13th World Telecommunication/ICT Indicators Symposium (Hiroshima, 2015)

Background Documents

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13ème Colloque de l'UIT sur les Indicateurs des télécommunications / TIC
Dans Le Monde (SITA) Hiroshima, Japon, 30 novembre - 2 décembre 2015

CONTRIBUTION DU GABON

Les Technologies de l'Information et de la Communication représentent un élément stratégique dans le processus de création et de distribution de la richesse nationale, et participent de manière significative à l'amélioration des principaux indicateurs macroéconomiques, ainsi qu'au développement de l'activité du économique et sociale du Gabon. Du point de vue du secteur des TIC et la Révolution des Données, les Progrès accomplis concernent la mesure des incidences des TIC, et le cadre de Suivi des Objectifs du Développement durable.

La contribution de ce secteur dans le PIB, la croissance soutenue de l'accès aux TIC et de leur utilisation ont permis à notre Pays, le Gabon, d'améliorer sa valeur en occupant la 126ème place du classement mondial de l'Indice de Développement des TIC (IDI) avec 2.66 entre 2012 et 2013.

Tableau de bord téléphonie fixe du 2ème trimestre 2015 données de l'Autorité de Régulation des Communications Electronique et de la Poste (ARCEP)

A. Parc Téléphonie Fixe

Indicateurs	Avril-2015	Mai-2015	Juin-2015	Part au 30-06-15
Lignes fixes professionnelles	8 154	8 174	8	45,7%
Lignes fixes résidentielles	6 345	6 174	6	34,5%
Lignes fixes Administrations	3 537	3 540	3	19,2%
Lignes fixes sans fil (CDMA…)	65	67	6	0,4%
Lignes points phones	35	34	3	0,2%
Parc total lignes fixes	**18 136**	**17 989**	**17 856**	**100%**
Croissance du parc total en %		-1%	-	-
Taux de pénétration(*)	1,19%	1,19%	1,18%	-

(*)Les taux de pénétration sont calculés sur la base d'une population de 1 517 685, conformément à la Décision n° 3/CC du 17 février 2005 de la Cour Constitutionnelle, relative à la requête du Ministre de la Planification et de la Programmation du Développement tendant au contrôle des résultats provisoires du recensement général de la population et de l'habitat

Le parc total des abonnements à la téléphonie fixe est de **17 856** lignes à la fin du deuxième trimestre 2015. Il est réparti entre les abonnements aux lignes filaires (les Professionnels **(45,7%)** les Résidentiels **(34,5%)** les Administrations **(19,2%)** et les point phones **(0,2%)** et les abonnements au **CDMA (0,4%)**

1. Volume de Trafic Voix

1.1 Volume de Trafic Global Voix déclaré du fixe

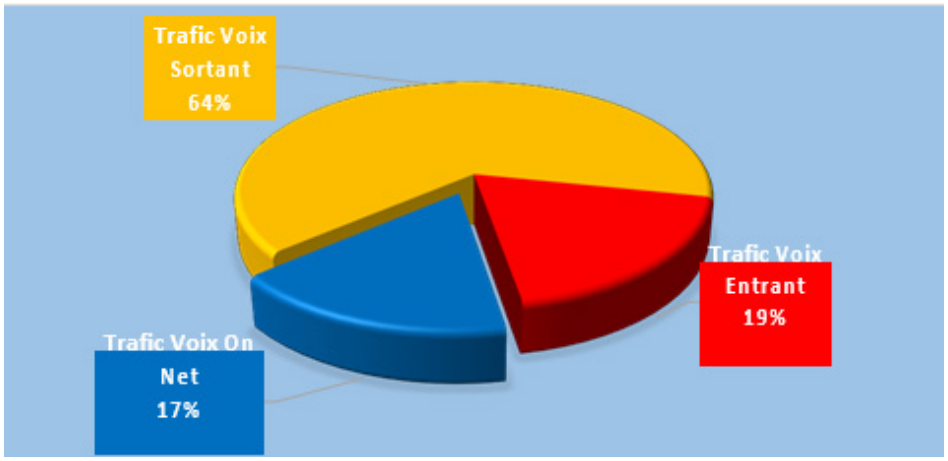
Indicateurs	Avril-2015	Mai-2015	Juin-2015	Cumul trimestriel
Trafic Voix On-Net	0,63	0,62	0,69	1,95
Trafic Voix sortant	2,67	2,10	2,86	7,63
Trafic Voix sortant vers les réseaux nationaux	2,11	2,03	2,28	6,43
Trafic Voix sortant vers l'International	0,55	0,07	0,57	1,20
Trafic Voix entrant	0,72	0,87	0,64	2,24
Trafic Voix entrant des autres réseaux nationaux	0,52	0,39	0,44	1,36
Trafic Voix entrant de l'International	0,19	0,48	0,19	0,87
Trafic Voix Global	**4,03**	**3,60**	**4,20**	**11,84**

1.2 Evolution mensuel du trafic Voix du fixe

Indicateurs	Avril-2015	Mai-2015	Juin-2015	Cumul trimestriel
Trafic Voix On-Net	0,63	0,62	0,69	1,95
Trafic Voix sortant	2,67	2,10	2,86	7,63
Trafic Voix entrant	0,72	0,87	0,64	2,24
Trafic Voix Global	**4,03**	**3,60**	**4,20**	**11,84**

Tableau du cumul mensuel de trafic (millions de minutes)

1.3 Parts de marché au deuxième trimestre 2015



Graphique des Parts de marché par nature du trafic global trimestriel

B. Parc Téléphonie Mobile

1.1 Parc des abonnements à la téléphonie mobile

Indicateur	Avril-2015	Mai-2015	Juin-2015	Parts T2- 2015
Parc prepayé	2 680 492	2 722 283	2 697 339	99%
Parc postpayé	19 472	19 630	19 918	1%
Parc total declaré (*)	2 699 964	2 741 913	2 717 257	100%
Croissance	-	2%	-1%	
Taux de pénétration(**)	178%	181%	179%	

Tableau des parcs d'abonnés prépayé et post payé

(*) Il s'agit ici du parc des SIM actives déclaré par les opérateurs. Ce parc inclut les multi sims des utilisateurs.

