National ICT Policy - 2015 -

- Policy Proposal for the Government of Cambodia -

September 2009

New National ICT Policy - 2015 -

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Background:

Rapidly developing technological advances in this era have led to multiple convergences of content, computing, dissemination, communication and distribution. Leveraged by human capacity, this has led to the creation of the current popular advantages referred to as 'Information and Communication Technology (ICT)'. Combination of technologies have brought rapid changes in some areas, predominantly in knowledge management, covering aspects of knowledge creation, processing, storage, sharing, dissemination, collaboration and human resource development, in the level of education and training as well as work output and productivity. To overcome the lag in adoption of ICT in the country, the Government of Cambodia has committed to the development of a National Information and Communication Technology (ICT) Policy that will build on existing government initiatives and support in achieving Vision 2015. As a consequence of implementing Policy 2015, it is anticipated that Cambodia will benefit from persistent growth in the digital era, by serving as a key mechanism in the achievement of social, economic, political and cultural transformation within the country.

National ICT Vision, Mission, Goals

National ICT Vision:

> With a unique mélange of historical magnetism and geography, Cambodia is well placed to become a globally competitive, knowledge and information based society, capable of providing ICT-based solutions to enhance sustainable socio-economic development.

Mission:

> To integrate ICT activities in the government (public) and private sectors and ensure national optimal economic and social stimuli through achieving community framework agreements, which includes promoting an awareness against global warming. To provide a conducive framework (legal and regulatory) for public and private infrastructure investments in e-Commerce capacity building, by promoting the growth of national ICT and developing regionally competitive ICT experts.

Goals:

> Creating and providing a national framework and policy that will enable ICT to contribute towards the achievement of national development goals;
> Providing universal services and accessibility to information and communication facilities in the country that will inevitability lead towards global competitiveness in output and productivity.
> Transforming Cambodia into a knowledge based society through the implementation of proper ICT.

I.   Policy Objectives

The ICT Policy-2015 aims to achieve the following objectives:

- Provide a clear ICT legal framework for every citizen and key stakeholders.

- Enhance the national level of awareness as to the role and potential of ICT, with emphasis on sustainable development, in the empowerment of people and in enhancing governance.

- Create a culture of lifetime learning to maximize the existing potential of Cambodian people and accelerate innovation to develop a knowledge based system.

- Reduce the wide gap in living standards between the population living in the capital and those in the provinces, which is closely linked to the existing digital divide of information accessibility (development of basic infrastructure on a nation wide level).

- Increase the competitiveness of national industry with the establishment of an adequate business environment, and improve the quality of life and the access that Cambodian people have to convenient services through the promotion of the application and implementation of appropriate ICT.

- Encourage the development of the national ICT industry by facilitating the widespread adoption of ICT applications and implementation of ICT development.

- Provide the availability of ICT access points in all areas and implement a cost-effective ICT.

- Reduce public administration costs and improve the quality of public services through the application of ICT.

- Promote locally the development of human resources necessary for the adoption of ICT and a national ICT industry.

- Enforce the WID (Women in Development) within the scope of ICT.

- Enforce the awareness of the role ICT plays within the context of global warming, as well as the strong national position of undertaking the measures necessary to stop global warming, as the first AMS (Asian Member State) to initiate such a commitment in its national ICT Policy.

II. Policy Pillars/ Coverage

To achieve the objectives stated above, the ICT Policy-2015 shall incorporate the following measures:

1. ICT Framework

1-1 Develop a national ICT legal and regulatory framework to ensure a national economic and social stimuli.

1-2 Develop measures to achieve the e-ASEAN Framework Agreement, as well as to ensure efforts to keep pace with the ASEAN level of ICT technology through the promotion of a national ICT innovation.

