopier, scanner, printer, postal, banking services etc)	DCC
3) Percentage of DCCs generating local content	DCC
4) Number of sites with local content	DCC
5) Numbers of sites in local language	DCC
6) Percentage of DCCs operating in platforms developed on Free/Libre Open Source Software (FLOSS) and offering applications based on FLOSS to users.	DCC
COVERAGE AND ACCEBELITY	
1) DCC maximum coverage distance in km	DCC
2) Time taken to travel to DCC by users	Users
3) DCC Connexion mode to the networks (Dialup, Satellite, Broadband line, radio, PCL)	DCC
4) Percent of CDD by power supply (conventional, solar, wind)	DCC
QUALITY OF SERVICES	
1) Number of days per month of service unavailability due to telecom, energy and data-processing networks failures of DCCs	DCC
2) Number of opening hours per day	DCC
3) Number of helping assistants and technicians per 100 users in DCCs	DCC

Note: While the data referring to "DCCs" would be collected directly from the DCCs (perhaps through administrative data), the data referring to "Users" would be collected through household surveys.