(**)Le pourcentage de sim actives par rapport à la population est calculé sur la base d'une population de 1517 685, conformément à la Décision n° 3/CC du 17 février 2005 de la Cour Constitutionnelle, relative à la requête du Ministre de la Planification et de la Programmation du Développement tendant au contrôle des résultats provisoires du recensement général de la population et de l'habitat.

Les abonnements prépayés représentent 99% du parc global des abonnements mobiles. On note que les abonnements prépayés ont évolué de 1% tandis que les abonnements post payés ont progressé de 2% d'avril 2015 à juin 2015.

1.2 Parc des abonnements par opérateur

Indicateur	Avril-2015	Mai-2015	Juin-2015	Parts T2- 2015
Celtel Gabon (Airtel)	1 052 643	1 058 161	1 060 503	39%
GT Mobile (Libertis)	1 003 542	1 045 277	1 037 562	38%
Atlantique Telecom Gabon (Moov)	439 831	434 924	421 006	16%
Usan Gabon (Azur)	203 948	203 551	198 186	7%
Total	**2 699 964**	**2 741 913**	**2 717 257**	**100%**

Tableau du parc des abonnements par opérateur

2. TRAFIC VOIX ET SMS

2.1 Trafic Voix(*)

Volume de trafic voix du mobile et répartition par nature de trafic

Indicateur				Cumul
Trafic Voix On-Net	**143,26**	**145,08**	**161,16**	**449,51**
Trafic Voix Sortant	**156,23**	**167,13**	**182,11**	**505,48**
Trafic Voix Sortant vers les réseaux nationaux	*132,69*	*142,25*	*159,14*	*434,09*
Trafic Voix Sortant vers l'International	*23,54*	*24,87*	*22,96*	*71,38*
Trafic Voix Entrant	**132,10**	**139,48**	**156,50**	**428,09**
Trafic Voix Entrant des autres réseaux nationaux	*125,50*	*133,56*	*150,42*	*409,50*
Trafic Voix Entrant de l'International	*6,59*	*5,91*	*6,07*	*18,59*

Tableau de trafic voix par type de trafic (million de minutes)

Trafic Voix(*) : Le trafic voix déclaré par les opérateurs concerne le trafic mesuré et non facturé. Ce trafic n'est pas réconcilié.

Le trafic SMS cumulé à la fin du deuxième trimestre 2015 est composé comme suit :

- Le trafic on net représente 66% du trafic global
- Le trafic sortant et le trafic entrant représentent respectivement 18% et 16% du trafic global SMS

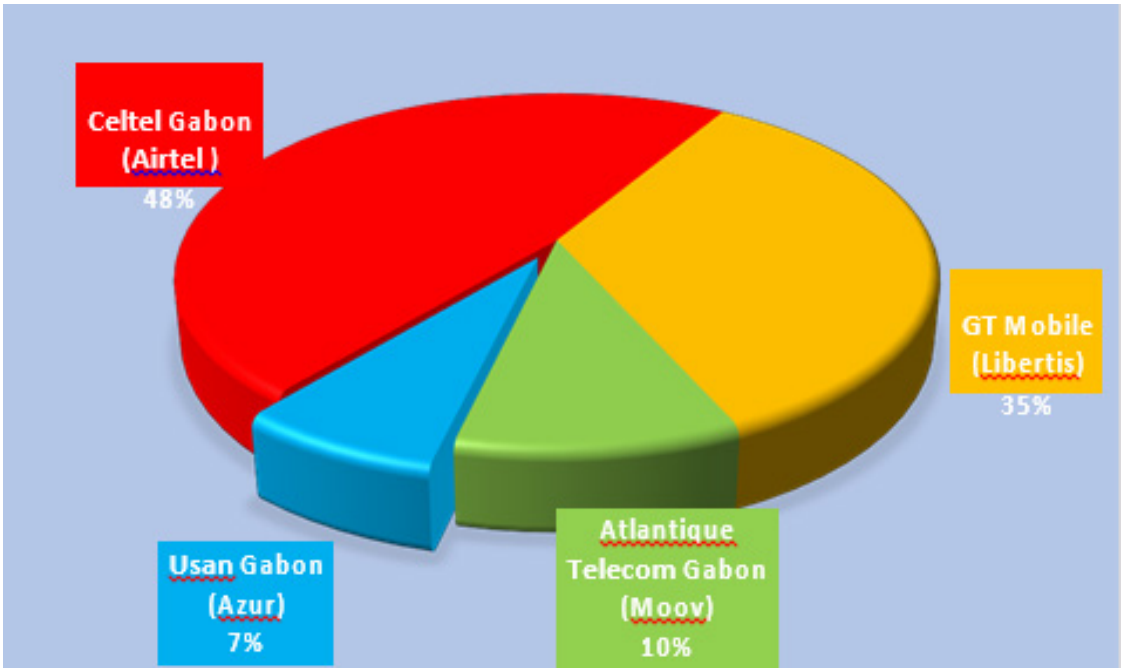
2.3 Chiffres d'Affaires

2.3.1 Chiffre d'Affaires Global et répartition par opérateurs

Indicateur	Avril-2015	Mai-2015	Juin-2015	Cumul
Celtel Gabon (Airtel)	8,71	8,79	8,95	26,47
GT Mobile (Libertis)	6,38	6,53	6,42	19,34
Atlantique Telecom Gabon (Moov)	2,31	2,08	1,41	5,81
Usan Gabon (Azur)	1,33	1,42	1,38	4,14
Chiffre d'affaires total	**18,74**	**18,84**	**18,18**	**55,77**

Tableau des chiffres d'affaires mensuels par opérateurs (milliard de francs CFA)