2. ICT Service

2-1 Improve government services through the application of ICT

2-2 Support the use of ICT in the private sector and the growth of e-commerce

2-3 Encourage the growth of a national ICT industry and its links among the ASEAN region

3. ICT Infrastructure

3-1 Develop a reliable national ICT infrastructure

4. ICT Development

4-1 Enhance the level of ICT literacy among the population

4-2 Develop regionally competitive ICT experts and ICT savvy human resources

4-3 Support WID (Women in Development) in the ICT Sector

5. Commitment to Global Issues

5-1 Encourage an awareness of ICT as a tool for fighting global warming

ANNEX 1

Objectives of National ICT Policy for Cambodia

1. Provide a clear *ICT legal framework* for every citizen and key stakeholders.

2. Enhance the national level of awareness as to *the role and potential of ICT*, with emphasis on sustainable development, in the empowerment of people and in enhancing governance.

3. Create a culture of lifetime learning to maximize the existing potential of Cambodian people and accelerate innovation to *develop a knowledge based system.*

4. Reduce *the wide gap in living standards* between the population living in the capital and those in the provinces, which is closely linked to the existing digital divide of information accessibility (development of basic infrastructure on a nation wide level).

5. Increase *the competitiveness of national industry* with the establishment of an adequate business environment, and improve the quality of life and the access that Cambodian people have to convenient services through the promotion of the application and implementation of appropriate ICT.

6. Encourage the development of *the national ICT industry* by facilitating the widespread adoption of ICT applications and implementation of ICT development.

7. Provide the availability of *ICT access points* in all areas and implement a cost-effective ICT.

8. Reduce *public administration costs and improve the quality of public services* through the application of ICT.

9. Promote locally *the development of human resources necessary* for the adoption of ICT and a national ICT industry.

10. Enforce the *WID (Women in Development)* within the scope of ICT.

11. Enforce the awareness of the role ICT plays within the context of global warming, as well as the strong national position of undertaking the measures necessary to *stop the global warming*, as the first AMS (Asian Member State) to initiate such a commitment in its national ICT Policy.

ANNEX 2

National ICT Policy -2015-

ICT Frameworks

1. Develop a **national ICT legal and regulatory framework** to ensure a national economic and social stimuli
2. Develop measures to achieve **the e-ASEAN Framework Agreement**, as well as to ensure efforts to keep pace with the ASEAN level of ICT technology through the promotion of a national ICT innovation

ICT Services

3. Improve **government services** through the application of ICT
4. Support the use of ICT in **the private sector and the growth of e-commerce**
5. Encourage the growth of **a national ICT industry** and its links among the ASEAN region

ICT Infrastructure

6. Develop a reliable national **ICT Infrastructure**

ICT Development

7. Enhance the level of **ICT literacy** among the population
8. Develop regionally **competitive ICT experts and ICT savvy human resources**
9. Support **WID (Women in Development)** in the ICT Sector

Commitment to Global Issues

10. Encourage an awareness of ICT as a tool for fighting **Global Warming**

ANNEX 3

Policy Pillars/ Coverage

To achieve the objectives stated above, the ICT Policy-2015 shall incorporate the following measures:

1. ICT Framework

1-1 Develop a national ICT legal and regulatory framework to ensure a national economic and social stimuli.

Contribute to the development of the Cambodian economy through the strategic national adoption of ICT, achieved by consolidating a system to facilitate this. Overall, divide ICT into key related sectors and encourage the establishment of ICT strategies as well as an ICT legal and regulatory framework for each respective sector, i.e. (e-Government, e-Commerce, e-Industry, e-Education, e-Society, etc.), for the appropriate and effective application of ICT.

Aligned with Cambodia's constitutional stipulation, legislative and regulatory environment, and being consistent with regional and global best practices, it is necessary to establish and maintain an enabling legal and regulatory framework.

Key Point:
To enable the early achievement of the ICT Policy-2015 objectives, the identity of NiDA as the organization in charge of promoting ICT policy shall be recognized, and the partnership between NiDA and other line-ministries shall be enforced. The jurisdiction of each line-ministry and agency related to ICT shall be clarified in detail. Moreover, for each respective field, an ICT policy, strategy and/or an action plan on a short-term and long-term basis shall be developed. These matters shall be included in the ICT legal and regulatory framework.

