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Supporting Multistakeholder Internet Public Policy Dialogue in a Least Developed Country: The Togo Experience

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July 2012

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Acronyms

ACE	Africa Coast to Europe
AFNOG	African Network Operators Group
AfriNIC	African Network Information Center
ARTAO	West African Telecommunications Regulatory Assembly
ARPT	Autorité de Réglementation des Secteurs des Postes et des Télécommunications
BOAD	West African Development Bank
CSO	Civil Society Organizations
ECOWAS	Economic Commission for West African States
FOSSFA	Free Software and Open Source Foundation for Africa
GF2D	Women Group for Democracy and Development
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information and Communication Technology
IGF	Internet Governance Forum
IISD	International Institute for Sustainable Development
IP	Internet Protocol
ISOC	Internet Society
ITU	International Telecommunications Union
NEPAD	New Partnership for Africa's Development
NICI	National Information and Communication Infrastructure
PRIMATURE	The Seat of Togo Government
REFAMP – TOGO	African Women's Network of Ministers and Parliamentarians
UEMOA/WAEMU	West African Economic and Monetary Union
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNECA	United Nations Economic Commission for Africa
WACS	West African Cable System
WAIGF	West Africa Internet Governance Forum

Acknowledgement

We gratefully acknowledge the generous support of the International Development Research Centre (IDRC) and thank Nahmsath Yabouri, Russell Southwood and Pierre Dandjinou for their contributions to sections of this report.

1.0 Introduction

Information and communication technology (ICT) growth in Africa has been steady in the past five years, with impacts on the economic and social landscape. Recent reports indicate a minimum of 1 per cent increase in GDP for each 10 per cent increase in telecommunication (fixed and mobile telephony, Internet and broadband) penetration in developing countries (Kim, Kelly & Raja, 2010). The recent use of mobile telephony has influenced political structures in several North African countries and is shaping communication across the continent. ICTs have been shown to help in meeting agriculture and food security challenges on the continent; climate systems that provide weather monitoring and agriculture information are instrumental in making knowledge available (although more needs to be done in identifying broader climate change adaptation priorities); the unbanked, particularly those in rural areas, have been absorbed into the peripheries of the financial services sector through mobile money applications, to which they previously had no access.[1] Besides agriculture, climate and financial services sectors, ICTs have been shown to modernize government activities, to contribute to teaching and learning through technology-enhanced education, and to enable and simplify healthcare service delivery. These are vital contributions to economic, social and environmental development and sustainability, with the opportunities for ICTs to become even more significant if proactive policy attempts are made and steps taken to include them in broader development planning and policy formulation.

In the past, countries in Africa embraced and embarked on technology policy planning, often in isolation of larger development goals. This has changed in the past decade where the drive to mainstream ICTs into development priorities has pushed toward a better understanding of technology's contributions to economic and social development. Recent recognition of broadband's role in achieving the millennium development goals[2] is an example of mainstreaming ICTs into broader development priorities. More work needs to be done, however, especially at the grassroots level, where better understandings of national or global policy priorities should have more impact, where evidence of national policy priorities should be generated, and where consent should be obtained from those persons affected by these policies (Souter et al., 2010).

The importance of grassroots involvement and local level policy consultations should not be trivialized but rather considered an intrinsic part of the process of developing national priorities and objectives. The International Institute for Sustainable Development's (IISD) involvement in stimulating public policy dialogue in least developed countries using processes that are inclusive and multistakeholder-focused has resulted in several lessons learned that have been captured in a toolkit for the Internet public policy practitioner (Akoh, Egede-Nissen & Creech, 2012). The toolkit is based on several multistakeholder public consultations for producing evidence that shapes public policy and gaining consent of those who will be affected by the implementation of those policies (Souter et al., 2010). Policy making under the context is underpinned by the principle of sustainable development, which examines society—in this case, Togo—through the social, economic and environmental lens.

This report is the outcome of a two-year study of Internet public policy participation in a developing country with approximately 6 million people.

[1] According to recent World Bank eTransform Africa reports on agriculture, health, climate change adaptation, and the local ICT sector; sector reports are available at www.etransformafrica.org.
[2] See the Broadband Commission's website at http://www.broadbandcommission.org and also recent posters such as http://www.broadbandcommission.org/BMore/poster_b_more2.pdf.

Togo depends on agriculture, amounting to 40 per cent of its export earnings, and is among the largest producers of phosphates in the world. In recent times, technology growth, as indicated by a steady increase of Internet and mobile phone uptake and access to several undersea cables carrying local voice and data, has influenced the social and economic nature of the urban society and is increasingly doing so in the rural areas. Participants at a recent workshop in the country describe this growing upsurge in the use of technology as influencing communication patterns and disrupting the social fabric, in the sense that it increases communications as well as influences moral conduct.

Despite these challenges, the Togolese embrace the opportunities that the Internet can offer, and many are ready to "do business" online. Broadband deployment, which stakeholders feel can contribute to their economic and social development, has, however, been pricey and almost unaffordable by the poor population, of which over 60 per cent live below the national poverty line. While the report examines Internet public policy consultation processes, it has revealed much more than validating the tools needed for a multistakeholder platform for policy making. It addresses fundamental issues of education, economic development with a particular focus on its existing agricultural and mining industries, and multistakeholder policy making that incorporates the private sector as an essential foundation for long-term development.

The report contains six sections. Section 2.0 broadly reviews the infrastructure and Internet public policy context in Africa. Undersea cable deployments have seen growth in recent years, in direct relation to rising mobile usage and subscription rates. In retrospect, the policy activities of the past few years have contributed toward the present shape of the landscape. Organizations such as the Association for Progressive Communications, the African Network Information Center (AfriNIC) and the United Nations Economic Commission for Africa have been instrumental in laying the foundations and creating the platform for policy dialogue on the continent in the past decade.

These policy activities spanned the breadth of the continent at the time, but countries such as Togo were unable to ride the wave because of a number of internal factors, including an unstable political atmosphere. Section 3.0 examines the country's attempt at expanding ICTs to its rural and urban areas in relation to its political atmosphere, its economic landscape through thriving industries such as phosphate and agriculture, and its ICT policy landscape, along with the challenges of cultivating and implementing policies in small developing countries.

In Section 4.0, the report describes the methodology employed in the two-year study of public policy consultations in Togo. Commencing with online surveys of public perceptions on Internet issues, to national and global public consultations, tools out of the Internet public policy toolkit for the practitioner (Akoh, Egede-Nissen & Creech, 2012)[3] were employed to produce evidence and to elicit stakeholder consent on policy issues as it concerns them. Key messages from the survey include the importance of broad stakeholder participation that involves the government and private sectors in Internet public policy making, and the importance of broadband access, essential for the economic and social development of Togo.

Section 5.0 discusses the findings from the two-year study, highlighting the challenges of policy making and the need for broad policy-making reform in the country. The linkages between Internet policy and education emerged as an important policy consideration for Togo. Broadband deployment could significantly contribute to the local phosphate and agricultural industries, but only if conscious policy considerations are made that target development in these sectors.

[3] The Togo project is a validation of the various tools for public policy consultation presented in Akoh, Egede-Nissen & Creech, 2012, *Toolkit on Internet Public Policy Dialogue: Tools for the Practitioner*.

The report concludes with a set of recommendations for specific actions by the government, private sector and other non-state actors and the need for more industry-focused research on the role that the Internet can play in ensuring sustainable development. The importance of broadband deployment for job creation and for enabling innovation, and the role that a platform for multistakeholder dialogue can play in contributing to and sustaining appropriate policy formulation and implementation, are further discussed.

2.0 *Infrastructure and Internet Public Policy Development in Africa*

Internet and infrastructure deployment in Africa shows a growing trend in fixed telephone lines, from less than one per 200 inhabitants in 1996, to one per 100 in 2009. Mobile subscription rates increased in a decade from less than two per 100 inhabitants to 41 per 100 in 2010, and broadband grew from 0.1 to 3.6 per cent between 2005 and 2010.

In the last couple of years, several undersea cable infrastructure projects have commenced and are at various stages of deployment (Table 1). The Africa Coast to Europe (ACE), West African Cable System (WACS) and MainOne, which recently launched, have increased by several-fold the bandwidth capacity that was previously available only two years prior, and underpinned the growth of local to international, and local to local, traffic and content. The growing infrastructure and user base are essential to the African context, given the budding influence of the Internet on global economies; particularly, they may be required to ensure long-term sustainable development, if appropriate policies are implemented to leverage them. Most importantly, growth in these areas calls for the development of policy processes that respond to the dynamism of technology. It does not take too long for policies to become obsolete, and obsolete policies can not completely, efficiently and effectively leverage the benefits and the opportunities that new infrastructural and social developments offer. The principles of adaptive policy making are essential in this regard, where policies are designed in such a way that they respond to changing circumstances (Swanson & Bhadwal, 2011).

TABLE 1: EXISTING UNDERSEA CABLE DEPLOYMENT IN AFRICA.

	Seacom	EASSy	TEAMs	WACS	MainOne	Glo1	ACE	SAex
Cost (millions of USD)	650	265	130	600	240	800	700	500
Length (km)	13,700	10,000	4,500	14,000	7,000	9,500	14,000	9,000
Capacity	1.28 Tb/s	4.72 Tb/s	1.28 Tb/s	5.12 Tb/s	1.92 Tb/s	2.5 Tb/s	5.12 Tb/s	12.8 Tb/s
Completion	July 2009	July 2010	Sept 2009	Q3 2011	Q2 2010	Q3 2010	Q2 2012	Q2 2013
Ownership	USA 25% SA 50% Kenya 25%	African Telecom Operators 90%	TEAMs (Kenya) 85% Etisalaat (UAE) 15%	Telkom Vodacom MTN Tata (Neotel) Infraco et. al	USA Nigeria, AFDB		France Telecom et. al (see below for full list)	

Source: Many Possibilities, 2012.

Existing policy processes in Africa continue to grow in response to the developments in these fields. Institutions such as the United Nations Economic Commission for Africa (UNECA), through its African Information Society Initiative, have embarked on several ICT policy development initiatives, from which several countries have benefited, although countries such as Togo were unable to leverage the momentum that characterized this wave of policy formulations through this initiative.

Since then, a number of organizations have stepped up to the plate and have continued to contribute significantly in shaping the African policy landscape as it concerns the Internet. AfriNIC—the Regional Internet Registry for Africa, recognized by ICANN (Internet Corporation for Assigned Names and Numbers) in 2005—has been at the forefront of developing technical capacity and policies in relation to critical Internet resources such as the Internet Protocol

(IP) numbering systems, especially the new protocol, IPv6 and domain name infrastructure, facilities essential for the smooth running of the Internet. AfriNIC has over 1,200 members spread across the continent (2012 figures) (AfriNIC, n.d.), has trained 352 network engineers in 10 countries, disseminated 370 policy-related messages to its community in 2009, and one out of three policies was collaboratively accepted and implemented (AfriNIC, 2010). AfriNIC continues to engage with local national and regional Internet public policy initiatives such as the West Africa Internet Governance Forum (WAIGF).

The Association for Progressive Communications has contributed to supporting capacity building and for developing national public policy communities and institutions such as the Kenya ICT Network and regional policy centres like the ICT Policy Centre for Eastern and Southern Africa and the Center for International ICT Policies for Central and West Africa. The Free Software and Open Source Foundation for Africa (FOSSFA) was established in 2002 to explore open source software use in Africa and to fulfill the larger objective of creating a platform for the discourse of National Information and Communication Infrastructure (NICI) policy processes.

These non-state actors and other Civil Society Organizations (CSOs) have collaborated with regional economic commissions like the Economic Commission for West African States (ECOWAS), the South African Development Community and, in recent times, the UNECA and the African Union to develop regional and continental Internet public policy dialogue spaces shaped after the United Nations global Internet Governance Forum (IGF).[4]

Regional policies such as the ECOWAS legislative acts on cyber crime and personal data protection were created, among other things, in anticipation of the growing influence of the Internet in the economic and social lives of ECOWAS countries (UNECA, 2008a). Countries would have to adopt and adapt them to their local contexts in order to address the growing concerns of trust and security in the Internet domain and to do so in such a way that the policies they create respond to the dynamism and rapid evolution of the Internet. Governments are important stakeholders in this process and in the creation of the platforms needed to make these policies. The private sector is equally important but has been largely missing from these communities where it could play a significant and critical role.

Collectively, these institutions, actors, networks and infrastructures make up the policy ecosystem (Akoh et al., 2011) that is essential for the production of effective and far reaching policies at the continental, regional and national levels. Most importantly, stakeholders who are non-technical but whom these policies will affect should be included in this ecosystem.

In sum, the infrastructural growth and increasing user subscription rates to technology products and services call for the creation of a truly multistakeholder policy-making platform and policies that respond in a sustainable manner to the growing challenges of doing business online and that leverage the opportunities that these advancements bring in order to ensure sustainable development. This approach is more important to developing countries, where policies are missing and platforms do not exist for such public consultations. Togo, a West African country, has recently emerged from a repressive political climate into one where its public is becoming more active and engaged in public policy consultation.

[4] There are currently three thriving regional Internet public policy spaces in West Africa (www.waigf.org), East Africa (http://www.eaigf.or.ke), and the Southern African IGF (http://www.ngopulse.org/saigf). A budding forum is currently being developed in Central Africa involving countries around the region. Discussions on the continental African IGF commenced at the recently concluded Nairobi IGF in September 2011. It is being spearheaded by the UNECA.

3.0 *Internet Public Policy in Togo*

FIGURE 1: MAP OF TOGO.

Source: Central Intelligence Agency (CIA), n.d.

Togo lies in the West coast of Africa, occupying approximately 56,785 square kilometres and bordered by Burkina Faso, Ghana, Benin and 56 kilometres of coastline on the south (Figure 1). The country depends on commercial and subsistence agriculture with cocoa, coffee and cotton generating close to 40 per cent of its export earnings (CIA, 2011). It is among the world's largest producer of phosphates; mining in this sector, along with agricultural processing, cement, handicrafts, textiles and beverage production, make up the local industry base on which Togo's economy depends. Togo's GDP grew from 0.1 to 3.3 per cent in the past decade, with projections expected to reach 4 per cent in 2012 (African Economic Outlook, 2011; World Bank, 2011). Commercial services exports[5] grew to US$265 million, up from US$53 million, with computers, communications and other services[6] contributing between 40 and 45 per cent of its revenue stream, which is nearly evened out by imports of similar goods and services to the tune of between 35 and 40 per cent during the past decade.

Togo's population has remained evenly spread between urban and rural communities in the past decade, with 43 per cent of its 6 million persons living in rural areas. Sixty-three per cent of urban residents live in big cities where they can access more and better infrastructure such as Internet, mobile phone services and electricity; the latter serves only 20 per cent due to production challenges. Employment for youths between the ages of 15 to 24 years dropped slightly, by one percentage point, to 44.6 per cent of total population in the past decade.

Fixed telephone lines remain at a low of 3 per 100 inhabitants, with mobile cellular showing a remarkable growth, from 6 to nearly 40 per 100 inhabitants from 2004 to 2010 (International Telecommunications Union [ITU], 2011b). Households with a computer and with Internet are at 3 and 1 per 100 inhabitants, respectively, making Togo one of the countries with the lowest Internet and computer penetration in Africa. Broadband remains largely unavailable.

[5] Commercial service imports are total service imports minus imports of government services not included elsewhere. International transactions in services are defined by the International Monetary Fund's Balance of Payments Manual (1993) as the economic output of intangible commodities that may be produced, transferred and consumed at the same time. Definitions may vary among reporting economies.
[6] Computer, communications and other services (percentage of commercial service exports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and non-residents; construction services; royalties and licence fees; miscellaneous business, professional and technical services; and personal, cultural and recreational services (World Bank, 2011, 2012).

3.1 Togo's Political Landscape

Togo's political climate was fraught with crisis prior to and immediately following independence from France on April 27, 1960, approximately the same time Togo released itself from UN trusteeship status. An unstable political climate, fractured and diverse opposition parties and incessant constitutional amendments characterized its political landscape (U.S. Department of State, 2012). Commencing from 1958 with the first general election, which was contested and won by Sylvanus Olympio against Nicholas Grunitzky, a former prime minister, a new constitution was instituted that established a seven-year executive presidential term and empowered the office to appoint ministers and to dissolve the national assembly. A military coup deposed Olympio, and Grunitzky was instituted as prime minister of a provisional government, and then as president three years later in 1963, until 1967, when he was ousted in a bloodless coup by Lt. Col. Etienne Eyadema.