2.3.2 Parts de marché au deuxième trimestre 201



3. EMPLOIS DIRECTS

3.1 Nombre d'emplois directs par opérateur

Opérateurs	Avril-2015	Mai-2015	Juin-2015
Celtel Gabon (Airtel	279	280	284
GT Mobile (Libertis)	376	376	376
Atlantique Telecom	178	175	174
Usan Gabon (Azur)	99	101	104
Total	**932**	**932**	**938**

Tableau mensuel des emplois directs par opérateur

C. Parc Internet

1.1 Parc des abonnements à l'internet

Indicateur	Avril-2015	Mai-2015	Juin-2015	Part au T2-2015
Parc internet mobile	1 049 669	1 040 962	966 090	96%
Parc internet fixe	10 471	10 257	10 316	1%
Parc internet FAI	33 604	33 482	33 313	3%
Parc total internet	**1 093 744**	**1 084 701**	**1 009 719**	**100%**
Croissance du parc en %	-4%	-1%	-7%	
Taux de pénétration(*)	72%	71%	67%	

Tableau des parcs d'abonnés prépayé et post payé

(*)Le taux de pénétration est calculé sur la base d'une population de **1517 685**, conformément à la Décision n° 3/CC du 17 février 2005 de la Cour Constitutionnelle, relative à la requête du Ministre de la Planification et de la Programmation du Développement tendant au contrôle des résultats provisoires du recensement général de la population et de l'habitat.

Evolution comparée Bas débit/Haut débit

	Avril-2015	Mai-2015	Juin-2015
Parc Haut Debit	**156 151**	**170 237**	**175 627**
Parc Bas Débit	**937 593**	**914 463**	**834 092**

Parc des abonnements par opérateur

Opérateurs	Avril-2015	Mai-2015	Juin-2015
Gabon Telecom Fixe	**10 471**	**10 257**	**10 316**
Internet Gabon	**461**	**462**	**453**
Solsi*	**NC**	**NC**	**NC**
GBM	**20**	**20**	**20**
Celtel Gabon (Airtel)	**585 087**	**559 847**	**555 421**
Atlantique Telecom Gabon(Moov)	**118 414**	**71 351**	**75 035**
Gabon Telecom Mobile	**342 136**	**405 743**	**331 797**
Usan Gabon (Azur)	**4 032**	**4 021**	**3 837**
IPI9	**31 189**	**31 139**	**31 055**
Digicom	**162**	**162**	**162**
Boost Africa Wifly	**1 384**	**1 319**	**1 263**
TLDC	**388**	**380**	**360**
Parc Total	**1 093 744**	**1 084 701**	**1 009 719**

Tableau du parc des abonnements par opérateur

2. CHIFFRES D'AFFAIRES

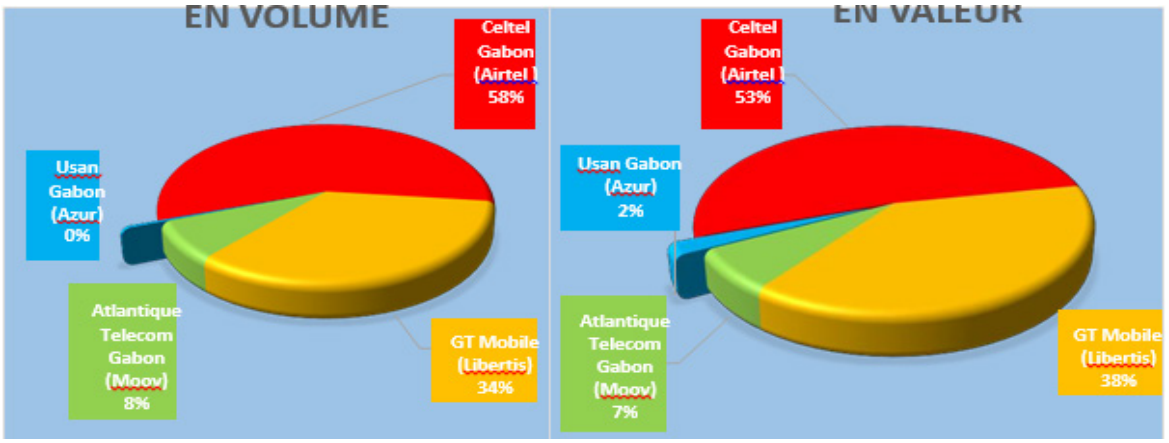
2.1 Chiffre d'Affaires Global et répartition par opérateurs

Opérateurs	Avril-2015	Mai-2015	Juin-2015	Cumul
Gabon Telecom Fixe	1,43	1,39	1,37	4,20
Internet Gabon	0,11	0,11	0,11	0,35
Solsi*	NC	NC	NC	0
GBM	0,12	0,12	0,13	0,39
Celtel Gabon (Airtel)	1,33	1,42	1,32	4,08
Atlantique Telecom Gabon(Moov)	[illegible]	[illegible]	[illegible]	[illegible]
Gabon Telecom Mobile	0,90	1,06	1,01	2,98
Usan Gabon (Azur)	0,05	0,05	0,05	0,17
IPI9	0,15	0,16	0,15	0,47
Digicom*	NC	NC	NC	0
Boost Africa Wifly	0,05	0,03	0,03	0,12
TLDC	0,03	0,03	0,03	0,10
Chiffre d'Affaires Global	4,43	4,58	4,43	13,45

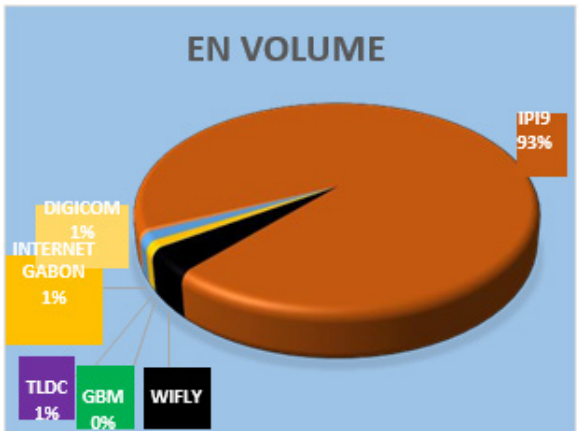
Tableau des chiffres d'affaires mensuels par opérateurs (milliard de francs CFA)