1-2 Develop measures to achieve the e-ASEAN Framework Agreement, as well as to ensure efforts to keep pace with the ASEAN level of ICT technology through the promotion of a national ICT innovation.

ICT commitments that the Government of Cambodia has made to the international community, especially among the ASEAN region shall be respected. Compliance with international frameworks (such as WTO and WIPO) shall be pursued while prioritizing the e-ASEAN Framework, ensuring a commitment at the regional level.

The set timeframes for national strategies shall comply with those timeframes set for promoting ICT policy. In addition, investments in the development of the necessary human resources shall receive emphasis.

At this time, when the establishment of an ASEAN Economic Community (goal scheduled for 2015) is imminent and new advances in technology and innovation are constant, there is no area in which Cambodia can afford to lag behind in terms of its level of technology. For this reason, gathering information

on new technologies as well as the development of human resources such as ICT engineering and R&D shall be consistently promoted.

These advantages can be accelerated only through the implementation of ICT capacity building in both infrastructure and human resources. In the case of infrastructures, to promote efficient, sustainable national ICT infrastructures appropriate with the majorities needs, and compliant with regional and international standards, with adequate accessibility and reduction of costs as it's primary aim. In addition, it is necessary to increase the quantity and capability of the ICT skilled human resource base in Cambodia.

Key Point:

The most important primary objective for Cambodia is not to lag behind the ASEAN level of ICT development. With respect to the necessary human resources, for the time being, Cambodia needs to rely mostly on international (private and public) support. (This point shall be developed in detail as an ICT strategy.).

However, selecting the appropriate adoption of ICT is one of the 'keys to success' in accelerating the development of the ICT in Cambodia.

2. ICT Service
2-1 Improve government services through the application of ICT

Develop e-Government with a well-established information security system.

By means of this facility, it is possible to provide a considerable amount of information on the country and its government; therefore, facilitating two-way communication between the government and public citizenry or vice versa.

Through the application of ICT, the public administration shall administer their activities more effectively and provide services for the public in a more convenient manner.

The Government of Cambodia shall be responsible for implementing these measures, and ensure that adequate policies are put in place to maintain the national information security system.

The establishment of an e-Government backed by a reliable information security system would also make the government more efficient, effective, trusted and transparent. Moreover, many of its operations and systems could be easily revised.

The public, who will become the first users of e-Government, shall be able to obtain information regarding the public administration and its activities, and e-Government will therefore be established to ensure a greater transparency in Government and as a means for providing services nationwide.

By adopting e-Government, many costs for both the provider and the user could be reduced, productivity of the public administration would be increased and most importantly, enhance inter-individual as well as inter-institutional cooperation, allowing for more effective communications.

Key Point:
Developing and promoting e-Government will increase the accountability of the public administration. However, it is necessary to keep in mind the existence of certain groups that may be adversely affected by the introduction of e-Government.

2-2 Support the use of ICT in the private sector and the growth of e-commerce

Encourage the application of ICT among small and medium enterprises, and develop the necessary basis for an optimal e-commerce environment for business. To successfully achieve this, the necessary legal and regulatory framework shall be established and proactive initiatives taken to encourage ICT adoption.

The definitions and rules regarding digital signatures, electronic commerce and electronic payment are the basics of e-commerce, and as such they shall be part of public campaigns and related information shall be transmitted to the population.

Moreover, the necessary legal environment for e-Commerce shall be developed, and additional incentives for the private sector shall be adopted.

2-3 Encourage the growth of a national ICT industry and its links among the ASEAN region

Foster and develop a national ICT industry (manufacturing and development of ICT-related devices and software applications) to maintain a relatively high level of technology among the ASEAN region.

Key Point:
Jurisdiction of ICT industry development lies with the Ministry of Industry.

Given the prevailing situation, the first step to take is to loosen regulations on foreign capital inflow, along with some additional incentives. Accordingly, the development of a national ICT industry driven basically by foreign capital shall be promoted.

Discussions shall be required regarding whether to mention the partnership with foreign enterprises inside the National ICT Policy.