Subsequently known as General Gnassingbe Eyadema, he banned all political parties, suspended the constitution, was later elected party president of a single national political party, and then returned as an unopposed president in the 1972 elections. Even though some significant opposition had emerged and shaped itself into parties between 1979 and 1986, Eyadema was confirmed president for two more unopposed terms. Amidst political unrest, which characterized the period between 1989 and 1992 when a new democratic constitution was approved, opposition parties were reinforced, and they strongly opposed the existing political structures. Student unrest sparked riots in the capital, Lome, and a general amnesty arrangement was agreed upon that accorded exiled politicians a right to return. Although unrest continued up until July 1993 when the Ouagadougou agreement was signed allowing for presidential and legislative elections, Eyadema won another landslide with only 36 per cent of the voters; the rest abstained (U.S. Department of State, 2012).

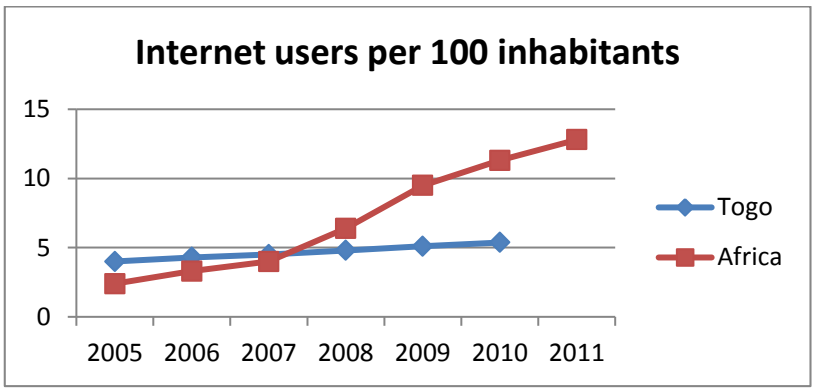
In 1998, he won another flawed election, this time marginally, by 52 per cent. Dialogue with opposition parties resumed in 1999 and, among other things, led to the Lome Framework Agreement that requested Eyadema to respect the constitution and to refrain from adjusting it to suit another term in office after 2003. He gained the rights to "unlimited" terms in office after the constitution was amended by a two-thirds majority parliament in 2002, and subsequently won the flawed 2003 elections by 57 per cent. His son, Faure Gnassingbe, was instituted into the office of the president by the military in 2005, after his father died.

Faure Gnassingbe contested and won the April 2005 and the March 2010 elections and remains president, trimming the number of government ministries and seeking to implement reforms that will revive the economy.

3.2 Togo's ICT Landscape

There are slightly over 324,000 Internet users, representing 5.4 per cent of the total population (Figure 2) (ITU, 2011a). Although growing slightly by one percentage point during the past five years, this figure is still low compared to the rest of Africa at 12 persons, Europe at 74.4 persons, and the Americas at 56.6 persons per 100 inhabitants. Two major Internet service companies provide access: Café Informatique, the first and by far the largest, and the incumbent Togo Telecom (OstaMyy, n.d.). Others include eProcess International SA, which is a subsidiary service provider for the regional financial institution, EcoBank; and other small-scale ISPs and cyber cafes numbering close to 179 in Lome alone. As a result of the low penetration of the Internet to households, access is centralized to cyber cafes—even then, connectivity is concentrated in mostly urban areas (Balancing Act, 2007).

FIGURE 2: INTERNET USERS PER 100 INHABITANTS, TOGO AND AFRICA.



Source: International Telecommunications Union (ITU), 2011a.

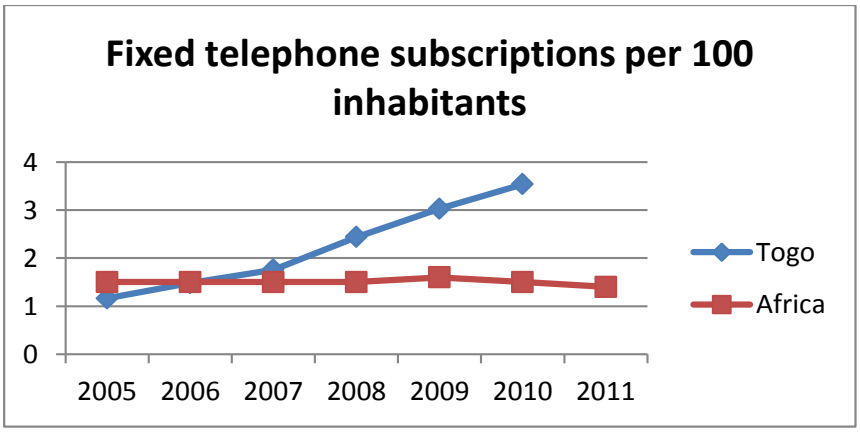
International data and voice bandwidth reported for 2008 was 49 Mbps (Trading Economics, 2008a), compared to 693 Mbps in Nigeria (Trading Economics, 2008b) and about 3,000 Mbps in Senegal (Trading Economics, 2008c). Fixed telephone and mobile cellular subscription per 100 inhabitants has been on the increase, growing at the same rate as the rest of the continent, from 8 persons per 100 inhabitants in 2005 to 41 persons in 2010 (Table 2, Figure 3).

TABLE 2: INTERNET AND MOBILE STATS IN TOGO.

	2005	2006	2007	2008	2009	2010
Fixed telephone subscriptions per 100 inhabitants	1.16	1.48	1.76	2.44	3.03	3.54
Mobile cellular subscriptions per 100 inhabitants	8.02	12.80	21.06	26.82	37.06	40.69
Percentage of individuals using the Internet	4	4.3	4.5	4.8	5.1	5.38
Fixed Internet subscriptions per 100 inhabitants			1.13	1.12	1.01	1.00
Fixed broadband subscriptions per 100 inhabitants	0	0	0.02	0.03	0.05	0.06

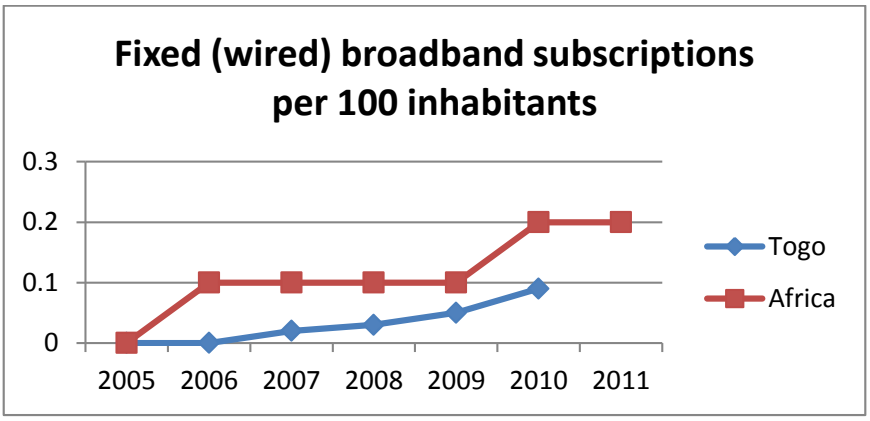
Although this trend in Africa shows a decline in subscriptions to fixed telephone (Figure 3) and a stagnation for fixed broadband (Figure 4), Togo shows the opposite, indicating growth in fixed line subscriptions, which suggests the possibility that this facility is increasingly being used and in demand for voice communication. As a result of the aforementioned centralized access to cyber cafes, the growth in fixed line subscriptions alone is insufficient to drive ubiquitous demand that will improve bandwidth availability in the country. An opportunity exists for Togo to leverage the proliferation of mobile subscription to drive broadband deployment (Figure 5). More effort is required on the part of all stakeholders, particularly government and the private sector, for this to take place.

FIGURE 3: FIXED TELEPHONE SUBSCRIPTIONS PER 100 INHABITANTS, TOGO AND AFRICA.



Source: ITU, 2011a.

FIGURE 4: FIXED BROADBAND SUBSCRIPTIONS PER 100 INHABITANTS, TOGO AND AFRICA.



Source: ITU, 2011a.

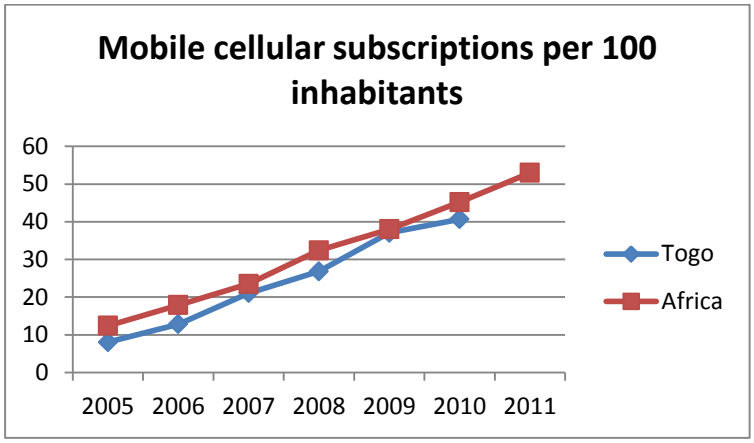
Broadband growth in Togo is evolving slowly compared to the rest of Africa (Figure 6) and its unavailability remains a significant concern for most Togolese (see survey results in this paper). An opportunity for the deployment of mobile broadband, especially to the rural areas where access is mostly scarce, is evident because of the growth of mobile cellular subscriptions (Figure 5), but more action is needed to leverage this opportunity. Choices would have to be made that involve the government and the private sector, especially infrastructure and Internet service providers that support the deployment of mobile broadband particularly to the underserved and unserved. Broadband deployment would need much more than deployment in fixed line infrastructure.

Another opportunity exists in advancing growth in the phosphate mining, agricultural and service producing industries. Togo's large youth population could contribute to the development of a service industry that capitalizes on the positively improving provision of technology services and goods to the mining and agriculture sectors as a contribution to GDP. A

large percentage of those involved in the survey of public perception in Internet policy making highlighted tax issues as impeding growth of the technology services industry. There is an opportunity here to reform the tax regime in the light of the opportunities that the Internet offers, and broadband deployment can play an important role here.

Two sides of the broadband coin should influence its development in the country—the supply side, which concerns the deployment of international connectivity, domestic backbone, metropolitan connectivity and local connectivity infrastructures; and the demand side, which concerns the creation and use of broadband-enabled services and applications to boost local demand and encourage further deployment (Kelly & Rossotto, 2012). This is further discussed in Section 5.3.

FIGURE 5: MOBILE CELLULAR SUBSCRIPTIONS PER 100 INHABITANTS, TOGO AND AFRICA.



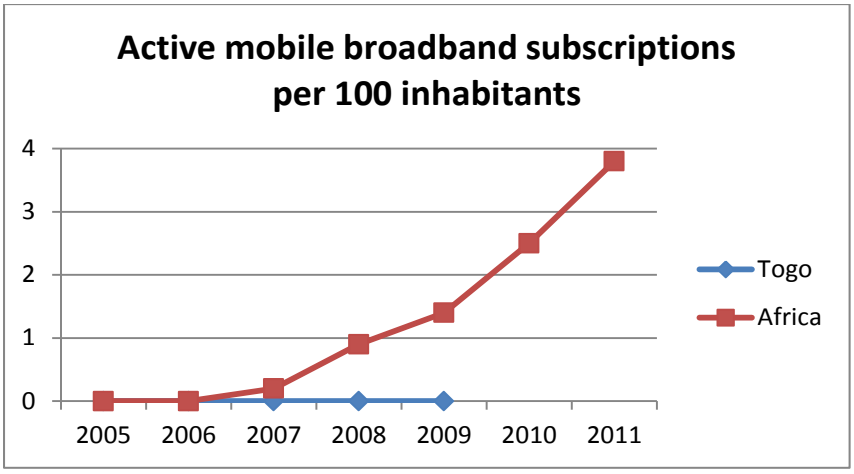
Source: ITU, 2011a.

On the supply side, metropolitan and local connectivity is provided largely by two mobile/wireless companies that dominate the Togolese territory: Togocel, the wireless arm of the incumbent Togo Telecom (Togocel, 2012b), and Moov Togo (Moov, n.d.a), a subsidiary company of Atlantique Telecom that has six other installations in Burkina Faso, Cote d'Ivoire, Central Africa, Gabon, Niger and Benin. Both companies claim sufficient geographic coverage of the country's five regions, although not much has changed since a 2007 report suggested that 85 and 69 per cents of the country were covered by Togo Telecom and Moov Togo, respectively (Balancing Act, 2007; personal communication, Russell Southwood, editor, Balancing Act).[7] Usage figures have improved nonetheless. Both institutions offer GPRS/EDGE technology that supports data usage on the mobile phone, although coverage is restricted to certain areas, mostly urban.

Consumers can pay up to 25,000 FCFA (US$50) for a 3 GB cap that allows between 8 and 20 hours of Web browsing in a 30-day window from Moov Togo (Moov, n.d.b), or 15,000 FCFA (US$30) for unlimited (undisclosed cap) bandwidth for Togocel for the same period (Togocel, 2012a). Such cost may be unaffordable to the almost 62 per cent of the population living below the national poverty line (World Bank, 2012).[8]

[7] For coverage, see http://www.moov.tg/moov/couverture.php and http://www.moov.tg/moov/carte.php.
[8] Poverty headcount ration at national poverty line (percentage of population).

FIGURE 6: ACTIVE MOBILE BROADBAND SUBSCRIPTION PER 100 INHABITANTS, TOGO AND AFRICA.



Source: ITU, 2011a.

As it concerns international connectivity, access to the Internet prior to 2007 was via satellite links, until an agreement was reached between the president of Togo and Benin to allow access to the undersea South Atlantic 3/West Africa Submarine Cable through the deployment of over 165 kilometres of fibre optic cable installed by Togo Telecom to increase the delivery of voice, video and data. Since then Togo has access to Glo1, and there are plans to connect to WACS (Q3 2011) and ACE (Q2 2012) (Many Possibilities, 2012). This makes international bandwidth (not necessarily broadband) available to the country. Metropolitan access or the backbone infrastructure necessary for last-mile distribution and that diversifies access to the regions is still lacking, the availability of which will significantly improve broadband access to and in the country.

The demand for broadband services from sectors such as education and health is yet to gain significant hold in Togo. Neither has demand been created in the private sector through firms that may be interested in exploring the local agricultural and phosphate industries. The opening up of industries in these areas could stimulate the growth of broadband and drive demand beyond the basic Internet access for which it is presently used.

Act No. 98-005 of February 11, 1998, and decree No. 2001-195/PR of November 16, 2001, grant the regulator ARPT [Autorité de Réglementation des Secteurs des Postes et des Télécommunications] the rights over all telecom service providers in the country, including the setup of a universal service fund, the deployment of networks and the provision of freely available public services. The fund is generated from revenue calculated from the audited statements of local telecom operators. The ARTP, through a bidding process, invites interested operators to deploy networks to underserviced areas after conducting a survey of the communities with the greatest needs.[9] This provision grants government (through the regulator) the opportunity to facilitate the deployment of networks that meet the demand for growth and development (ARPT, 1998, 2001), although the extent to which this will contribute to meeting the demand for broadband cannot be quantified. Additional research is required in this area.

[9] A survey of all the regions that will benefit from the universal access fund was last conducted in 2008. According to the ARPT site, most of the communities that emerged from this survey have been covered. See http://www.artp.tg/index.php?page=choix_localites_tgcel_2008 (chosen) and http://www.artp.tg/index.php?page=realisation_conv_tgcel_2008 (covered/deployed).

3.3 Togo's ICT Policy Landscape

As of 2007, Togo had no ICT policy (Agyeman-Duahl, 2007). Early attempts at engaging the government to formulate one were subjected to great risk, attributed mainly to instability in the political landscape (see Section 3.1). Legislative elections were postponed several times until 2007, even though a political agreement was signed a year earlier following dialogue between the government and various opposition parties (African Economic Outlook, 2011). Presidential elections were held in 2005 and again in 2010 in highly disputed circumstances that retained Faure Gnassingbe, the son of the former president, Gnassingbe Eyadema. It was nearly impossible under these circumstances to pay attention to ICT policy concerns, despite the attempts to do so.