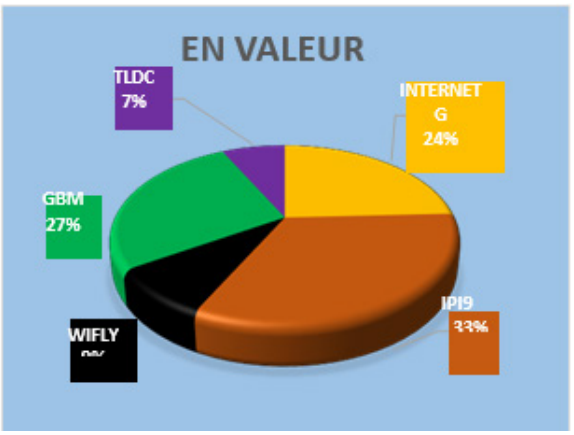
3. PARTS DE MARCHE AU 30 JUIN 2015

3.1 Sur le marché de l'internet mobile

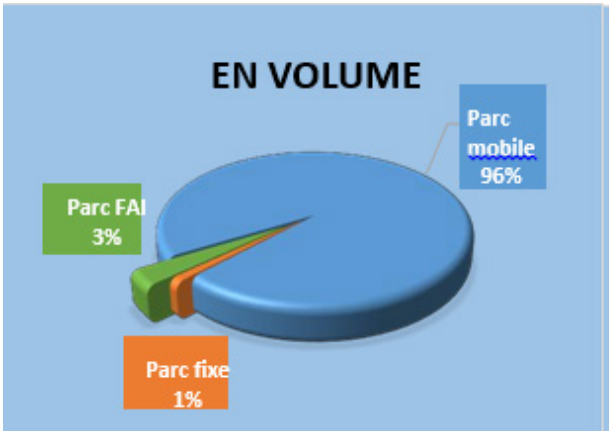


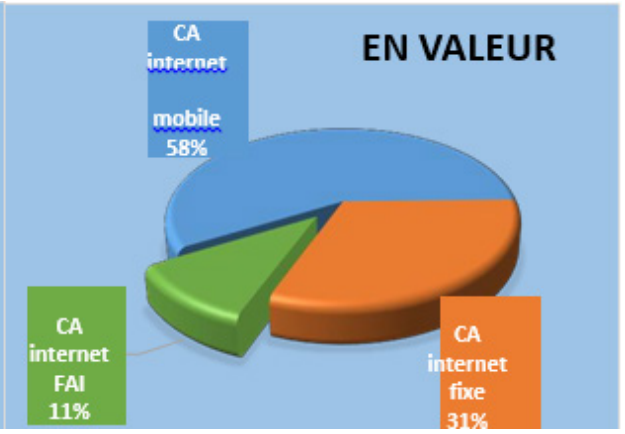
3.2 Sur le marché des FAI





3.3 Sur le marché Global internet





Towards Principles for Access to Data for Official Statistics

Discussion note
by the United Nations Global Working Group on Big Data for Official Statistics
for the 13th World Telecommunication/ICT Indicators Symposium (WTIS)
Hiroshima, Japan, 30 November to 2 December 2015

Introduction

In 2014, the UN Global Working Group on Big Data for Official Statistics (GWG) was established by the UN Statistical Commission in response to the emergence of Big Data sources, which have a high potential as sources for official statistics. A number of national and international statistical and other organizations are represented in the GWG, including ITU. One of the tasks of the GWG is to formulate principles for access to Big Data sources for official statistics, reflecting the need to strike a balance between the legitimate interests of organizations holding Big Data and the demand for Big Data for official statistics. The access principles are meant to be based on an appeal to the social responsibility of those organizations and are closely linked to the Fundamental Principles of Official Statistics, which are attached to this note.

In 2015, the GWG produced such draft principles. They were discussed at the 2nd Global Conference on Big Data for Official Statistics, which was held in Abu Dhabi from 20 to 22 October 2015. The draft principles appeared to be generally supported by the statistical community. However, it was also noted that the access principles should be broadened to all types of data held by private organizations, and that there is also an urgent need for similar principles concerning data held by national administrations.

After the Global Conference in Abu Dhabi, the GWG modified the draft principles in order to cover all types of data held by private organizations. This note contains these broadened draft principles. It is the intention of the GWG to consult stakeholders on the draft principles, in particular stakeholders outside the statistical community. This is the reason that this note was written for the WTIS-15. Comments on the draft principles are most welcome.

The UN Statistics Division (UNSD) and the GWG are currently considering how to address the need for similar principles concerning data held by national administrations. This may ultimately lead to one integrated set of access principles for official statistics, covering all types of proprietary data held by any organization. The consultation process will show whether there is sufficient support for formal adoption of the access principles by an appropriate UN body. In addition to establishing access principles, implementation guidelines will be needed that are specific to industries and data sources. In collaboration with the GWG, UNSD will contact relevant bodies in order to foster the development of such guidelines.

