Measures concerning the promotion and use of Multilingualism and Universal Access to cyberspace

Development of Multilingual content and systems

To alleviate language barriers, Ministry of Information and Communications (MoIC), have initiated measures, among others, to include the Dzongkha[1] localization, which is capable of computing local language. Currently, it is in the process of rolling it out throughout the country. Training of the trainers with support from PAN Asia (IDRC) has been carried out. The second project will focus on providing training for people both in the government and private sectors, including the village communities. This will be carried out in collaboration with the community information centers (CIC), being established in the Gewogs[2].

With regard to the issue of language survival in cyberspace, effort has been taken by the Ministry to promote the local language on the net. To this effect, Dzongkha has been developed based on UNICODE. Most of the websites will have their contents in local language. Furthermore, web address is also under translation.

The Ministry has also developed an open-source platform (Drukpal), where people can post local content in local language.

Facilitating access to networks and services

1. Community Information Center

Access to information plays a crucial role in improving the living conditions of the poor, and promotes integration of isolated communities into the global economy. Having recognized this importance of providing and facilitating affordable access to information and communications services at all levels of the Bhutanese society, Government has initiated establishment of Community Information Centers (CIC) in the Gewogs. CICs provide access to basic services such as telephone, fax, computers, TV, and Internet. Furthermore, CICs can be equipped to provide telemedicine, distance education, news distribution, government services, and business opportunities. Through the

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[1] The national language of Bhutan
[2] Block level

CIC, rural people can find information and knowledge for livelihood improvements and self-empowerment.

As of December 2006, 37 CICs have been completed, and by the end of 10th FYP (2008-2013), 300 CIC would have been established all across the country, with each Gewog having a minimum of one CIC.

Other government agencies such as Ministry of Agriculture, Ministry of Labour & Human Resources and Ministry of Trade & Industry are also extending their full cooperation to this initiative.

2. Universal access fund

A major barrier to achieving universal access in Bhutan is the significant amount of capital investment required to extend ICT services into rural and under-served areas where harsh geographical terrain and sparsely distributed population pose formidable difficulties. Lack of stable commercial electric power supply in rural and isolated areas add to the high deployment costs. On the other hand, having realized the importance of providing access to ICT services, the government enshrined the establishment of a Universal Service Fund in the Bhutan Information, Communications and Media Act 2006, with its endorsement in June 2006.

To this effect, with the assistance from the International Telecommunication Union (ITU), a "framework for a universal/public service fund for Bhutan" has been developed. The framework has proposed the establishment of two separate sub-funds: (i) the Universal Access for Telecommunications sub-Fund; and (ii) the National ICT and Media Development sub-Fund, within the broad umbrella of "Universal/Public Service Fund", to ensure tight co-ordination of infrastructure development and service delivery in the telecommunications and other areas of the ICT sector.

The universal access program will contain provisions for supporting the basic telecommunications services, such as voice, and in some cases, basic narrowband internet. Indeed, there seems a widespread support for such a program in Bhutan. Telecommunications operators have expressed their willingness to support universal access by paying the proposed 1% of the adjusted gross revenue levy.

3. Broadband Connectivity

Committed to the development of promoting ICT infrastructure, the Ministry of Information and Communications (MoIC) aspires to ensure a coordinated development of the national network through broadband connectivity to the remotest locations of the country. As a result, MoIC has already embarked on developing the Broadband Network Master Plan, which is near completion. This is crucial in bringing the high-end services closer to the rural population and help in reducing poverty. The efficiency and effectiveness of the community information centers (CIC), telemedicine, distance learning and internet utility in schools will rely heavily on the availability of the broadband connection. Similarly, it will help in the effective functioning of the e-governance and improve overall service delivery.

Development of public domain content

We have now entered the Information Age, where access to and availability of information on time are seen as critical to attaining our development goals and objectives. The Royal Government, thus, fully recognizes the need to promote an information-rich and knowledge-based Bhutanese society.