This unstable political climate called for the delineation of concrete steps to address policy challenges in all sectors and in particular the ICT sector, including the creation of a new ministry that would be responsible for ICTs, and the need to engage this ministry and the government with ongoing national and continental policy initiatives such as those spearheaded by the UNECA under the NICI (National Information and Communication Infrastructure) initiative.[10]

Several attempts have been made to produce a national ICT policy document without yielding much in the way of tangible outcomes. For instance, the national ICT policy workshop under the NICI project that was conducted in 2006 and heavily attended and supported by the government, including staff from the Office of the President with promises by the then Minister of Communication to "offer optimal conditions for the successful implementation of the country's NICI plan" (UNECA, 2006) did not lead to the production of a policy document. A national survey administered by the UNECA to 450 public and private institutions to identity opportunities and constraints of ICTs in the country also failed to inform any tangible policy outcome. However, efforts toward the creation of such documents are ongoing, as are indicated in a dated 2008 UNECA chart of countries in which Togo is indicated as being in the process of developing a national ICT policy (UNECA, 2008b). A more recent assessment of countries that have adopted national policies to promote broadband also suggests that Togo has plans to do so (Broadband Commission, 2011).

In April 2011, over 60 participants from student and youth organizations, along with representatives of local human rights and environment non-governmental organizations (NGOs), the local Internet technical community, ISPs and media representatives gathered in what was perhaps the first public consultation with a specific focus on the Internet and its impact on development. The objective of the forum was to create a local framework through which the different stakeholders can dialogue and reflect on Internet development issues, and generate ideas that are required for continued dialogue on Internet public policy. This public forum was preceded by a number of activities such as the dissemination of public interest surveys, a national online discussion, and a futures scenarios exercise, which have contributed both toward the production of this report and toward providing a basis for testing the tools described in the toolkit for policy practitioners (mentioned previously). This section describes how this process has contributed to creating a local platform through which Internet public policy can take place.

After the public consultation, three important policy initiatives resulted in Togo, the production of:

- A Draft Bill on Electronic Communication
- A Sectoral Policy Statement, "The Technology Strategy for the Promotion of Information and Communication Technology 2011–2015"
- A resurfacing of a 2009 e-Administration Report commissioned by the government and financed by the United Nations Development Programme (UNDP)

[10] See http://www.uneca.org/disd/events/2006/atac/content/Togo%2520NICI%2520Plan%2520-%2520EN.ppt.

These documents are in their draft stages and none of them have been adopted.[11] This recent focus on the production of specific strategies or policy documents is a departure from the previous promises that, though they have nonetheless enjoyed the goodwill of the administration, have not materialized. If the time these documents take to emerge in the public domain is anything to go by, it suggests the need for assistance and support for systematic processes that could lead to very tangible policy outcomes and, most importantly, embark upon the steps required for achieving the objectives defined therein. There are indications that suggest gaps in capacity by government, CSOs and policy-makers; specific steps may be required to narrow the challenges in making and implementing policy.

Without these policy documents it becomes difficult to set developmental goals that may be underpinned by the evident growth of the Internet and of ICT, especially mobile communications, which has had significant economic and social impact in countries across the African continent (Kelly & Rossotto, 2012) and in Togo specifically. It is further difficult for the country to achieve substantial progress toward ICT sector-specific objectives (of which none are defined) or to gauge progress of ICTs' contributions toward achieving sectoral objectives in other areas. Appropriate policy documents, plans and strategies that have been collectively developed through a multistakeholder approach, adopted, and for which implementation strategies have been defined, are needed to help Togo leverage technology's capacities toward development.

In the next section, the report describes in more detail the methodology applied to the Togo Internet public policy consultation process derived from a toolkit for policy practitioners, available on the IISD site (Akoh, Egede-Nissen & Creech, 2012). The tools mentioned in the toolkit and applied to the Togo process resulted from IISD's extensive work and experience with the global and various developed and developing countries' national IGFs. Our experience working in sustainable development has shown that policy must be based on two elements: evidence that informs the shaping of policies, and consent of those who will be affected by the implementation of those policies (Souter et al., 2012). Nine tools were mentioned in the toolkit and categorized according to their abilities to provide evidence and to elicit consent of all stakeholders. These tools include:

- Evidence-based tools:
    - **Mapping the broad policy landscape:** A contextual mapping of policy making, including documenting the following: policies that are already in place; issues that may warrant attention for policy formulation or reform, stakeholders that are or should be involved, and the mechanisms currently available for policy dialogue.
    - **Mapping the ICT landscape:** Understanding the status of ICT deployment through empirical (evidence-based) data and analysis in a way that it reveals the role of ICTs in the community as a whole including adoption rates and usage, in the context of the state of the economy, geography, demographics and trends.
    - **Online surveys:** Creating a baseline of stakeholder opinions, perceptions and knowledge levels. Web-based surveys represent a cheap (even free) and easy way of reaching a cross-section of interests.
    - **Expert roundtables:** Bringing together experts and thought leaders to discuss trends, frame issues, and identify information gaps, critical uncertainties and policy challenges.

[11] The national Internet governance coordinator mentioned during an email exchange that the production of the sectoral policy statement was largely influenced by the discussions from the national consultations.

- Consent-based tools:
    - **Background papers and policy briefs:** Presenting the evidence: based on the mapping, data gathering and survey processes, writing the background paper that describes the issues. Must be written by a local and highly respected expert and "ambassador" who understands the issues and is able to articulate the concerns that must be addressed to the larger community.
    - **Public multistakeholder event:** The holding of a public event that brings in a diversity of sectors and interests for the purpose of developing a shared understanding of issues and challenges.
    - **Focus groups and workshops:** A useful way to explore perceptions, attitudes and trends, within a community or group of people that have something in common and organized around a geographic space (city or regional), theme or profession.
    - **Scenarios, backcasting and related modelling and forecasting processes:** Scenarios can be a useful activity that helps stakeholders consider possible futures, identifying in the process common concerns and differences of opinion, and building awareness of options. Backcasting is a useful process to consider what actions might be necessary over time to achieve a desired future. Both will benefit from modelling data and trends as inputs.
    - **Online discussion boards and mailing lists:** Discussion boards and mailing lists represent a common way for groups to keep in touch, keep organized and engage in debate across a far-flung network of people. This is a very practical administration tool useful for asynchronous consultations, for agenda setting prior to in-person consultations, and for eliciting evidence and consent.

Four tools were applied in the Togo process, namely, the online surveys; public multistakeholder event involving small focus groups and workshops; scenarios, backcasting and related modelling and forecasting processes; and the implementation of an online discussion board and mailing list.

4.0 Internet Public Policy Consultations in Togo

As already mentioned, public consultations leading to the successful production and publication of ICT-related policy in Togo have been far from attainable. There may be no direct correlation between the first Internet governance multistakeholder consultative forum held in April 2011 and the sudden emergence of the three important policy outcomes mentioned in the previous section, but the feedback from participants at the forum and the survey results do indicate the importance of explicit public multistakeholder consultations so that additional benefits can be accrued from the increase in infrastructure deployment and usage growth rates.

This section describes activities that have been undertaken in Togo from June 2010 to September 2011. The Togo Internet governance multistakeholder forum is a process that can catalyze public participation to dialogue on issues concerning growth in the ICT sector and how these link to broader development objectives. A number of tools have been deployed to collect evidence of stakeholders' needs and to seek their consent for the most appropriate policy steps to address those needs. In the toolkit for policy practitioners, several tools that can be used to gather consent and evidence were presented, and four of the nine tools described were deployed in the Togo process, as also previously mentioned.

This section describes these tools in detail, commencing with a depiction of the online discussion list that was deployed in July 2010; two online surveys that were deployed in June 2010 as a part of the wider West African survey of public interest in Internet policy; and in April 2011 to dig deeper into areas identified in the first survey that required further elaboration and to produce sufficient data to inform the scenarios exercise held as a part of the public consultation process. The findings from the surveys, the scenarios exercise, the national public consultation and the global IGF can be found in Sections 4.2 through 4.6.

A scenarios exercise was implemented during the public consultation forum in April 2011. The methodology section describes, in further detail, the various activities and the outcomes of the process.

4.1 Methodology

The policy process in Togo involved the following activities that contributed to the outcome of this document:

1. Online discussion list
2. Surveys of:
    a. Broad public policy interest in Internet governance in West Africa
    b. Specific survey on deepening Internet governance in Togo
3. A public policy multistakeholder consultation and capacity building workshop
4. Futures scenarios exercise
5. Participation in the "Linking Local to Global Policy Workshop" at the global IGF

4.1.1 Online Discussion List

An online discussion list was created in July 2010 as a part of the broader WAIGF initiated in seven countries: Benin, Gambia, Nigeria, Senegal, Liberia, Sierra Leone, and Togo.[12] The list was aimed at promoting a national platform for the exchange of information and the discussion of issues related to the Internet, its current and future development in Togo; to document ongoing policy dialogue; and to generate data required for analysis of the policy landscape. The list has been used, and continues to be used, for sharing local and global information about Internet policy issues in the country and to build the capacity of its various members.

At least 50 individuals from various groups subscribed to the list at inception. Preceding the regional WAIGF, it was used to provide a history of the IGF and to invite participants to dialogue on Internet policy issues with which the country was faced. It was further employed to disseminate the West African survey link and to invite participants to the one-day consultation among local stakeholders in August 2010.

Although initial dialogue on the list was restricted to the sharing of information, as most participants tended to self-regulate their contributions for fear of being reprimanded by the authorities, it did not take too long to shed those restrictions and highlight Internet policy issues that bothered them. One contributor commented, "After a month of the existence of a list under incubation such as this, we all know there is a problem that no one dares speak out from within."[13] In spite of these challenges, contributors—focused on creating structures that fostered dialogue—suggested that a non-discriminatory, multistakeholder format, where all participants can comment without reservation on key Internet policy issues, should be established. Participants were focused on using the list for discussion that will lead toward "building a city where the current struggles for the proper functioning of the Internet will benefit future generations."[14]

4.1.2 Survey of Public Internet on Internet Governance

Two public surveys were deployed in the country:

1. A West African-wide survey, "Public Interest in Internet Policy," significantly populated by stakeholders in Togo, conducted in June 2010
2. A survey, "Deepening Internet Governance in Togo," conducted in April 2011

The West African-wide Survey of Public Interest in Internet Policy contained questions grouped according to the following categories:

- Issues of importance in relation to Internet development, access and use (access, ISP neutrality, critical Internet resources, privacy, security, abuse, intellectual property rights, governance, Internet literacy and education)
- Issues of importance in relation to other policy areas (economic development and competitiveness, health, education, employment, arts and culture, broadening citizen participation, social cohesion and environmental stewardship)
- Institutions, organizations and mechanisms required for supporting a public dialogue on Internet policy

[12] The process was supported by the Association for Progressive Communications, FOSSFA, Internet Society (ISOC), AfriNIC, Open Society Initiative for West Africa, IISD and ECOWAS.
[13] Comment posted by a user to the discussion list on July 28, 2010.
[14] Comment posted by a user to the discussion list on July 28, 2010.

The "Deeping Internet Governance in Togo" survey contained questions grouped according to the following categories:

- Affordable access and connectivity to the Internet
- Security and cyber crime
- The future direction of the Internet
- Development and use of the Internet

Both surveys used a combination of Likert scale and open-ended questions to elicit quantitative and qualitative information from the respondents. The questionnaires were deployed during a one-month period in June 2010 and in April 2011, respectively, and disseminated through online discussion lists and snowballed via email to various stakeholders including government agencies and departments, CSOs, youth groups and academia.

The findings from the initial survey led to the production of "Preparing the Ground for the West Africa Internet Governance Forum: A Review of Internet Public Policy Interests and Processes in Selected Countries in the Region" (Akoh et al., 2011), available on the IISD and WAIGF sites. The outcomes of the second survey contributed to the design of the scenarios workshop that was held at the same time as the national consultative multistakeholder forum.

4.1.3 Public Policy Multistakeholder Consultation and Capacity Building Workshop

A public consultation event with the theme, "The Internet in Togo: Impacts and Means of Achieving the Most Benefits" was held in the capital city, Lome, on April 18, 2011 and co-organized by IISD and the local Togolese Forum for Internet Governance Forum, a part of the West African Internet Governance. Over 60 participants, including students, youth associations, NGOs involved in human rights and environmental protections activities, private sector and individuals working in the area of technology, Internet and the media participated in the half-day event. Two main objectives were sought:

- Capacity building: to highlight, build awareness and inform on some of the present and important regional and global Internet policy issues such as
    - Descriptions of trends in Internet governance in West Africa and how they specifically impact Togo
    - Dissemination of initial survey findings
    - Dialogue on topical issues such as critical Internet resources and management, security and privacy, social networks, and online journalism and citizenship
- Multistakeholder public consultation: to initiate a local platform for Internet public policy dialogue and maintain such for future dialogue

The forum consisted of plenary and breakout sessions using methodologies that allowed for active participations of the various stakeholders.

4.1.4 Futures Scenarios Exercise

During the half-day public consultation, a future scenarios exercise was conducted using the four futures framework implemented by IISD (Creech et al., 2008).[15] Participants were asked to address the following questions:

- What is your vision of the Internet in the best case scenario for the next 10 years?
- What are the worst case scenarios of the Internet for the next 10 years?
- How do you envisage the Internet led by the Market for the next 10 years?
- How do you see the Internet led by Government for the next 10 years?

The outcome of this exercise can be found in the results/findings section.

4.1.5 "Linking Local to Global Policy Workshop" at the Global Internet Governance Forum

A workshop was organized at the global IGF, held in September 2011 in Nairobi, with the theme, "Multistakeholder Internet Public Policy Dialogue: Lessons Learned and Best Practices Examples of Local to Global Policy Dialogue." It involved a series of presentations from various coordinators of national Internet governance consultative forums from Canada, Kenya, Togo, the United Kingdom and Brazil. The workshop set out to discuss some of the valuable lessons learned from global Internet public policy dialogue processes that are applicable to the local context. These outcomes were based on research conducted at all levels of the IGF (global, continental, regional and national), the tools and methodology used for effective public policy dialogue, and how these could influence the way in which future Internet policy dialogue is designed and implemented.

4.2 Results/Findings: Key Messages from First Survey

The characteristics of survey respondents are delineated first, followed by the specific (numbered) findings for each of the two surveys.

Respondents' Characteristics

Togo's Internet community or those who are concerned about Internet public policy is predominantly male, at 90.9 per cent (see Table 3). Female respondents are 6 percentage points less in Togo than their counterparts, from data generated in the same survey conducted across eight West African countries (Akoh et al., 2011). This indicates evidence of a male bias toward technical or computer-related professions and in the domain of Internet governance.

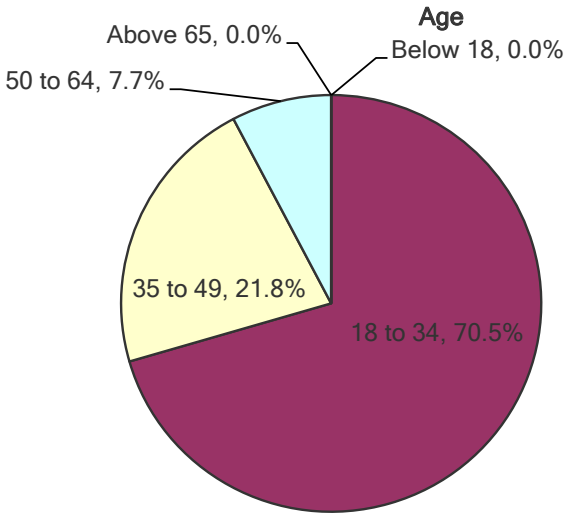
TABLE 3: GENDER DISTRIBUTION OF RESPONDENTS TO SURVEY (BY PERCENTAGE).

	REGIONAL (EIGHT WEST AFRICAN COUNTRIES)	TOGO
Male	85.0	90.9
Female	15.0	9.1

[15] The storylines are: a) policy reform (regulated market), b) unregulated market, c) VIPnet, d) Internet Commons.