Comments on this document should be sent to indicators@itu.int

Draft Principles for Access to Data from Private Organizations for Official Statistics

Preamble

The [*name of the appropriate international body*]

(1) **Taking notice** of the high and urgent need for access to data kept by private organizations for the production of official statistics, such as indicators for the Sustainable Development Goals and statistics on phenomena related to modern society, and the social responsibility already shown by private organizations to provide access to new data sources, free of charge, for purposes such as disaster relief and the fight against epidemics,

(2) **Bearing in mind** that in using such data the Fundamental Principles of Official Statistics, as endorsed by the UN General Assembly[1], unconditionally apply, and that the statistical community has pledged to adhere to the professional ethics, as stated in the Declaration on Professional Ethics, as adopted by the International Statistical Institute[2], thereby creating the foundation for sharing data for official statistics,

(3) **Recognizing** the legitimate interests of private organizations, including respect for their business model and value proposition, and the need to guarantee a level playing field for private organizations considering the burden created by providing data for official statistics, as well as the legitimate interest of organizations in charge of compiling official statistics to have equal access,

(4) **Stressing** that the burden to private organizations resulting from data requests for official statistics must be fair in proportion to their envisaged public benefits and that the data should be adequate and relevant in relation to the purposes for which they are requested,

(5) **Considering** that legislation aimed at accessing and using data kept by private organizations unavoidably lags the emergence of new types of data sources, that existing national and international legal frameworks fully apply but need interpretation in view of new data sources, especially concerning privacy, data ownership, reuse of data by third parties, and liability in case of breaches of confidentiality, and that there is thus a need for guiding principles,

(6) **Highlighting** the need to create public trust by applying full transparency in the use of data from private organizations for official statistics, in particular in view of privacy concerns, given a number of well-publicized cases of likely abuse outside the realm of official statistics, and the need to provide clarity concerning the possible use for statistical purposes of personal data in customer contracts with private organizations, for instance by referring to the Principles set out below,

(7) **Acknowledging** that private data sources are diverse in many respects, such as data ownership, provenance of the data, purpose of collecting the data, and characteristics of the data itself, and that providing access to the data can take a variety of shapes, such as sending micro data to statistical agencies, providing aggregates compiled according to specifications from statistical agencies, or providing on-site data access for analysis,

(8) **Admitting** that source and branch specific principles and operational rules and guidelines may be needed for dealing with access to data kept by private organizations, that such rules and guidelines should be based on the Principles set out below, that before access is requested for the purpose of producing official statistics data

[1] Resolution 68/261, adopted by the General Assembly on 29 January 2014.

[2] This declaration was adopted by the Council of the International Statistical Institute in its session of 22 and 23 July 2010, in Reykjavik, Iceland.

exploration may be necessary in collaboration with the private data source, and that this requires the development of partnerships between private organizations providing and statistical agencies using data,

Endorses the following principles for access to data from private organizations for the production of official statistics:

Principles

Principle 1. The role of national and international systems of official statistics is to provide relevant, high-quality information to society in an impartial way. This role is indispensable to the well-functioning of societies. To this end, data is needed from private organizations as inputs to these systems. In view of the emergence of new types of data sources and the social responsibility of private organizations, these members of society are called upon to make the data that is needed available to the statistical agency concerned, free of charge, on a voluntary basis.

Principle 2. The data needed for official statistics may only be collected and processed if the statistical agency concerned acts in full accordance with the Fundamental Principles of Official Statistics[3]. These principles guarantee, among other things, the professional independence and accountability of the statistical agency, and the strictly confidential use of the data, exclusively for statistical purposes.

Principle 3. When data is collected from private organizations for the purpose of producing official statistics, the fairness of the distribution of the burden across those organizations has to be considered, in order to guarantee a level playing field.

Principle 4. Data requests for official statistics must acknowledge and take into account the role of data in the business model and value proposition of private organizations, in particular if their data has market value. There must be a fair balance between public and business interests when data is requested and possible harm to business interests has to be kept as low as possible.

Principle 5. The data must be adequate and relevant in relation to the purposes for which it is requested from the private organization. No more data should be requested than needed for these purposes. Operational arrangements have to be agreed on between the private organization and the statistical agency concerned, taking into account business concerns and data adequacy for official statistics. The metadata must also be adequate.

Principle 6. The cost and effort of providing data access, including possible pre-processing, must be reasonable compared to the expected public benefit of the official statistics envisaged.

Principle 7. When private organizations operate internationally, they are expected to treat requests for data from national statistical systems in a non-discriminatory way, unless different treatment is justified by differences in the national legislative frameworks concerned, and provided that adherence to the Fundamental Principles of Official Statistics is guaranteed in theory as well as practice.

Principle 8. Full transparency about the provision of data to national and international statistical systems has to be exercised by private organizations as well as statistical authorities in order to ensure public trust and to support a level playing field for private organizations and an equal treatment of national statistical systems by them. In particular, private organizations have to make sure that their customers are aware of the possible use of their data for the purpose of official statistics, in full adherence with the Fundamental Principles of Official Statistics.

[3] http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx

Annex: Fundamental Principles of Official Statistics

The Economic and Social Council

Recalling recent resolutions[4] of the General Assembly and the Economic and Social Council highlighting the fundamental importance of official statistics for the national and global development agenda,

Bearing in mind the critical role of high-quality official statistical information in analysis and informed policy decision-making in support of sustainable development, peace and security, as well as for mutual knowledge and trade among the States and peoples of an increasingly connected world, demanding openness and transparency,

Bearing in mind also that the essential trust of the public in the integrity of official statistical systems and confidence in statistics depend to a large extent on respect for the fundamental values and principles that are the basis of any society seeking to understand itself and respect the rights of its members, and in this context that professional independence and accountability of statistical agencies are crucial,

Stressing that, in order to be effective, the fundamental values and principles that govern statistical work have to be guaranteed by legal and institutional frameworks and be respected at all political levels and by all stakeholders in national statistical systems,

Endorses the Fundamental Principles of Official Statistics set out below, as adopted by the Statistical Commission in 1994[5] and reaffirmed in 2013, and recommends them further to the General Assembly for endorsement.

Fundamental Principles of Official Statistics

Principle 1. Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.

Principle 2. To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Principle 3. To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

Principle 4. The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

Principle 6. Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

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[4] These include General Assembly resolution 64/267 on "World Statistics Day", and Economic and Social Council resolutions 2006/6 on strengthening statistical capacity and 2005/13 on the 2010 World Population and Housing Census Programme.

[5] For the original preamble used on the occasion of the initial adoption of the Principles in 1994, see the report on the Statistical Commission on its special session (E/1994/29), chapter V, available from http://unstats.un.org/unsd/statcom/94report.pdf. More information on the Fundamental Principles and their history is available from http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx.