A policy objective underpinning the Bhutan ICT Policy and Strategy (BIPS), 2004, is to create a Bhutanese info-culture, wherein sharing of information among public agencies, between public agencies & citizens, and among citizens, are seen as a critical element. Hence, as a requirement of BIPS, a policy guideline on information- sharing has been formulated, taking into account the privacy of participants and protecting confidential data. Hence, the guideline addresses information necessary in fulfilling the overall national objective of creating an informed society.

With regard to online accessibility of public domain information, there has been significant improvement over the years. As per the Bhutan ICT Policy and Strategies (BIPS), most of the agencies were able to post their information online by creating respective websites. With regard to publishing of government reports online, more than 75% of the publication has been achieved. This has helped in keeping the people informed of the various activities and initiatives by the government.

Reaffirming the equitable balance between the interests of rights-holders and the public interest

Please indicate what action has your Government taken in order to update the national copyright legislation and its adaptation to cyberspace. Please indicate also how was considered the possibility of encouraging rights-holders and the lawful beneficiaries of limitations and exceptions to copyright and related rights protection to ensure that such limitations and exceptions are applied.

The copyright legislation is with the IPD[3] of Ministry of Trade & Industry. However, a convergent law in the form of Bhutan Information, Communications and Media Act 2006 has been passed by the 85th Session of the National Assembly.

What are the actions planned in your country to give consideration to the development of technological innovations and to their potential impact on access to information?

BIPS is the guiding principle for development of ICT in the country for the time being, with all actions and strategies underpinned within this framework. The detail of the document can be accessed from www.moic.gov.bt

Final comments

What efforts has your Government made to establish a system of continuing monitoring of the implementation of the decisions taken at the World Summit on the Information Society and what time-related goals and benchmarks has your government set in this respect?

With regard to narrowing of digital divide in the country, various measures have been initiated by the government, with the most notable being the formulation of Bhutan ICT Policy and strategies within the given time frame for each goal and strategy.

> ➢ By 2010, to ensure an affordable, fast, secure, sustainable and appropriate ICT infrastructure throughout the country;
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> Strategies:
> a) Develop a plan for a country-wide intranet connectivity to ICT infrastructure, including schools, Geog centers and villages – by 2005; the broadband master plan is being formulated

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[3] Intellectual Property Division

b) Extend government-wide intranet to all Dzongkhags headquarters-by 2008
c) Extend government-wide intranet to all Geogs (blocks)- by 2010
d) Establish multipurpose telecenters/CIC in every Gewog – by 2010
e) Introduce and deploy advanced and appropriate technologies - 2006

What are, according to your government, the main issues and new challenges that need to be further addressed for promoting multilingualism and universal access to cyberspace? Please provide a brief description in your final comments.

A major issue/challenge in achieving universal access to cyberspace in Bhutan is the significant amount of capital investment required to extend ICT services into rural and under-served areas. The mountainous terrain and sparsely distributed population poses formidable difficulties, adding high deployment costs. Unless, there is some external assistance, it will remain as one of the biggest constraints to the development of universal access to cyberspace in the country.

Given the infant stage of ICT development, the rural people are still immature in their thoughts and demand for ICT services. With other pressing needs and priorities, the demand for ICT services becomes only secondary. This poses a threat to the very sustainability of the services. Hence, government support is crucial at this juncture to create as much awareness among the people, and make them realize of the various potentialities attached with ICT. Development of local content will also prove very useful. Secondly, until such time where people feel the need, government has to subsidize the cost.

Hence, it is very difficult to provide connectivity to the rural areas, and even if granted access, the question that arises is whether people will be able to harness the potentialities. Therefore, concerted effort of government is required in overcoming such challenges, and making people realize that ICT is the future for tomorrow.

Acute shortages of technology know-how and skilled personnel also pose formidable constraints in promoting cyberspace and multilingualism in the country.