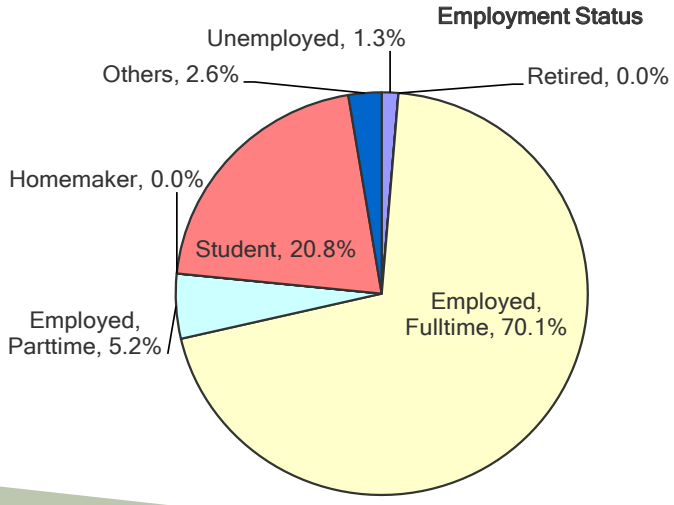
Over 90 per cent of respondents are between the ages of 18 and 49; 70 per cent represent participants who are in a much younger age bracket of 18 to 34, indicating a strong interest in Internet public policy by the working population (see Figure 7). One remarkable finding is the absence of any survey respondent below 18 years or those that should be in middle, high school, first-year university or college. While this group may not have been primarily targeted for the survey, their non-inclusion probably suggests a lack of affiliation with various in-country groups that are concerned with Internet, media, economic, social and environmental development public policy issues. Internet public policy concerns are important to this group because of the potential role they could play in driving a future Internet economy in a country like Togo. An early introduction to Internet technologies and policy issues driven through raising awareness, advancing digital literacies, and offering school-level guidance and counseling that point toward career opportunities in the technology and technology services industry could help here.

FIGURE 7: AGE DISTRIBUTION OF SURVEY RESPONDENTS.



Although Figure 8 indicates significant student participation at 20.8 per cent, this is far less than the 70.1 per cent who are fully employed.

FIGURE 8: DISTRIBUTION, BY EMPLOYMENT SITUATION, OF SURVEY RESPONDENTS.



1. Access to speedy, affordable, quality Internet, and online trust and security are fundamental, essential and priority concerns for the growth of the Internet and development in Togo.

At least 60 per cent of all respondents were very concerned about the importance of access to and trust in doing business on the Internet. Over 80 per cent thought these issues should be priority discussion items in a public policy forum. A proportion of not less than 94 per cent were concerned for their online privacy and security and indicated that Internet abuse and misuse are significant policy issues. Concerns for the protection of national heritage, local intellectual property and critical Internet resources may become significant in the future, although they are less pressing issues at the present moment in comparison with access and trust. Most participants, 88 per cent at least, are concerned about the adequacy of current institutions and processes for decision making around these Internet issues, suggesting that they need to be better structured to address growing concerns.

2. Significant public education gaps on the benefits of the Internet to growth and sustainable development in Togo are evident; specific steps are required to bridge them.

The aforementioned section on demographic information already indicates that the domain of Internet public policy in Togo is predominantly male dominated and mostly the preoccupation of fully employed persons, and less so of youths or younger persons at the primary to secondary school level or at pre-university or college levels. These gaps present an opportunity for sufficient business investments in the knowledge area, especially as it concerns creating public awareness, informal capacity-building initiatives for the public, and more specific formal education such as digital literacy education as a key component of advancing technology growth at all levels of education in the country.

Specific focus needs to be paid to students and learners at the primary and secondary level who are important stakeholders but whose concerns are not captured in the survey, and to students at the tertiary level who should be concerned about positioning themselves as stakeholders in the future Internet economy. Broadly speaking, respondents thought that Internet literacy, particularly as it relates to rights, responsibilities and the consequences of online actions, should be addressed by public education. Likewise, public policy in Togo should be concerned with the development of other sectors such as health, employment, arts and culture. Respondents indicated their concerns about the role of the Internet in environmental matters such as carbon dioxide emissions and electronic waste. The Internet can play an important role both in mitigating greenhouse gas emissions and in building capacity to adapt to the impacts of variability in climate through the sharing of knowledge and the development and deployment of systems to help in these areas.

3. Broad Internet policy reform involving local and international stakeholders is required in all areas, to include existing regulatory frameworks, preservation of culture and local content, and a legal guide for local goods and services, resulting in a comprehensive ICT and Internet policy and strategy.

In addition to quality and affordable access, education, literacy and public awareness of Internet public policy issues, participants suggested that more attention is needed in the following high priority areas:

- Regulations, proper management and administration of Internet goods and services, and the implementation of citizen-centric e-governance services:
    - Introduction of tax relief and incentives to the technology services industry, to Internet and technology equipment, and goods and services. Participants also suggested the need to develop a tax refund mechanism for already delivered goods, equipment and services.

- Regulation of electronic services, and of public Internet access points such as Internet cafes, especially for students and young persons who predominantly use them to access undesirable online content. Others include: regulator independence, liberalization of the telecom sector, facilitation and regulation of the export of Internet goods and services, regulating training services in the same way as driving.
- Establishment of e-governance services that are annually deployed and managed, to include areas such as the management of renewable energy sources for rural areas, providing services that focus solely on development, ensuring the participation of governance in the social aspect of city life.

- Preservation of local culture, content and intellectual property:
  - Local content in local languages: the development of, and the incentivizing of, grassroots-focused mechanisms that promote local content development in local languages, the protection of cultural heritage.
  - Respect for rights, privacy and intellectual property.
  - Development of a local job market and placement service for local technology services experts.
- The need to develop a comprehensive ICT policy and strategy that covers the broad development sector and involves all stakeholders:
  - Any strategy should focus on core development concerns, integrate young people, involve elements of effective communication between governments and citizens, and include sectors such as agriculture as essential development sectors.
  - Development of a legal framework to guide local delivery of goods and services—one that focuses on decentralization of services, supports the evolution of a free and competitive market structure for technology goods and services; provisions of a national universal service fund for technology services.
  - A reform of present spectrum licensing regimes that encourage more widespread deployment to rural areas and the better management of national critical Internet resources such as the top-level country domain name.

4. Government is an important key stakeholder in facilitating Internet public policy in Togo, but all stakeholders are responsible for the evolution of the Internet.

Over 85 per cent of respondents agree that governments and all stakeholders share the responsibility for the evolution of the Internet in Togo. Approximately 12 per cent think it should solely remain the responsibility of the private sector.

When asked to specify the institutions that should be involved in the process, respondents thought stakeholders such as government offices, the telecommunications regulator and operators, the private sector, consumer groups and associations, academia and international development agencies should be involved (see Table 4: Relevant and important local stakeholders, for a breakdown of these groups).

TABLE 4: RELEVANT AND IMPORTANT LOCAL STAKEHOLDERS AS REPORTED BY SURVEY RESPONDENTS, TOGO.

Government departments and ministries	• Ministry of Post and Telecommunications • Ministry of Commerce and the Promotion of Private Sector • Ministry of Arts and Culture • National Agency for Management and e-Administration • The executive arm of the Presidency • Ministry of Industry, Free Zones and Technology Innovations • Ministry of Territorial Administration, decentralization and Local Government • Ministry of Public Works • The National Assembly • Ministry of Security and Civic Protection • The Seat of Togo Government (PRIMATURE)
Consumer groups and associations	• Togolese Consumer Association • Togolese Free and Open Source Software Association • ICT Experts Network (Réseau ExperTIC – Branche Togolaise) • ISOC Togo • ESTETIC Togo • Young Catholics Online • The Organization for the Promotion of the Internet and Mobile • Journalist Network • Chamber of Commerce and Industry • ISP Association • Women Group for Democracy and Development (GF2D) • African Women's Network of Ministers and Parliamentarians (REFAMP – TOGO)
The telecommunication regulatory agencies and operators	• ARTP • TogoTelecom • Moov Togo • Togo Cellulaire
International development organizations	• UNDP • West African Development Bank (BOAD)
Private sector	• Café Informatique and IDS Technologie
Academia	• The University of Lome

Over 90 per cent of the respondents thought it was important for Togo to engage with other West Africans on issues that impact the evolution and use of the Internet in the region, such as affordable and reliable access.

When asked which external organizations should be involved in internal public policy dialogue, respondents suggested the inclusion of stakeholders such as international development organizations/agencies, regional and continental economic commissions, private sector (including telecom operators) and the Internet technical community (Table 5).

TABLE 5: RELEVANT AND IMPORTANT EXTERNAL STAKEHOLDERS AS REPORTED BY SURVEY RESPONDENTS, TOGO.

International development organizations/agencies	• International Telecommunications Union (ITU) • UNDP • La Francophonie • Internet without Borders • Panos Institute of West Africa • Oneworld UK • Radio France International • IDRC • Women's World • USAID • Akendewa Cote d'Ivoire
Regional and continental economic commissions	• New Partnership for Africa's Development (NEPAD) • West African Economic and Monetary Union (UEMOA) • African Union • ECOWAS • European Union • Economic Commission for Africa • United Nations • United Nations Educational, Scientific and Cultural Organization (UNESCO) • BOAD • West African Telecommunications Regulatory Assembly (ARTAO)
Private sector including telecom operators	• Satellite operators • Orange • MTN • GLO • Microsoft • France Telecom • Google • CISCO • eTriLabs Benin • April International • SFR (a French mobile company)
Internet technical community	• ISOC • AfriNIC • ICANN • Réseau ExperTIC • FOSSFA • African Network Operators Group (AFNOG) • Internet Assigned Numbers Authority (IANA)

When asked what other stakeholders are missing that they would like to involve in a local process, respondents suggested members of the research and academic community, universities and polytechnics, students, technical, youth and women organizations. In addition, farmers and peasant groups should be included, along with social groups (including those on social networks), non-schooled persons and the handicapped.

Over 90 per cent would like a forum to discuss Internet public policy and decision making. When asked the mechanism they would use to participate, some suggested the setup of a local commission that will be responsible for organizing, coordinating, facilitating dialogue and for sharing information, research outcomes and reflections among stakeholders; others wanted technology facilitated platforms such as a blog, website or the use of radio and television for the same reasons. A public policy space is required irrespective of the specific mechanism employed.

4.3 Results/Findings: Key Messages from Second Survey

1. Internet access is important to Togolese for business and education, but the cost has a negative impact to the growth of entrepreneurial, educational and research activities and on the growth in the use of mobile devices.

When asked what devices users prefer most for accessing Internet content, 97.7 per cent preferred a computer to a mobile device. Over 87 per cent of respondents access the Internet from their office or cyber cafe. Only 13 per cent can access them from home. When combined, only 8 per cent indicated they preferred mobile devices as an access device of choice to connect to the Internet—an increase of 5 per cent from those who already do so. The rest, 92 per cent, prefer a situated form of access, either using computers provided at their work, at home or in cyber cafes. Only 8 per cent think the cost of the Internet is appropriate for educational and entrepreneurial activities.

2. Government is a key stakeholder in the development, deployment and monitoring of broadband and mobile broadband access to all Togolese.

Over 94 per cent of respondents say there is no mobile broadband available in Togo or have not experienced broadband connectivity over a mobile device. A combination of both the private sector and government should be responsible for the deployment of broadband in the country, a position supported by over 97.8 per cent of respondents. Government (68.5 per cent) should be responsible for this joint effort. About 85.4 per cent think broadband access should be subsidized and 86.5 per cent think a particular agency should be set up to monitor broadband access and quality.

3. Togolese are ready to conduct and transact business online, but cyber security and online trust remains a major deterrent.

When asked about awareness of regional instruments that guarantee protection of personal data such as the ECOWAS text on cyber crime and the protection of personal data, less than 10 per cent responded in the affirmative. A large percentage of the population are unaware of such regional instruments that protect them and their data when they interact online. More than 59 per cent are unaware of any local provisions and over 37 per cent said there were no such provisions. Over 91 per cent would like to see some form of local law that guarantees personal data protection and that builds business confidence, although more than 65 per cent of this group feel their confidence for online business would be boosted by a repressive cyber crime law (one that is heavily focused on protecting people conducting online business) rather than a permissive law (one that enables online business). About 72 per cent of respondents are ready to transact business online in spite of these data protection challenges and 89.7 per cent feel confident that they can "make money" from conducting business online.

4. Governments should play a more active role in creating a public forum for Internet policy dialogue.

Over 93 per cent of respondents are unaware of any multilateral policy-making process in the country and 96.1 per cent would like to see a mechanism for dialoguing Internet policy—either as a public open forum (46.1 per cent) or a public advisory forum involving all stakeholders (50 per cent). Over 92 per cent of respondents believe government should

play the role of a coordinator and a convener of Internet policy stakeholders, while 72.4 per cent believe the telecom regulatory body should be involved in Internet policy issues. Less than 4 per cent of respondents believe government should play the role of a final decision-maker.

5. Although personal perceptions on the important role of the Internet are broad, most respondents agree that it can significantly facilitate education and research.

As it concerns individuals' perspectives on their contributions to the development of the Internet in Togo, respondents were divided; 32.2 per cent would like to participate in decision making, 20.6 per cent would like to do business online, and 25 per cent would like to use their technical knowledge to help others develop. No respondent thought the Internet should be left to develop by itself. Respondents were also divided in terms of the role they play in the Internet today. Although only 3 per cent thought their role will be that of a decision-maker, 31.3 per cent believe they provide technical support in one form or the other and 23.9 per cent play roles as entrepreneurs. A large proportion of respondents believe they are consumers only. Respondents believe education and research (66.7 per cent) is an important aspect of the Internet. Over 25 per cent perceive communication as important. Less than 8 per cent find social networking or entertainment important.

4.4 Future Scenarios

It is important to describe what scenarios are. They are carefully crafted stories that:

- Describe how the future might unfold
- Explore the possible and not the probable
- Challenge users to think about conventional wisdom

The United Nations Environment Programme (UNEP) offers the following parameters: "A scenario is not a prediction of what the future will be. Rather it is a description of how the future might unfold. Scenarios explore the possible, not just the probable, and challenge users to think beyond conventional wisdom. They support informed action by providing insights into the scope of the possible. They also can illustrate the role of human activities in shaping the future, and the links among issues, such as consumption patterns, environmental change and human impacts" (UNEP, n.d.[16]).

This section presents a synthesis of four story lines based on the stakeholder input at a scenarios workshop held during the public multistakeholder consultation forum. Four plausible future scenarios emerged based on a 10-year vision of the future. The various outcomes were influenced by data gathered during the initial West African-wide survey of public perception of Internet policy, which was significantly completed by Togolese stakeholders. The initial survey outcome was presented at the public forum to provide a realistic view of plausible present and potential future states of the Togolese Internet society. The scenarios are:

- The best case scenario
- The worst case scenario
- A government led scenario
- A market led scenario

[16] Policy practitioners could consider examining this *IEA Training Manual*, developed by UNEP and IISD, for a detailed scenario development resource.

4.4.1 Best Case Scenario

Broadband access of at least 100 Mbps is affordable, easy to acquire, ubiquitous and available on mobile devices through wireless Internet zones spread in every part of the city and available in all urban and rural areas. The entire country is covered by a wireless network that has spread similar to existing mobile coverage. At least 80 per cent of public services including government applications and close to 30 per cent domestic activities such as low-level economic transactions (mobile payment services) are conducted online. Eighty per cent of the population utilize the access that is available to them, with at least 50 per cent of students able to access school content from their homes and 80 per cent of schools connected. Issues that negatively impact critical Internet resources, such as availability of IP addresses, are a thing of the past as IPv6 has been deployed; transit cost has been kept local as Internet traffic is routed locally through deployed and functional Internet exchange points (IXPs); and on-demand Internet television and radio abound to address all sorts of programming, local content and entertainment needs. Triple play (data, voice and video) are bundled at an affordable cost to all.

Government facilitates and participates in a broad reaching public policy dialogue space that allows citizens to inform them of their needs and services. E-health and e-governance applications result from these interactions. The policy landscape is favourable to technology innovation and growth.

As broadband access becomes integrated in schools at all levels (primary through tertiary) and across the country, the basis for the Internet as a pillar for development becomes more glaring to government and the people. Local content produced and utilized by the locals continues to grow to as much as 20 per cent. Business and banking become fully Internet enabled and transactions take place on mobile devices. There is a need to stem the growth of online crime because the Cybercrime Brigade has been setup as a preventative action.

4.4.2 Worst Case Scenario

The Internet landscape is dismal. Cyber crime continues to grow at rates unimaginable, pirates rule the Internet and cyber terrorism is prevalent. More illegal content overloads the network, including pornographic images and videos resulting in Internet addiction, an increase of Internet related psychological problems, and a disintegration of the social fabric of society—relationships are particularly affected and social life is ruled more by Internet influences and less by socio-cultural values. No trait of social or cultural reference exists as these have been completely eroded by the Internet. Education suffers a blow and graduate students find it difficult to own an email address or the right to access educational content.

Government make efforts to bring back order to the chaotic Internet landscape as they institute censorship and surveillance as a rule. All Internet users are tracked systematically and as a result privacy is infringed to protect national security. Access from home no longer exists and schools cannot afford connectivity, yet the only other source of access—cyber cafes—has been shut down mostly because of the prohibitively high cost of sustaining their networks but specifically because governments had to respond to the growing chaotic landscape, which it does through social and cultural "indoctrination by propaganda."