Principle 7. The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8. Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

Principle 9. The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

Principle 10. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

Data has always been a crucial tool for alleviating poverty and fostering development. With the advent of "big data" (large data-sets, often from different sources and collected in real-time) and the internet of things (or IoT, a catch-all term for connected devices and sensors) the potential uses for digital information will only grow. Just think how much more efficient the distribution of anti-malaria or other medicines in Africa could become, if firms could sift through text messages to look for key words and then send the drugs to places where subscribers use the word "fever" a lot. Or how much easier it would be to determine somebody's risk profile—and thus give her or him access to credit—by analysing a person's mobile-phone records, something a few startups are already doing. Others use call-record data to model the growth of slums, so they can tell authorities where, for instance, public restrooms and other infrastructure is needed.

Yet as always, things are not that easy: several hurdles mean that progress in using big data for development will be slow. One is reliability: currently only the mobile-network operators (MNOs) provide a steady flow of reliable information. Another problem is the lack of a "data culture", meaning the right skills and mindset to analyse what data becomes available. Privacy and data-protection, meanwhile, are not just rich-country issues. Sustainable business models have to be found: data donations and open-data projects such as Orange's in Sierra Leone are great, but MNOs will only keep giving away valuable data if they can make money with them. And then, there are all kinds of technical and standards issues which mean that it is hard, for instance, to combine data from different sources.

To summarise: big data can be a great tool to foster development—but it is only one tool and it will take time. What needs to be done? One area is standardisation—which is where the ITU could help. A more ambitious project would be to create a "data platform for development", which could serve, among many other things, to collect data, make it usable and allow startups and NGOs to experiment with it. The UN's Global Pulse and the UN Foundation's Mobile Hub are first steps in this direction, but more needs to be done to make big data really useful for development.

3rd Meeting of the ITU Expert Group on ICT Household Indicators (EGH)

Geneva, 21-22 September 2015

Final Report

1. The 3rd Meeting of the ITU Expert Group on ICT Household Indicators (EGH) took place in Geneva, Switzerland, on 21-22 September 2015. The meeting was held back-to-back with the Expert Group on Telecommunication/ICT Indicators (EGTI) meeting that took place from 23-24 September. A joint session of the two expert groups was held in the afternoon of 22 September.

2. The EGH meeting was attended by 94 participants representing national statistical offices, ministries, regulators and international and regional organizations, as well as the private sector. ITU staff was also present during the meeting and acted as the secretariat of EGH. The meeting was chaired by Mr Alexandre Barbosa, head of the NIC.br's Regional Center for Studies on the Development of the Information Society (CETIC.br), Brazil.

3. The topics discussed in the 3rd EGH meeting were those identified by the 2nd EGH meeting and recommended by the 12th WTIS (held in Georgia in November 2014). These topics were discussed in the EGH forum during the year. In particular, the agenda covered indicators on barriers to Internet access by households, barriers to Internet use by individuals, barriers to mobile phone ownership, ICT employment and the future work of the EGH. In addition, the meeting highlighted country experiences related to data collection, data verification and data dissemination.

4. The meeting discussed the contributions received in the EGH online forum between February and September 2015. The discussions focused on the suggested indicators, their relevance and definition and whether to include them in the future (2016) ITU data collection process. The meeting further discussed the future work of EGH, identifying topics that required further discussion as well as new areas related to ICT measurement.

5. The EGH meeting agreed on the definition and response categories of the indicator on barriers to individuals not using the Internet. The meeting clarified that in cases where respondents have access only to certain mobile applications but not the public web, they are not included in the current definition of Internet users. The meeting agreed to using the wording "by type of reasons" instead of barriers in the name of the indicator. The meeting debated on whether to merge some of the response categories to lessen the response burden, but agreed not to aggregate the response categories so as not to lose the information needed for policy making purposes. The meeting agreed to collect the indicator as part of the ITU ICT Household data collection in 2016 and to review the responses categories after the 2016 data collection. The discussion will be closed in the EGH forum.

6. The following indicator, question and response categories were agreed during the meeting.
   Indicator: *Proportion of individuals not using the Internet, by type of reasons*
   Question: *Why did you not use the Internet in the last 3 months? Select all reasons that apply.*
   Response categories:
   - *Do not need the Internet (not useful, not interesting)*
   - *Do not know how to use it*
   - *Cost of Internet use is too high (service charges, etc.)*
   - *Privacy or security concerns*
   - *Internet service is not available in the area*
   - *Cultural reasons (e.g. exposure to harmful content)*
   - *Don't know what Internet is*
   - *Not allowed to use the Internet*
   - *Lack of local content*
   - *Other reason, specify*

7. The EGH meeting reviewed the response categories for the indicator "barriers to household Internet access". There were suggestions to exclude response categories that are for individuals (i.e. do not need the Internet, privacy or security concerns and cultural reasons) from the response categories, to aggregate response categories to reduce response burden, and to include "lack of local content" as one of the response categories. The meeting finally agreed not to aggregate the response categories so as not to lose the relevant information that might be needed for policy making purposes. The meeting also requested ITU to review the response categories after the 2016 ICT data collection. The meeting agreed to continue collecting the data as part of the ITU ICT Household data collection. The meeting decided to close the discussion in the EGH forum.

8. The following indicator, question and response categories were agreed during the meeting.
   Indicator: *Proportion of households without Internet access, by type of reason*
   Question: HH14 - *Why does this household not have Internet access? Select all reasons that apply*.
   Response categories:
   - *Do not need the Internet (not useful, not interesting)*
   - *Have access to the Internet elsewhere*
   - *Cost of the equipment is too high*
   - *Cost of the service is too high*
   - *Privacy or security concerns*
   - *Internet service is not available in the area*
   - *Internet service is available but it does not correspond to household needs (e.g. quality, speed)*
   - *Cultural reasons (e.g. exposure to harmful content)*
   - *Lack of local content*
   - *No electricity in the household*
   - *Other reason, specify*

9. The EGH meeting discussed the indicator on proportion of individuals not owning a mobile phone, by type of reasons. There were several country-specific reasons that were raised during the meeting. The meeting decided that those issues that are relevant to some countries only can be included in national data collection and should be reported under "other reasons". The meeting agreed that the indicator will not be included in the ITU ICT Household data collection, but countries are encouraged to collect the data using the agreed question and response categories according to their national needs. The discussion on the indicator will be closed in the EGH forum.