To engage in technology transfer, the first five years shall be devoted to attracting foreign enterprises to Cambodia, and an environment conducive to technology transfer for the people of Cambodia should be created.

To develop and ensure a supply of human resources based on strict guidelines regulating information security, shall be treated as an urgent priority.

3. ICT Infrastructure

3-1 Develop a reliable national ICT infrastructure

The basic ICT infrastructure shall be developed nationwide to reduce information accessibility gaps currently existing among the Cambodian population.

In particular, the Government of Cambodia shall seek to develop an information infrastructure (network development), as well as applications and services to be delivered through the new infrastructure.

Key Point:

A "meeting opportunity" is basically required to discuss and consider role sharing and coexistence with international institutions and assisting countries.

Moreover, the functions of a Project Implementation Unit (PIU) are urgently required.

4. ICT Development

4-1 Enhance the level of ICT literacy among the population

Towards the development of an e-Society in Cambodia, the key players, namely the Cambodian people, shall be provided with equal opportunities for the acquisition of ICT education. The application of ICT shall also extend to the education field benefiting schools and other educational institutions. The specialized instruction of ICT shall be promoted as well. First, the training of educators with the capabilities to focus on the actual education field shall be undertaken in order to achieve an "ICT education for Cambodian people by Cambodian people". Second, provide facilities to expand and develop the teaching of ICT at all levels of formal and informal education and training in the national system. Third, promote and support ICT training for political decision makers, community and civil society leaders, as well as private and public sector officials. Fourth, give special attention to facilitating new learning systems and ICT access opportunities for women and youth, the disabled and disadvantaged, and illiterate people, in order to address social imbalances.

4-2 Develop regionally competitive ICT experts and ICT savvy human resources

It is strongly demanded to develop a pool of ICT experts and other personnel for the national industry as well as for the sectors where ICT applications are to be implemented.

To maintain a respectable ICT level among the ASEAN region, it shall be necessary to ensure the supply of national ICT experts. Training programs orientated towards the development of experts rich in specialized knowledge and skills shall be strongly promoted, along with the creation of a vast pool of brilliant ICT experts.

To keep up with the efforts of developing an ICT infrastructure and a competitive ICT industry in the country, the training and development of ICT experts is an urgent issue. The Government of Cambodia shall enforce the development of action plans related to the training of experts, both for the short and long-term.

The initial step for the Cambodian Government is to create a position of Government Chief Information Officer (GCIO), to oversee the development of a core human resource of skilled ICT workers within the country, and to raise their status as needs be.

4-3 Support WID (Women in Development) in the ICT Sector

In order to develop a pool of ICT experts for the national industry and related sectors, it is essential to involve within the process, the presence of women. Especially in the ICT field, women are still not being involved as they should. As stated and agreed at the "International Convention on the Elimination of all forms of Discrimination against Women", men and women are equal and therefore shall be equally treated in the work place. As demonstrated in many countries, women are well capable of actively performing in specialist fields.

Cambodia's biggest asset is in its people, therefore assuring the performance of both men and women is crucial for the development of the country as a whole. It would be a waste of good human resources not to utilize women suited to the ICT industry. Furthermore, developing a suitable environment for women to work in is equally important.

The Government of Cambodia shall develop a resource pool of ICT women experts and other personnel. As well, the development of action plans related to the training of women experts, both for the short and long terms shall be encouraged.

5. Commitment to Global Issues

5-1 Encourage an awareness of ICT as a tool for fighting global warming

The Government of Cambodia shall actively pursue initiatives through the development of ICT to combat global warming, which is already at a critical stage. By finding applications for ICT, create a low-carbon society with a reduced environmental footprint.

Specifically, strengthen this commitment to make the private sector, public institutions and general public more aware of the close relationship between the national challenge of ICT applications, and measures to stop global warming.

The Government of Cambodia shall raise its national profile before the international community by means of promoting ICT development as one of their most important measures in their efforts to reduce global warming.

In addition, the effects of global warming (including droughts, torrential rain and floods) represent an urgent issue for the Cambodian people.