Unemployment is high and the rate continues to increase, resulting in acute deprivation. Innovation is stifled and those that have any form of access spend more time engaging in unproductive activities, resulting in a drop in productivity and, consequently, a drop in the economic viability of the few Internet-based institutions that remain. The only service provider is the incumbent Telco, which maintains a monopoly market that restricts privatization and entry by other competent local and international providers. The Internet has remained the same today as it was ten years ago—it is only being sustained by a lingering thread of government surveillance machinery—otherwise, it is long dead.

4.4.3 Government Led Internet

Actions toward "access for all," especially in the area of public service and education, has been taken up by governments, which have continued to expand access to urban as well as rural areas, from 4 per cent 10 years ago, to about 14 per cent through subsidies retrieved from a "universal access fund." Although access is pervasive and available and public access points have been created in rural and urban areas, broadband access that allows for heavy bandwidth applications like voice and video required for e-health applications is not affordable. Quality of service is not guaranteed.

As a result, the network suffers daily hiccups, making it insufficient to address day-to-day economic operations. Jobs are impacted and Internet-based opportunities become less available.

In an attempt to build online trust and confidence, government sets up what appears to be a transparent regulatory framework and institutes laws to protect the network and its users, as threats on individual privacy increases. Cyber crime is "fought" accordingly using government machinery. Surveillance and privacy violations also increase and citizens feel their rights are infringed upon by the government. Freedom of expression and communication is dead and citizens are harassed for their political convictions. Access is controlled and users are regulated at an individual level. In some cases, access to individuals has been censored, mangled or outrightly restricted.

4.4.4 Market Led Internet

The quality of technological goods and services, including Internet access, is at a level where it meets the needs of the industry and for social interactions. Cheap access is obtainable if users can tolerate the influx and network overload of corporate advertisements; otherwise ad-free access is available but at a price. Even though cyber crime continues to grow and there are more threats to privacy and security, government does not interfere with the private sector involved in providing Internet service, apart from creating an enabling environment for it to thrive. As a result, there are no subsidies for Internet access and only areas that are economically viable to these corporations are targeted for deployment, leaving out rural areas. Triple play allowing bundled voice (telephone), video (television) and data (Internet) become more available to those who could afford them, at a rate of approximately US$10 per month.

The employment rate has increased and more Internet and technology jobs are available. Creativity takes off, and new and innovative services abound. There is a free flow of information and knowledge, and e-commerce continues to develop although with marginal "side effects" on the social fabric of society.

4.4.5 Summary of Findings in Scenarios

Participants at the scenarios exercise were explicit about what they would like to see play out in the country over the next 10 years. The following outcomes emerged from the best case scenario:

- Availability of affordable and ubiquitous broadband access on all devices, including mobile phones, in all regions of the country. Broadband should support education and local domestic activities and should facilitate business and banking.
- Government public services should be deployed and made available online, especially in e-health and e-governance applications.
- Government should facilitate and participate in broad public policy dialogue.

The following summarizes the outcomes from the worst case scenario:

- Cyber crime requires a proactive action that if not presently addressed could degenerate toward a collapse of social structures.
- Although government can play a role in curbing cyber crime, this should not involve propaganda messaging or the use of censorship and surveillance techniques. Alternative ways of managing this should be co-jointly developed among all stakeholders.
- Availability of access could improve innovation that would, in turn, contribute to improving employment; however, this will result if more competent local and international service providers can access the market. The barriers for entry should therefore be reduced or completely removed and incentives that encourage local and international business in the Internet sector should be encouraged.

If the Internet was government led, the following outcomes emerged:

- Public service, and access to health, government facilities and education provides the justification for governments to attain "access for all" objectives and to make access available to both urban and rural areas.
- Transparent laws and regulatory framework are needed to build online trust and confidence and to protect the integrity of the Internet in the country.
- In an attempt to address cyber crime, policies should not stifle freedom of expression and communication.

The following summarizes the outcomes from a market led scenario:

- Even though regulatory mechanisms should not interfere with market progress, specific efforts are required that ensure equity in the spread of access to unserved and underserved areas.
- A market led economy will contribute to the growth of innovation and creativity, which will increase employment. Efforts are needed to create such an enabling environment.

In sum, participants would like to see the government and the private sector taking a more proactive role in improving innovation and in making access more ubiquitous. One way of doing this is through making the landscape friendlier to investments in the Internet sector and allowing for broad-based stakeholder participation in establishing policies that affect their economic and social well-being. There is also an opportunity for government to partner with the private sector in expanding broadband access across all the territories through deploying e-health, e-government, and education initiatives.

4.5 Outcomes from the National Public Consultation

At the first ever public consultation on Internet public policy in Togo, discussions centered on the need for a thriving public platform for open consultation on Internet policy that leads to economic, social and environmental development. A number of facts were presented based on a previous survey that was conducted across West Africa and to which a significant number of Togolese respondents completed:

- The cost of access to the Internet remains high and where it is available, it is unaffordable to a majority of people; there are therefore specific implications on educational institutions and the development of the local industry.
- Broadband Internet is not available for the majority of people and businesses in Togo, especially those in the rural areas.
- Security and trust issues related to doing business on the Internet remain predominant concerns for most Togolese.
- Government, public authorities and the private sector have been absent for advancing, facilitating and participating in public policy dialogue, an area in which they play a vital role.
- A public consultation forum for decision making on Internet policy is largely non-existent in the country but there is widespread support for the creation and continued functioning of one.

A session to build the capacity of the various participants was held, through an expert panel, on the following topics:

- Internet Critical Resources Management
- Security and Privacy on the Internet
- Social Networks and ICT Journalism
- Social Networks and Online Citizenship

Participants to the consultation agreed on a number of outcomes:

- There is an absence of the requisite legal and regulatory mechanism to guide, protect and safeguard consumer interests and participation in the use of the Internet.
- High access cost and a weak telecommunication and electricity infrastructure continues to prevent access to a majority of the population, particularly those in rural areas. Public authorities should invest in the improvement of infrastructure related to the Internet.
- The Internet is perceived in a negative light to a majority of people: broadly, as a luxury good in the collective mind of the majority of Togolese, and specifically, as a tool with the potential for corruption for parents, politicians and religious leaders.
- The absence of a public multistakeholder consultative mechanism contributes negatively to the development of the Internet.
- Mobile broadband provides an opportunity to improve access, but this means remains underexplored and insignificant.

4.6 Outcomes from the Global Internet Governance Forum

At the "Multistakeholder Internet Public Policy Dialogue: Lessons Learned and Best Practice Examples of Local to Global Policy Making" organized by IISD at the Nairobi IGF, and involving a rich panel consisting of coordinators of the Canadian, British, Brazilian/South American, East African, and Togo national IGFs, along with the UNDP, certain key messages emerged:

- The relationship between global and local policy making can be examined through a) a subsidiarity approach—that the structure of national and regional IGFs, feeder workshops and thematic themes are significant links to and from the global workshop; and b) the complex weave between Internet public policy and other public policy domains such as security (food and safety), health and education are important aspects that should concern the global Internet community.
- Awareness raising of citizens, consultation with all stakeholders, representation in the policy-making process, partnership by various representative bodies and audits that track transparency and accountability of the policy process are essential elements for effective Internet public policy participation. As such, all processes should be carefully designed and systematically implemented to involve a large body of stakeholders, inclusively cover various geographic locations, respond to unintended outcomes, and be generic regarding stakeholder specificities and local nuances.
- Evidence generated through research and consent of the stakeholders themselves should underpin Internet public policy dialogue.

4.7 Conclusion

In summary, this section highlights the key messages that emerged from the two surveys, the scenarios exercise, the national public consultation and the global IGF.

The key messages from the first survey include:

- Togo's Internet community and those who are concerned about the development of the Internet are predominantly male and fully employed persons.
- Access to speedy, affordable, quality Internet and online trust and security are fundamental, essential and priority concerns for the growth of the Internet and for development in Togo.
- Gaps are evident on the significance of public informal and formal education, particularly on the benefits of the Internet to sustainable development.
- Broad Internet policy reform involving local and international stakeholders is required in all areas and sectors to include existing regulatory frameworks, address the preservation of culture and local content, and provide a legal guide to the local goods and services industry.
- Government is an important and key stakeholder in facilitating Internet public policy in Togo, but all stakeholders are responsible for the evolution of the Internet.

The outcomes from the second survey include:

- Internet access is important for business and education, but the existing cost negatively impacts entrepreneurial growth.
- Government remains a key stakeholder in the development, deployment and monitoring of broadband and mobile broadband access to all Togolese.
- Togolese are ready to conduct and transact business online, but cyber security and online trust issues remain major deterrents.
- Government should play a more active role in creating a public forum for Internet policy dialogue.
- The Internet can significantly facilitate education and research, and it is an important enabler for economic development.

The outcomes from the scenarios exercise suggest that:

- Government and the private sector should play a more proactive role in improving innovation and making broadband access more ubiquitous, through establishing a friendlier investment landscape for both local and international businesses interested in developing the Internet sector.
- E-health, e-governance and education are necessary and sufficient reasons to raise the demand for the deployment of broadband across both rural and urban territories.

The outcomes from the national consultation include:

- The importance of a public consultation forum for decision making, which should include the government, public authorities and the private sector—who have been largely absent from engaging with non-state actors in creating a platform for policy dialogue.
- Public authorities should invest in the improvement of infrastructure related to the Internet to address present weak telecommunication and electricity infrastructures.

The outcomes from the global IGF suggest:

- The need for awareness raising and digital literacies, representation and partnership of all stakeholders in the policy-making process, and transparency and accountability as essential elements for effective Internet public policy participation.
- The importance of evidence and consent as critical elements to informing public policy.

The discussion and recommendation sections will further expand these outcomes.

5.0 Discussion

5.1 Policy Reform in Specific Areas of ICT and Internet Policy

The difficulty in creating a national policy is an important and significant challenge in Togo, evidenced by the various processes that have previously taken place and that have not led to any tangible outcomes. Although the availability of a policy is not a guarantee that ICTs and the Internet can contribute to growth and development in Togo, neither is it a "silver bullet" to its development challenges; it is, however, an important step in at least defining a baseline of the current situation and the elaboration of a road map toward meeting specific developmental objectives. Policies could be more useful if they are aligned with specific targets such as education, health and industry—especially Togo's lucrative phosphate and agriculture industries. Indeed, there are indications from stakeholder perceptions that policies are required in these areas, but the actual systematic processes of creating and implementing them have not been instituted.

It is unclear whether these gaps in policy formulation and implementation are specific to the ICTs and Internet domain alone or if they apply broadly across all sectors, but the outcome may have systemic implications, especially in how the government approaches such issues and whether it needs help in this area. Policy reform may therefore be required, with implications on the development of capacity for government officials in policy making. The situation presents opportunities where new ICT policies can be defined that contribute to developmental goals and advancements.

These will not take place overnight and therefore a quick fix solution may be inappropriate. For small countries such as Togo, there is the likelihood they could become test beds for donor initiatives that may result in unsuitable outcomes with little to no impact. Indeed, the sporadic nature of ICT policy so far has indicated that quick-fix solutions do not produce any tangible outcomes. A protracted and sustained initiative that encompasses a broad range of policy reform issues such as capacities for government officials, policy formulation practices, and monitoring of policy actions may help address the haphazard nature of the process hitherto.

One way of elaborating a long-term approach to defining policies that abide by the principles of sustainable development is through exploring the framework described in the book, *ICTs, the Internet and Sustainable Development: Towards a New Paradigm* (Souter et al., 2010). This framework links three order effects of ICTs: direct, indirect and social effects to economic, social and environmental sustainability. While the ICT policy landscape could develop on its own, in the Togo case, it will provide more valuable, useful and long-term use if it is examined using this framework. For instance, the framework can be used to examine the impacts that ICTs and the Internet will have on the agricultural and phosphate mining industries within the context of economic, social and environmental sustainability. The outcome could be useful in defining more sustainable policies.

Following the review of existing literature, the outcomes of the surveys, the scenarios exercise and the public consultation forum, several specific areas where policy reform could have significant impacts include education, health, agriculture, mining, intellectual property rights, trust and confidence to conduct business online, and in the area of telecom regulation as it relates to access. In more specific terms, and as aforementioned, ICTs and Internet policy reform could have specific impacts in the following areas: industries such as agriculture and mining (specifically, phosphates), in managing and improving production capacity, and in:

- Research, education and knowledge creation, and in the setup of publicly accessible education and capacity building
- Regulation in specific areas of taxation of government services and in the implementation of projects that meet the requirements of the universal service funds
- In the development of an intellectual property regime that recognizes and preserves local culture and content

The outcome from mining phosphates does benefit the agriculture sector, through the production of fertilizers that result in increased crop yields that consequently benefit the economy. The direct application of ICTs and the Internet can provide an opportunity for better integration of these areas through the sharing of information that results in efficient productions that meet local needs or international market demands. Policies should consider how the Internet can improve efficiencies and production outputs.

Support services that result in job creation could emerge as the indirect outcome of the use of ICTs and the Internet in these sectors. Carefully crafted policies are needed to chart these developmental objectives that sufficiently examine existing industries with an aim to making them more efficient and sustainable and that open the landscape for new and emerging industries.

A multistakeholder approach is required to produce such policies as suggested by the various participants to the policy process. The outcomes from the first survey suggested the need to include local, regional and international stakeholders in some policy processes, especially those related to ICTs and the Internet and long-term sustainable development. IISD can play a role here in collaboration with the local technical, social, economic and environmental communities and organizations, and in providing the necessary linkages to global policy interests in these areas.

The private sector is an equally important stakeholder and so is government, where stakeholders (non-state actors and civil society) would like to see a more proactive approach in creating a platform for public policy dialogue.

5.2 Internet Policy and Education

The application of the Internet in these sectors could also have significant impact in research and development and in education. Gaps are evident in the survey of public opinion where primary to secondary school level students, who should be shaped at these formative years, were not included and thus do not benefit from the Internet. The outcomes of the scenarios exercise suggest a plausible future where at least 50 per cent of students can access school content from their homes and 80 per cent of all schools are connected. The Internet can be used to provide quality distance education, especially for schools in rural areas. These objectives are achievable if the demand for education justifies the supplies for bandwidth growth and deployment, especially to rural schools.

The benefits of the Internet to education can be achieved if there is an overarching policy that links national educational requirements with those of the industry. Two important opportunities are evident here:

- The establishment of institutions and mechanisms that support education and broad public awareness on Internet issues. In this case, long-term plans are needed that clearly recognize the educational needs and challenges and that situate the opportunities that may result within a framework of long-term national developmental objectives.

- The establishment of an education industry that specifically aligns well with the local context, underpinned by the specific developmental goals in the agriculture and phosphate mining sectors and the broad national objectives.

The educational related opportunities here should not be restricted to the primary and secondary levels only but should be applicable broadly to the tertiary levels, where they should be better integrated with the industry. One area where there may be significant impact is in the development of specific research objectives focusing on the development of, and benefitting by, the local agricultural and mining sectors and that improve the research capacity of local research institutions. Essentially, research outcomes should be made available to the public, where they can contribute to improving transparency in governance through sharing of knowledge and providing access to information, especially government data. Policies in this area could span a spectrum—from defining revenue goals as a part of national contribution to GDP, to defining the human resource requirements and capacities that are needed for meeting these targets.

Educational programs, but more of a public awareness type, are also required to address the present and future challenges of cyber crime and to build online trust and confidence. Government information and communication mechanisms can play a role here. Similarly, a long-term vision for public awareness on the benefits and challenges of doing business over the Internet is needed. These mechanisms require a communication process that allows citizens to engage with governments in a shared dialogue space. Public interest policies are needed that leverage the traditional media and other forms of communication.

5.3 Infrastructure and Broadband Deployment

All of these developmental reforms and actions, even though underpinned by policy, will not achieve much if the infrastructure upon which these goals are defined is not developed. Access to coastal fibre following the termination of the various undersea cables is an important development that will certainly improve content flow in and out of the country and sufficiently build local businesses enough to contribute to economic growth and development—but only to the extent that inland fibre deployment and distribution is concurrently achieved.

The proliferation of mobile phones despite the dismal but growing distribution of fixed lines and the low levels of broadband uptake strongly suggests that the edge devices needed to access the Internet are in the hands of people, but the underlying infrastructure required to do so are not presently installed. Fixed wire line deployment alone is insufficient to meet the fast-paced development of Internet technologies; the local geographic context and the economic situation of the societies for which these infrastructures will benefit are issues that further complicate infrastructure deployment. For instance, access to household Internet and computing devices could create demand for increased broadband deployment, but only to the extent that the locals can afford them and that the backbone and last-mile infrastructure does allow access using these devices.