10. Should countries wish to collect the data on the indicator, the following question was agreed during the meeting and could be used.
    Indicator: *Proportion of individuals not owning a mobile phone, by type of reason*
    Question*: Why do you not have a mobile phone? Select all reasons that apply*.
    Response categories:
    - *Do not have mobile network coverage in the area*
    - *Do not need a mobile phone/ Do not have interest in having a mobile phone*
    - *Do not know how to use it*
    - *Cost of mobile phone is too high*
    - *Cost of airtime is too high*
    - *Not allowed to own a mobile phone*
    - *Other reason, specify*

11. The ILO presented the progress of the work related to measuring ICT employment and highlighted that the three indicators on ICT employment are relevant for policymaking. However, there is lack of data for these indicators at the international level. Regarding employment in the ICT sector, it was highlighted that the data are available at the country level and are usually collected through establishment surveys and household surveys. For most countries, household surveys are a better data source as coverage for these surveys is more complete and the disaggregation by sex is always possible. It was recommended that statistics on employment in the ICT sector should be compiled by countries based on data at the ISIC 4-digit level but may be compiled from 2- or 3-digit level when data are not available at the 4-digit level. However, it should be noted that there is some loss of accuracy at the 2 or 3-digit level. The meeting agreed to close the discussion in the EGH forum on employment in the ICT sector.

12. The meeting further discussed the indicators on employment in ICT specialist occupations. The data on this indicator are already collected in countries but due to lack of internationally agreed definition of ICT specialist occupations and international data collection, the data may not be compiled by countries. Moreover, the meeting emphasized the importance of having sex-disaggregated data on ICT employment. The meeting further highlighted that labour force surveys are a better source than establishment surveys for data on ICT specialist occupations. Household surveys, for example, collect sex-disaggregated employment data classified by occupation and

economic activity. The meeting agreed that statistics can be compiled by countries using the proposed definitions by ILO based on data coded to the 4-digit level of ISCO-08.

13. The meeting suggested that ILO should seek the comments and feedback from agencies compiling international estimates of employment in ICT specialist occupations (such as OECD and EUROSTAT) and the UN Expert Group on International Statistical Classifications. The meeting requested experts to consult at the national level on whether the following occupations groups should be included in the ISCO ICT specialist occupations, in addition to the other occupations identified in the ILO paper, and to provide comments in the EGH forum by 30 October 2015. The meeting agreed to close the discussion in the EGH forum on this indicator after the deadline.
    - *2152 Electronics Engineers*
    - *2166 Graphic and Multimedia Designers*
    - *2356 Information Technology Trainers*
    - *2434 Information and Communications Technology Sales Professionals*
    - *3114 Electronics Engineering Technicians*
    - *7421 Electronics Mechanics and Servicers*
    - *8212 Electrical and Electronic Equipment Assemblers*

2. The meeting also discussed the indicator on employment using ICT skills and tools and recognized that more work is needed to define this indicator. The discussion on this indicator will continue in the EGH forum.

14. Several country experiences on data collection, data verification and data dissemination were presented during the meeting. These experiences were highly welcomed by experts. The meeting encouraged countries to continue sharing their experience regarding methodological issues in the EGH forum. It further invited countries who had implemented innovative solutions related to data collection, data verification/processing and data dissemination to share their experiences and/or solutions to other countries. The meeting decided that the topic on methodological issues will remain open in the forum for experience sharing.

15. During the joint EGH/ETI session, the topic of new data sources was presented and discussed. An overview of the work of the UN Global Working Group on Big Data, UNECE work on big data highlighting positive experiences, including the Sandbox framework, and a country experience from Spain were presented during the meeting. The meeting recognized that today we are facing major gaps in official data and timeliness of ICT data. As a result, a great potential of new data sources exists. However, there are a number of remaining challenges, in particular in terms of access to the big data sources, legislation and privacy. To overcome these challenges, there is a need to share experiences, set up public-private partnerships, and develop global data access model agreements. The meeting also highlighted that the ITU has in important role to play in terms of raising awareness and facilitating the dialogue on the big data discussion. The meeting decided that the discussions should continue in the EGH and countries and other experts working

on big data should share their experiences over the forum. Finally, the topic of big data highlighted the synergies that exist between the work of the EGH and the EGTI. The EGTI covers other administrative ICT data sources and data from OTT service providers.

16. The meeting discussed the future work of the EGH. A presentation on the indicators framework for the SDGs was appreciated by participants. The meeting encouraged countries to collect the data (through official surveys) on the ICT indicators included in the SDG indicators framework. A number of suggestions were made by experts for the future work of the EGH. They include 1) continue discussion of indicator on employment using ICT skills and tools, 2) review of the indicators "household with computer" and "individuals using a computer" (to include other types of devices), and 3) review the indicators HH8, HH9, HH15 to see if they cater Internet users using a mobile phone. The meeting further invited experts to provide suggestions to future work of the EGH through the online forum until 15 November 2015.

17. The meeting agreed that the outcomes of the EGH meeting will be presented by the Chair of the EGH to the WTIS 2015, to be held from 30 November to 2 December 2015 in Hiroshima, Japan.

6th Meeting of the ITU Expert Group on Telecommunication/ICT Indicators (EGTI)

Geneva, Switzerland, 23-25 September 2015

SUMMARY

1. The 6th Meeting of the ITU Expert Group on Telecommunication / ICT Indicators (EGTI) took place in Geneva, Switzerland, on 23-25 September 2015, back-to-back with the 3rd Meeting of the Expert Group on ICT Household Indicators (EGH), which was held on 22-23 September 2015.