The proliferation of mobile as access device of choice presents opportunities for mobile broadband deployment. Even though mobile Internet is being deployed across the country, specifically in urban areas, its uptake is stifled by the subscription costs, which are high for most people. As a result, businesses—especially service providers—may lack the incentives to deploy broadband in these areas where no immediate gains are evident. Efficient policies are required in this area that explore the cost of access to broadband and the long-term gains that will emerge from its deployment.

Broadband distribution should be considered an integral part of this development. The economies-of-scale model that contributed to the growth of mobile in Africa may be equally useful in this context.

One area where there could be significant policy input is in regulation. A public–private cooperation between the service provider and the regulator, involving other stakeholders, for instance, can contribute to addressing the gaps in the deployment of broadband. The existing universal service funds could be utilized to back-stop losses as service providers deploy broadband networks across these regions, as a part of their universal service obligations. After several years of the universal service funds and the goals it has achieved of ensuring appropriate geographic coverage, new policies are needed that maximize the benefits and guarantee efficiencies in these deployments.

5.4 Conclusion

In summary, policy reform is required broadly to address the challenge of policy formulation and implementation in Togo, and specifically to address needs where ICTs and Internet policy could be applied in areas such as education, mining and agriculture. It should also explore the involvement of a broad base of stakeholders, including local and international partners who can provide assistance in creating linkages between local and global policy concerns.

As it concerns education, the Internet can provide content delivery, especially to remote learners, but its benefits to Togo can be significant if its use in education is applied to industries that yield most of its revenues (such as agriculture and phosphate mining), with an aim to making them more efficient and maximizing revenues. Policies are needed in this area, but more specific actions are required that link the industries to the outcomes of education using the Internet. Public awareness is also required to build trust and confidence for doing business online.

The rate of mobile proliferation is an indication of an opportunity for mobile broadband deployment even though the present demand is too low to incentivize supply. A lack of demand should not preclude the deployment of broadband, as it further disadvantages communities that will need it (especially those in rural areas) and defeat broad developmental objectives. The present universal service fund provisions should progress beyond the provision of access; they should be adapted to support broadband deployment.

6.0 Recommendations

Three broad recommendations result from this review of Internet public policy in a developing country such as Togo, recommendations that call upon all stakeholders, including non-state actors and CSOs and, particularly, government and the private sector:

1. There is insufficient knowledge about the economic landscape, especially as it relates to industry, particularly agriculture and phosphate mining, and how ICTs and the Internet can play a significant role in improving efficiencies and contributing to long-term economic and social growth in these sectors. One useful framework that can help further research work in this area is the framework that links the systemic effects of ICTs/Internet to economic, social and environmental sustainability. IISD can help carry out this analysis.
2. Broadband deployment is important for job creation and innovation. The demand for broadband may not be immediately evident and therefore does not incentivize supply, but the national objectives of making education, health and government services more available to both rural and urban people is sufficient incentive to create demand for broadband. Therefore broadband, as well as other infrastructure such as electricity, should be deployed in collaboration with the private sector. The universal service fund is one tool that can help Togo incentivize deployment; its current mandate should be expanded to include last-mile deployment.
3. Public multistakeholder dialogue is an important area of public policy making. Besides ensuring transparency and accountability in the policy-making process, it allows for a shared responsibility in policy making. Governments and the private sector have been missing in this area. A more proactive approach that creates an open platform is required. Government should work with civil society actors in establishing the existing national policy-making consultation process and should invite the private sector to engage in making it useful and sustainable. In order to address the capacity challenges in policy making, from inception to implementation, specific capacity-building measures should be taken. IISD can also work with national governments to define these policy-making capacity requirements as they touch on environmental and economic sustainability.

7.0 Appendix

7.1 Results from the First Survey

Respondent Characteristics

FIGURE 9: PRIORITY CONCERNS OVER INTERNET-RELATED ISSUES.

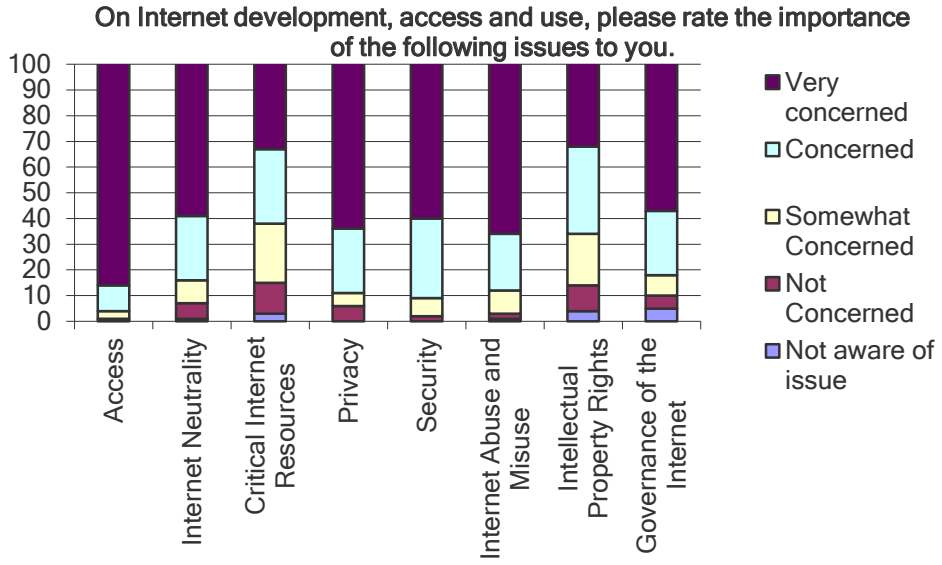


FIGURE 10: SIGNIFICANCE OF INTERNET PUBLIC EDUCATION.

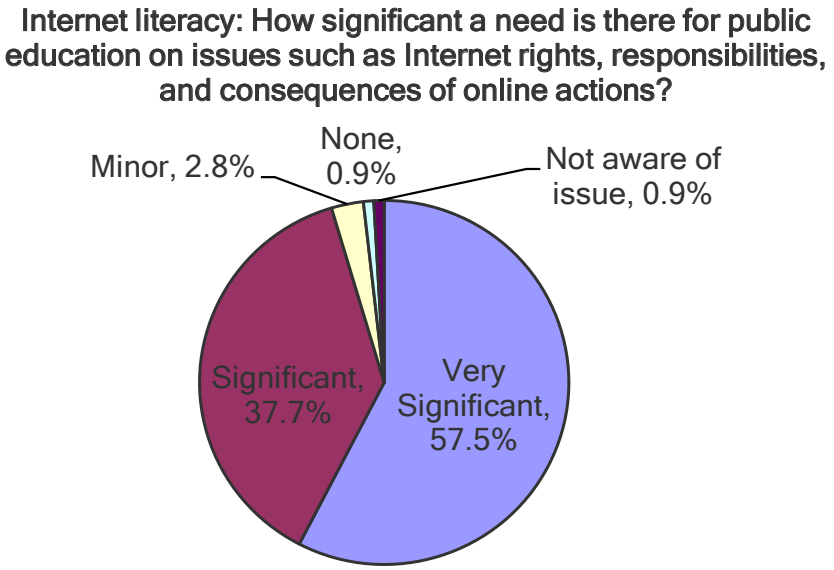


FIGURE 11: ROLE OF THE INTERNET WITH RESPECT TO OTHER POLICY AREAS.

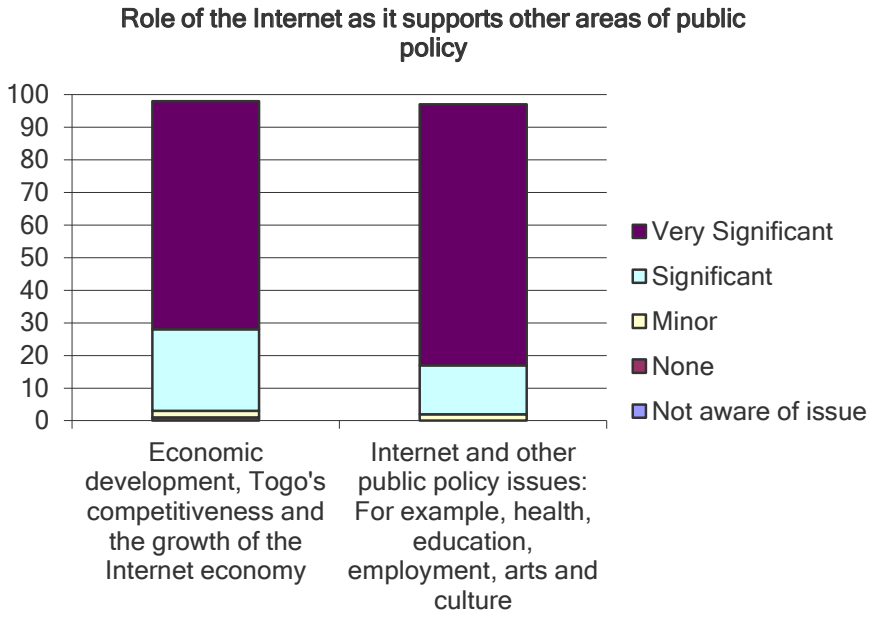


FIGURE 12: ROLE OF THE IMPACT OF THE INTERNET ON THE ENVIRONMENT.

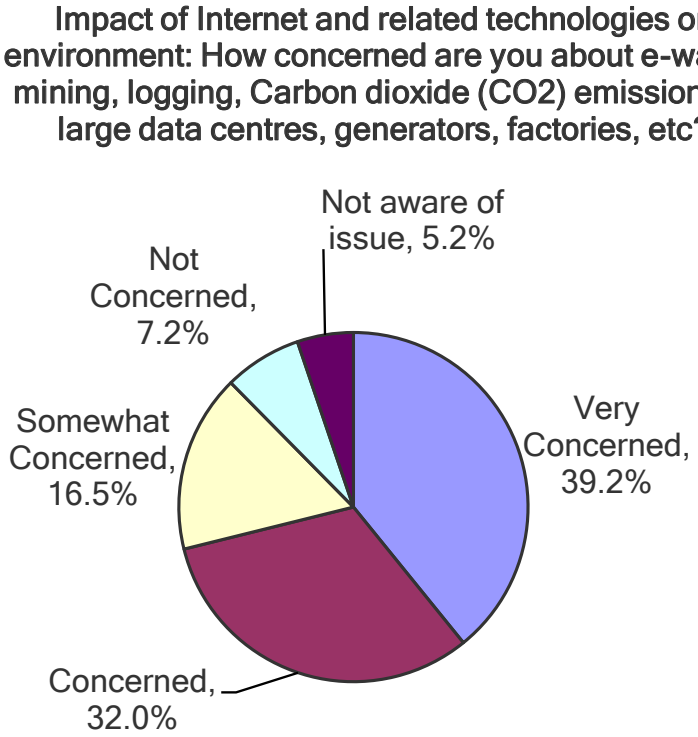


TABLE 6: RELEVANT AND IMPORTANT LOCAL STAKEHOLDERS.

Government departments and ministries	• Ministry of Post and Telecommunications • Ministry of Commerce and the Promotion of Private Sector • Ministry of Arts and Culture • National Agency for Management and e-Administration • The executive arm of the Presidency • Ministry of Industry, Free Zones and Technology Innovations • Ministry of Territorial Administration, decentralization and Local Government • Ministry of Public Works • The National Assembly • Ministry of Security and Civic Protection • PRIMATURE
Consumer groups and associations	• Togolese Consumer Association • Togolese Free and Open Source Software Association • ICT Experts Network (Réseau ExperTIC – Branche Togolaise) • ISOC Togo • ESTETIC Togo • Young Catholics Online • The Organization for the Promotion of the Internet and Mobile • Journalist Network • Chamber of Commerce and Industry • ISP Association • GF2D • REFAMP – TOGO
The Telecommunication Regulatory Agencies and operators	• ARTP • TogoTelecom • Moov Togo • Togo Cellulaire
International Development Organizations	• UNDP • BOAD
Private sector	• Café Informatique and IDS Technologie
Academia	• The University of Lome

FIGURE 13: STAKEHOLDERS RESPONSIBLE FOR GROWTH OF THE INTERNET IN TOGO.

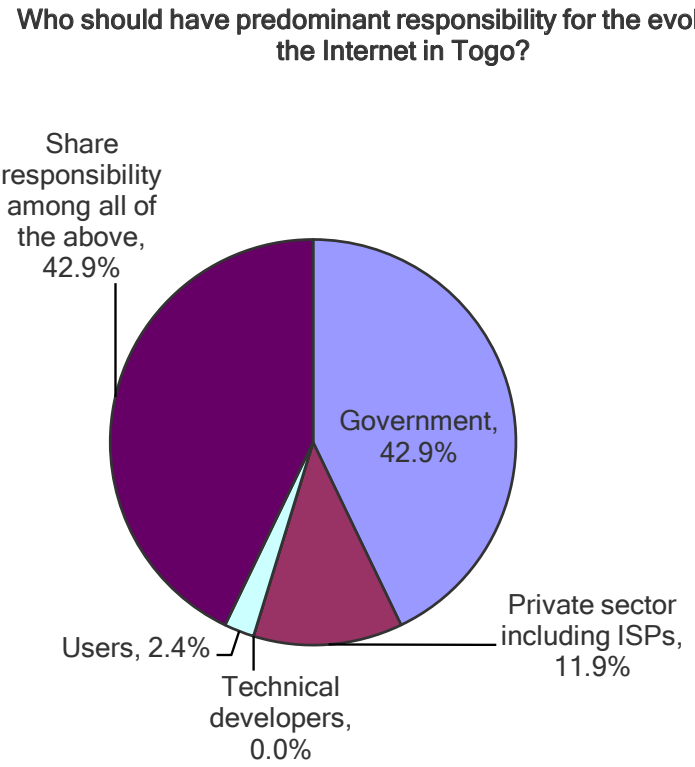


FIGURE 14: ENGAGEMENT WITH OTHER WEST AFRICANS ON THE EVOLUTION AND USE OF THE INTERNET.

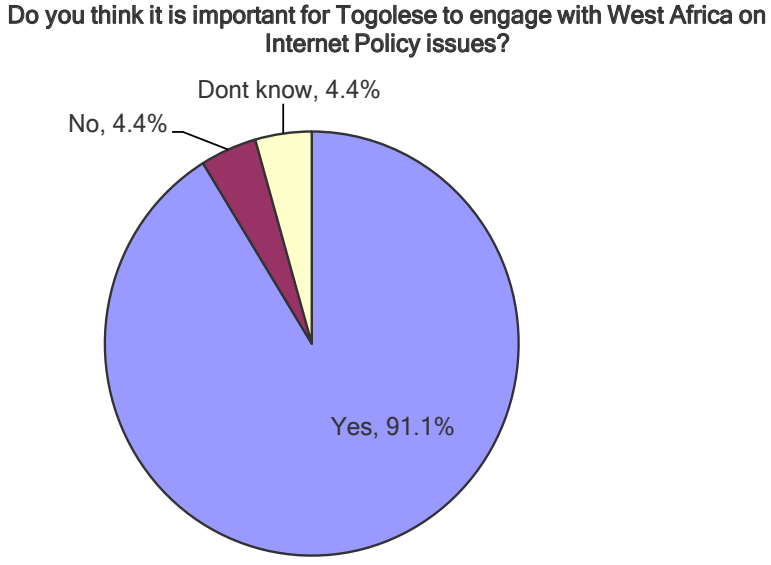
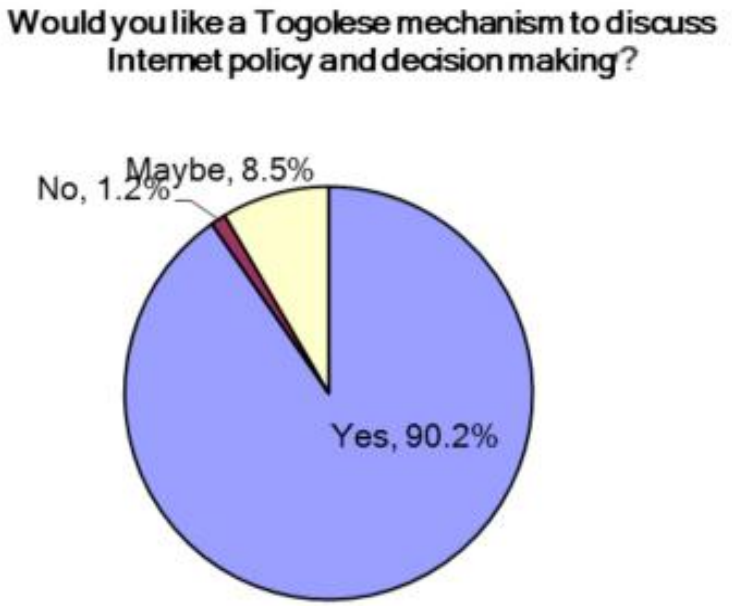


TABLE 7: RELEVANT AND IMPORTANT EXTERNAL STAKEHOLDERS.

International development organizations/agencies	• ITU • UNDP • La Francophonie • Internet without Borders • Panos Institute of West Africa • Oneworld UK • Radio France International • IDRC • Women's World • USAID • Akendewa Cote d'Ivoire
Regional and continental economic commissions	• NEPAD • UEMOA • African Union • ECOWAS • European Union • Economic Commission for Africa • United Nations • UNESCO • BOAD • ARTAO
Private sector including telecom operators	• Satellite operators • Orange • MTN • GLO • Microsoft • France Telecom • Google • CISCO • eTriLabs Benin • April International • SFR (a French mobile company)
Internet technical community	• ISOC • AfriNIC • ICANN • Réseau ExperTIC • FOSSFA • AFNOG • IANA

FIGURE 15: PREFERENCE FOR A LOCAL MECHANISM TO DISCUSS INTERNET POLICY AND DECISION MAKING.



7.2 Results from the Second Survey

FIGURE 16: MOST PREFERRED INTERNET ACCESS DEVICE.

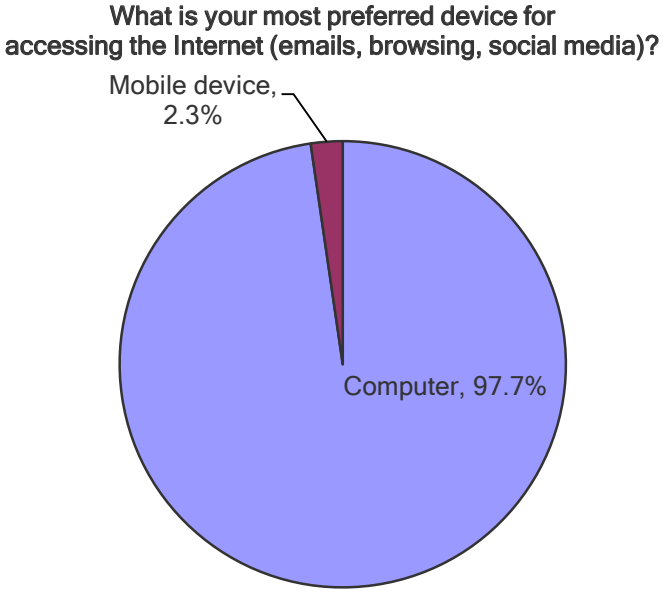


FIGURE 17: LOCATION MOST OFTEN USED TO ACCESS THE INTERNET.

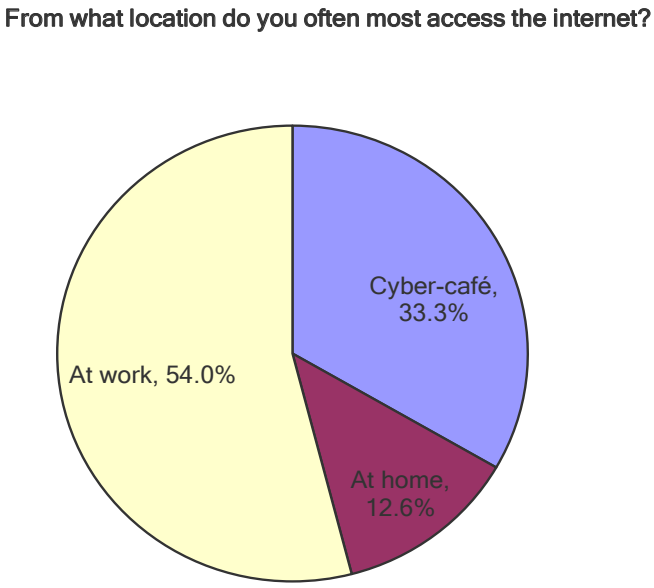


FIGURE 18: PREFERRED MODE AND LOCATION FOR ACCESSING THE INTERNET.

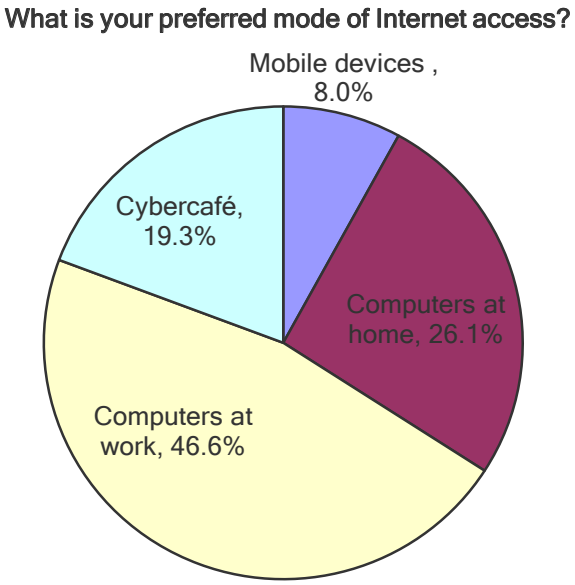


FIGURE 19: IS THE COST OF INTERNET ACCESS APPROPRIATE FOR BUSINESS AND EDUCATION?

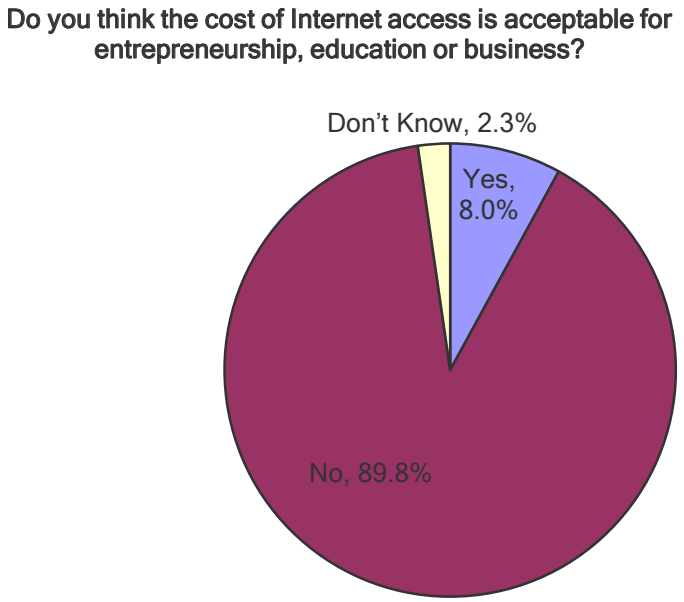


FIGURE 20: AVAILABILITY OF MOBILE BROADBAND IN TOGO.

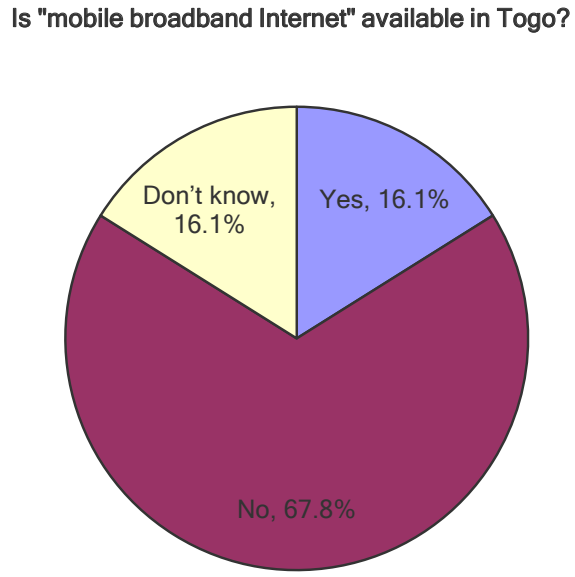


FIGURE 21: IMPORTANT STAKEHOLDERS REQUIRED FOR THE DEVELOPMENT AND DEPLOYMENT OF BROADBAND.

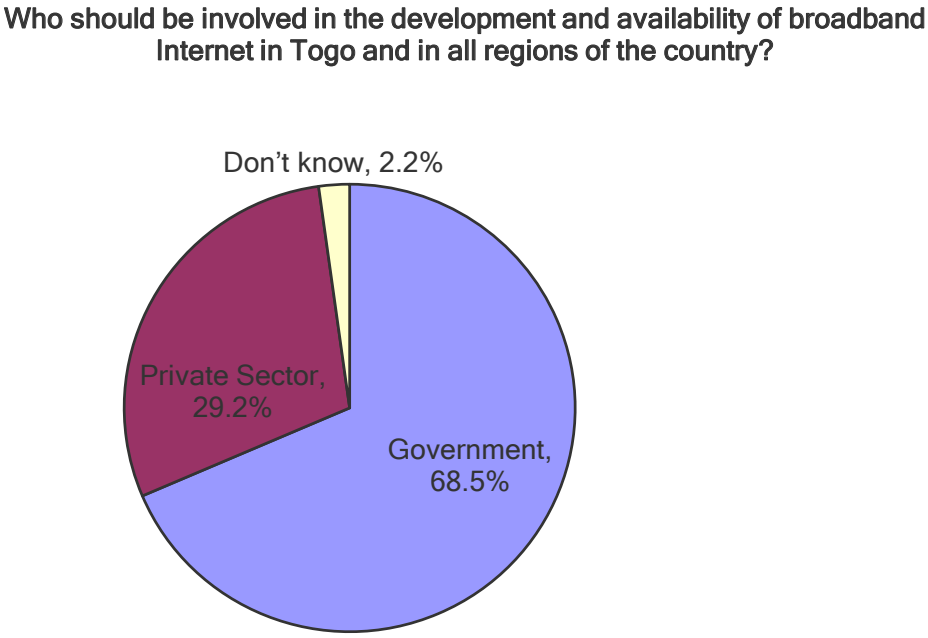


FIGURE 22: SHOULD BROADBAND BE SUBSIDIZED?

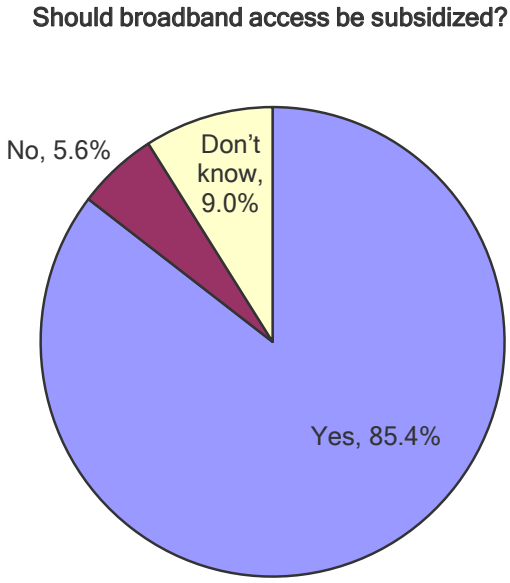


FIGURE 23: ESTABLISHMENT OF AN AGENCY TO MONITOR BROADBAND ACCESS AND QUALITY.

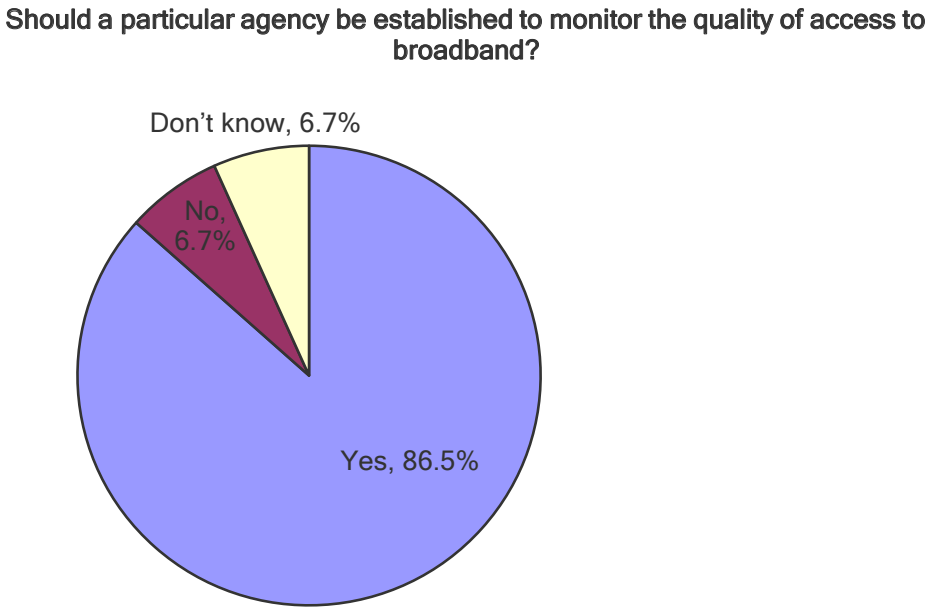


FIGURE 24: KNOWLEDGE OF THE ECOWAS TEXT ON CYBER CRIME AND PERSONAL DATA PROTECTION.

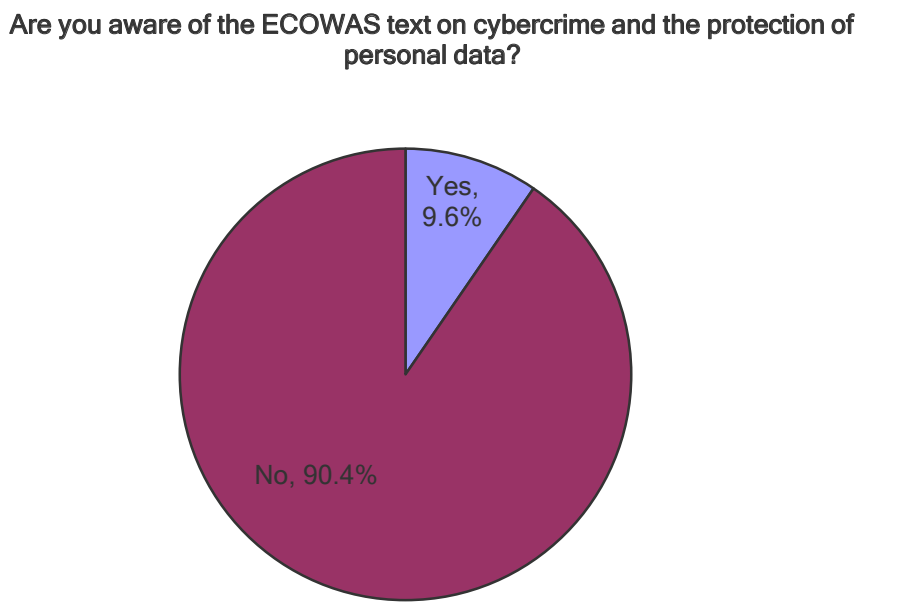


FIGURE 25: EXISTENCE OF A LOCAL LEGAL FRAMEWORK FOR PERSONAL DATA PROTECTION.

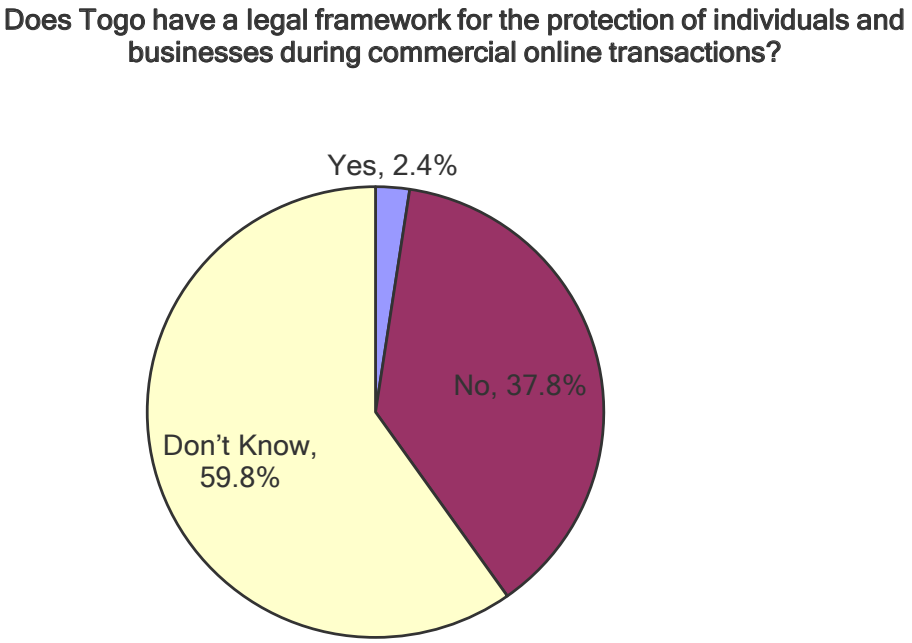


FIGURE 26: LEGAL FRAMEWORK REQUIRED TO BUILD CONFIDENCE FOR ONLINE TRANSACTIONS.