2. There were 100 participants attending the meeting, including experts from regulators, ministries and national statistical offices from 48 countries, as well as the African Civil Society for the Information Society, the African Telcommunication Union, Analysys Mason, América Móvil, China Mobile, the European Commission, Eurostat, Google, GSMA Intelligence, OECD, Research ICT Africa, UIS, UNCTAD and the Web Foundation. ITU staff was also present during the meeting and acted as the secretariat of EGTI. The meeting was chaired by Mr Iñigo Herguera, Professor of Economics, Universidad Complutense de Madrid, Spain.

3. The topics discussed in the 6th EGTI meeting were those identified by the 12th WTIS (held in Tbilisi, Georgia, in December 2014) as requiring further work, as well as continuing topics, such as the ICT Development Index. In particular, the agenda covered the indicators on advanced mobile-broadband technologies (e.g. LTE), the revision of the sub-categories of mobile-broadband subscriptions, the collection of fixed-broadband subscriptions by type of organization, other administrative data sources – such as over-the-top (OTT) service providers – and indicators on m-banking services.

4. The meeting discussed the inputs received in the EGTI online forum in 2015. The discussions focused on the suggested indicators, their definitions and whether to include them in the future (2016) ITU data collection. The meeting further discussed the future work of EGTI, identifying topics that required further discussion as well as new additions to the list of indicators.

5. EGTI decided that data on advanced mobile-broadband subscriptions would be collected on a trial basis by ITU starting from 2016. The agreed definition for the new indicator was the following: "**Active subscriptions to LTE/WiMAX mobile-broadband networks:** subscriptions that have generated Internet traffic in the last 90 days in LTE/mobile WiMAX and other advanced mobile-broadband networks, such as LTE-Advanced and WirelessMAN. It excludes subscriptions having generated Internet traffic only in HSPA, UMTS, EV-DO and previous 3G networks, and also excludes fixed WiMAX subscriptions". In addition, EGTI agreed that a topic would be opened in the EGTI online forum for experience sharing on the collection of data for the two LTE/mobile WiMAX indicators (population coverage, subscriptions).

6. EGTI agreed that the mobile-broadband sub-categories (standard and dedicated) would be adjusted as follows: (1) Data and voice subscriptions, including voice plus Internet plans (bundles and pay per use) and add-on data plans; (2) Data-only subscriptions, including USB dongles, datacards and tablets. The adjustments in the sub-categories will not affect the comparability of the aggregate indicator "Active mobile-broadband subscriptions". M2M subscriptions are excluded from the indicators on mobile-broadband subscrptions. These changes will be reflected in the 2016 ITU questionnaire.

7. EGTI concluded that it was neither feasible nor particularly relevant to collect data on additional sub-categories of fixed-broadband subscriptions for organizations at the international level. As a result, it was agreed that ITU would continue to collect data on: (1) Total fixed-broadband subscriptions; and (2) Fixed-broadband subscriptions for organizations without the additional sub-categories. In addition, EGTI clarified that the unit of measurement for the indicator "Fixed-broadband subscriptions for organizations" was the number of physical connections.

8. EGTI highlighted that alternative data sources, such as OTT service providers, could complement or extend the current data collection from telecommunication operators. In order to explore these new data sources, EGTI agreed on an integrated approach together with EGH, and decided that discussions would continue in the topic "Other data sources" created in the EGH online forum, which includes the discussions on big data for official statistics. Furthermore, EGTI identified two lines of action for the cooperation with OTT service providers: (1) complementing existing ICT indicators with their data; (2) specifying possible new indicators needed for the development of ICTs and not available from traditional data sources. To this end, EGTI welcomed the participation of OTT service providers in the EGTI forum and encouraged them to continue participating in the discussions. Finally, ITU should continue looking into common procedures and practices for the exploitation of these new data sources.

9. EGTI noted that there were several banking services offered through mobile networks (by operators and banks), including mobile money which already had a high uptake in some countries and held a big potential for development. EGTI decided that a sub-group within EGTI would be created to develop draft guidelines on the framework for the collection of internationally comparable indicators on digital financial services based on supply-side data sources. In addition, the discussions in the online forum would continue on the indicators to be collected for measuring digital financial services, as well as for experience sharing on the collection of these data.

10. EGTI agreed on proposing the following topics for discussion in 2016: the revision of the composition of the ICT price baskets; detailed guidelines for the international Internet bandwidth indicators (a sub-group would be created within EGTI to produce a draft); classification of WiFi networks; guidelines for the collection of indicators on digital financial services (a sub-group would be created within EGTI to produce a draft); experience sharing on the collection of LTE/mobile Wimax indicators (subscriptions and coverage); and fixed network coverage indicators.

EGTI agreed that ITU would produce the terms of reference for the two sub-groups to be created within EGTI.

11. The ICT Development Index (IDI) was discussed in a joint session with the Expert Group on ICT Household Indicators (EGH). EGH and EGTI welcomed the proposal of the UNESCO Institute for Statistics to replace the indicator “Adult literacy rate” with “Mean years of schooling” in the IDI and the progress made in the data collection of the indicators “Learner-to-computer ratio” and "Gross enrollment ratio in programmes with computer-assisted instruction”. The two expert groups also welcomed the assessment made by the European Commission’s Joint Research Center on the statistical soundness of the IDI and proposed that a similar exercise should be repeated in future revisions of the IDI. Finally, EGH and EGTI encouraged countries to submit data for the indicator “Fixed-broadband subscriptions by speed” with a view to its future inclusion in the IDI.

12. EGH and EGTI agreed that discussions on the IDI would continue in the EGTI forum. New proposals regarding the IDI should address the following points: (i) how would they improve the measurement of ICT developments? (ii) How would they fit in the conceptual framework of the IDI? (iii) Would data be available for the suggested new indicators and, if so, from which source?

13. The EGTI Chair will present the conclusions of the 6th EGTI meeting to the 13th World Telecommunication/ICT Indicators Symposium (WTIS), which will take place in Hiroshima, Japan, from 30 November to 2 December 2015.