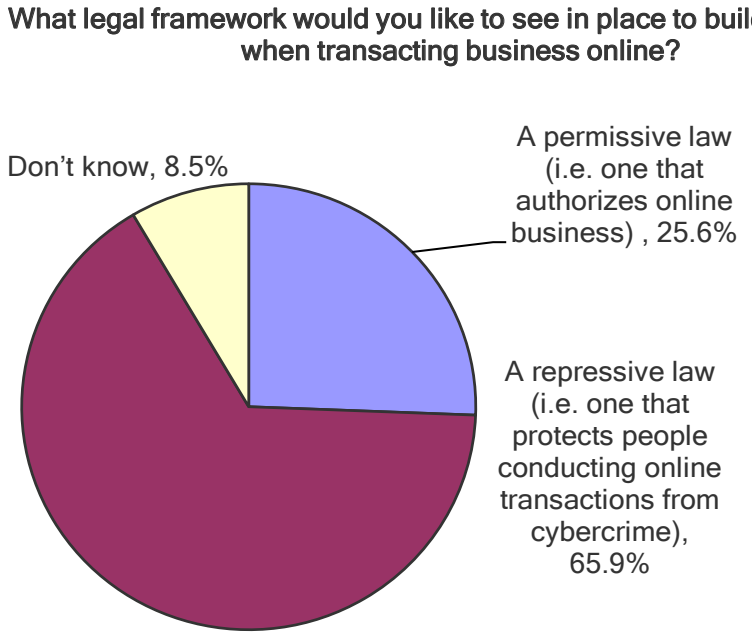


FIGURE 27: READINESS TO TRANSACT BUSINESS ONLINE.

FIGURE 28: CONFIDENCE TO GENERATE ONLINE REVENUE.

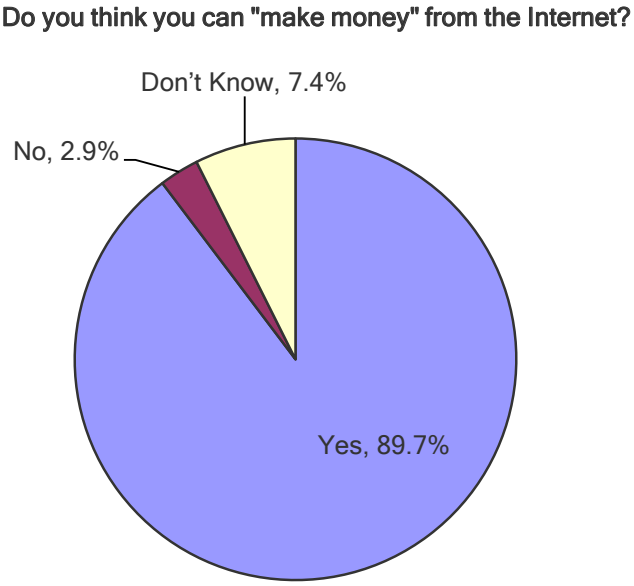


FIGURE 29: PRESENCE OF ANY MULTILATERAL PUBLIC POLICY PROCESS.

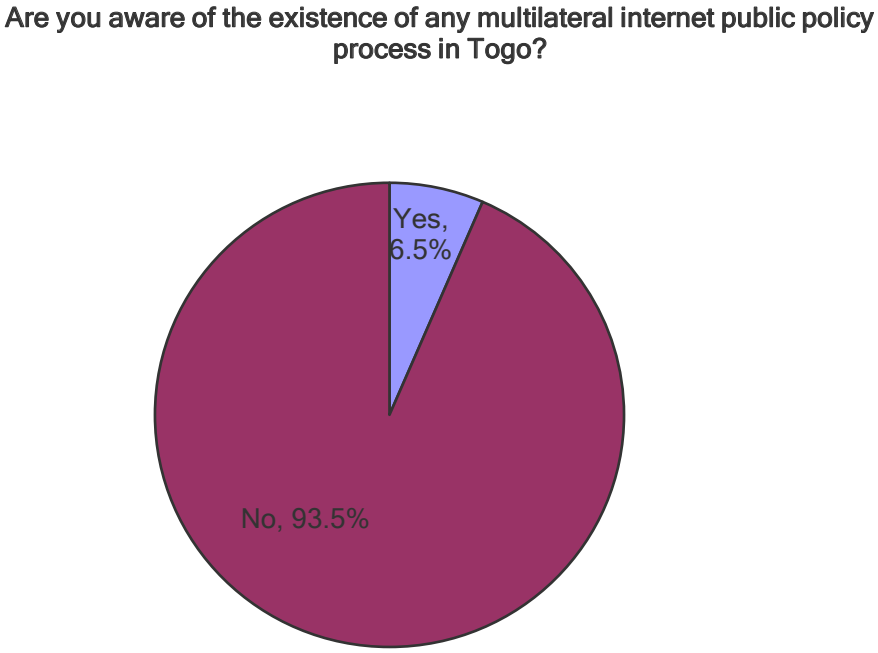


FIGURE 30: APPROPRIATE MECHANISM FOR INTERNET PUBLIC POLICY.

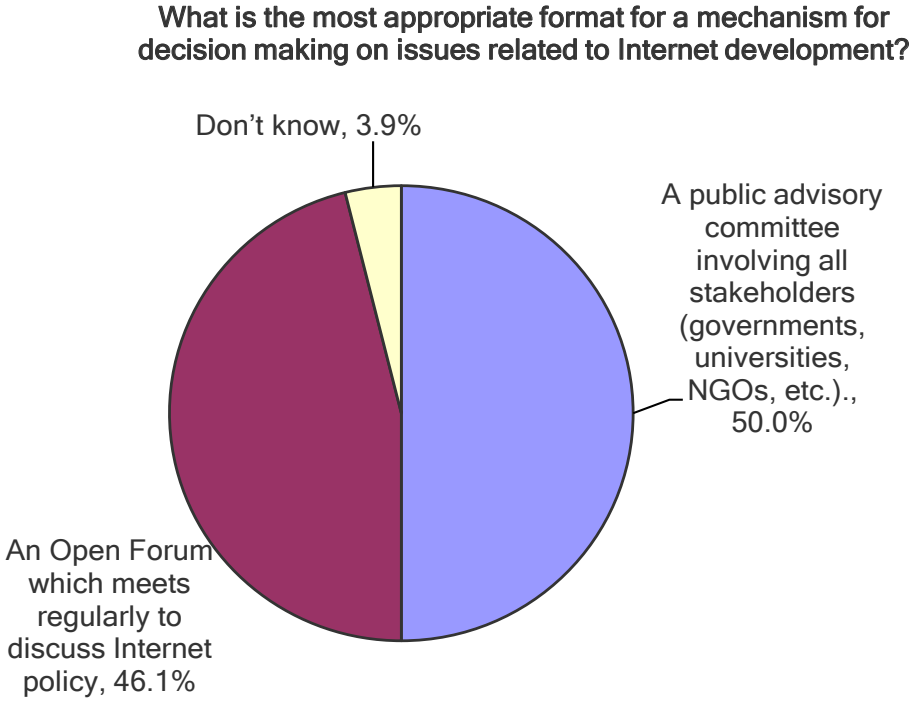


FIGURE 31: ROLE OF GOVERNMENT IN DECISION MAKING.

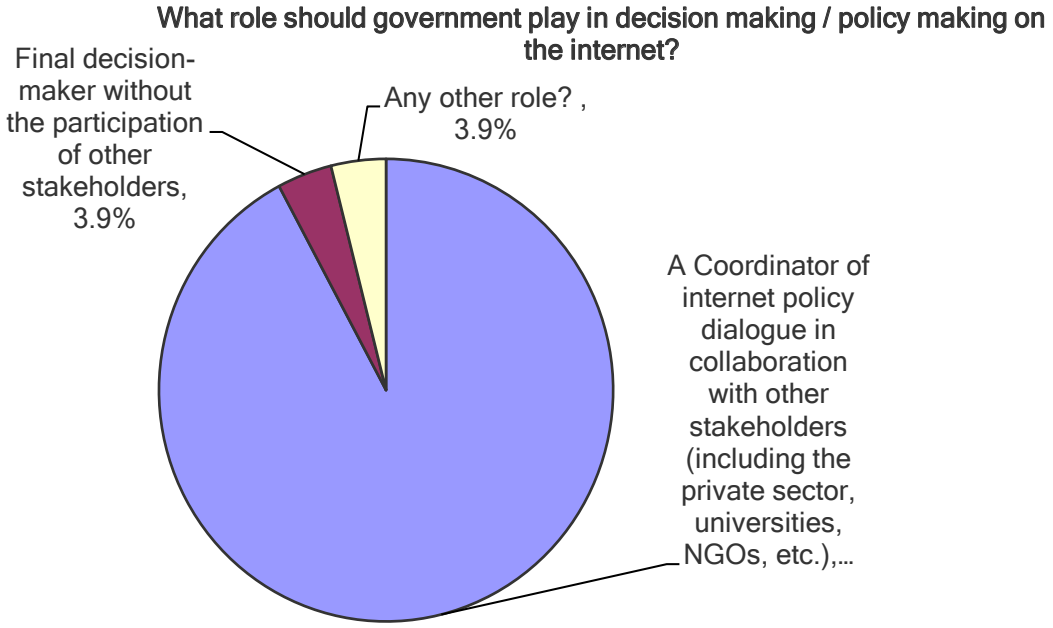


FIGURE 32: PARTICIPATION OF THE REGULATOR IN INTERNET POLICY.

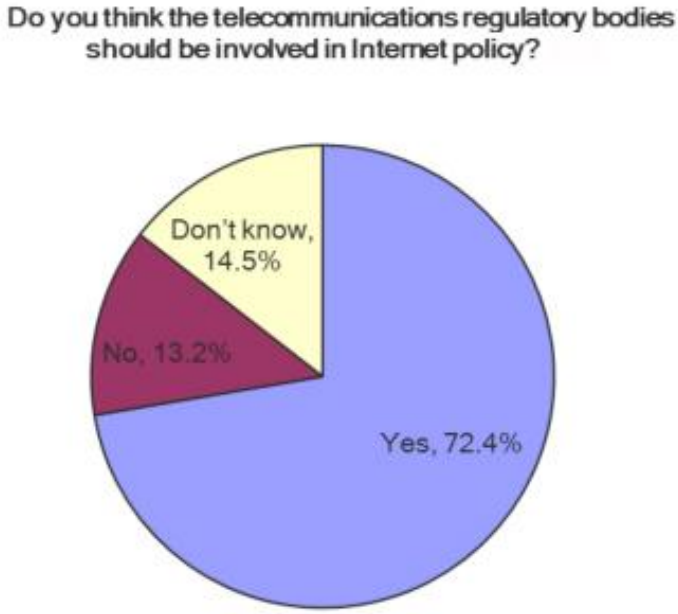


FIGURE 33: INDIVIDUAL CONTRIBUTION TO THE DEVELOPMENT OF THE INTERNET IN TOGO.

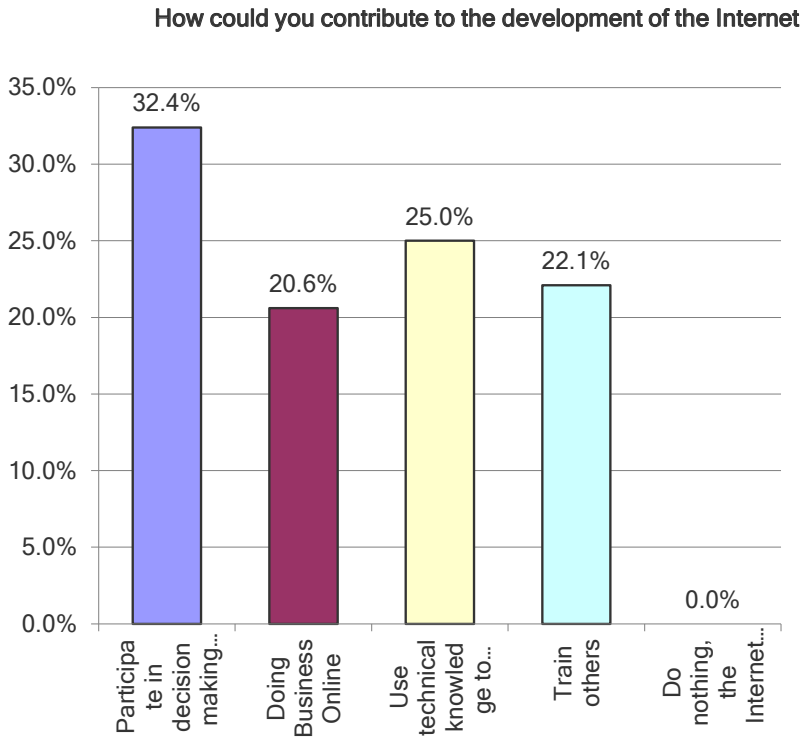


FIGURE 34: PRESENT ROLE ON THE INTERNET.

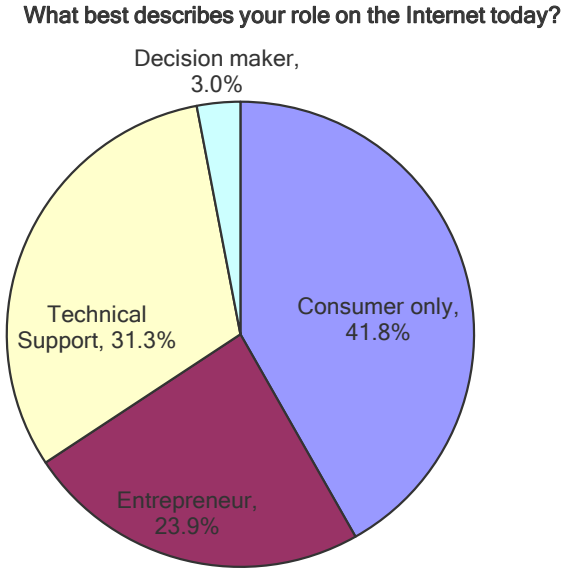
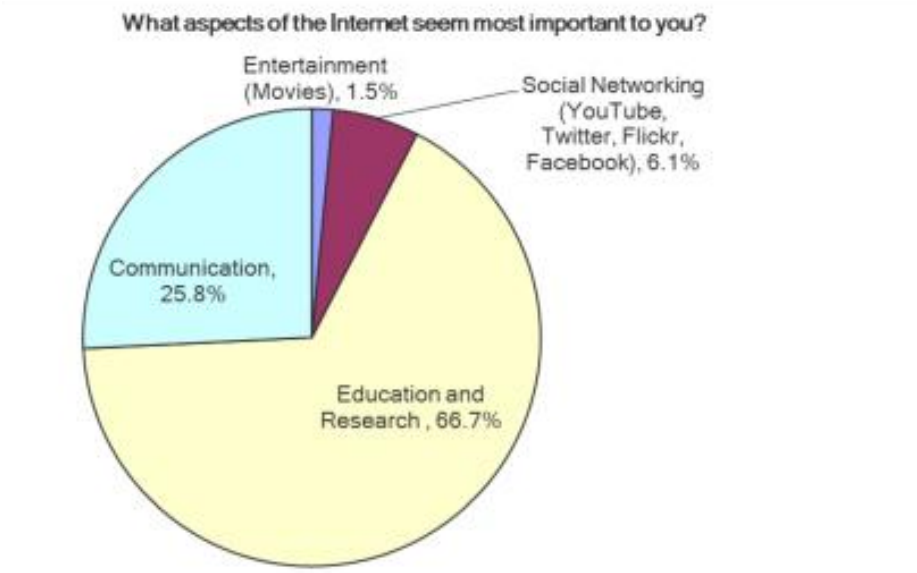


FIGURE 35: MOST IMPORTANT ASPECTS OF THE INTERNET.



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