



Asian Forum on Information and Communication Technology Policies and e-Strategies

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Lao PDR – Country Report



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ICT DEVELOPMENTS IN LAO PDR

Telecommunication Infrastructure

In the last decade, the Lao telecommunication sector has change quite rapidly. Foreign joint venture investment in the sector started since 1993-94 and with more liberalization has seen increase of players and high growth of subscribers.

With less than 1 percent of Laotian households having a telephone previously, now it is 1.31 percent or 69,863 of fixed line service.

The most rapid changes occur in the 4-5 biggest cities. In rural areas, penetration is 109 districts from a total of 147 districts. (Previous data: 58 districts from a total of 142 districts). As of September 2001, there were 29,545 mobile subscribers and mobile density was 0.25 percent¹, now there are more than 107,635 subscribers or 2.02 percent density. Beside GSM technology, CDMA mobile service will start soon. At the moment mobile service coverage is nation-wide.

Fiber Optic backbone cabling has been installed linking Vietnam, Laos and Thailand, part of the CSC project which has 6 countries involved: China, Laos, Vietnam, Thailand, Singapore and Malaysia. The technology involved is STM-16 (SDH technology with speed 2.5 Gbps). The objective of this project is to link China, the South-East Asian countries to Europe.

Also a Master plan on Telecom infrastructure has been drafted for up to year 2020, with plan for implementation of fiber optics backbone all over the country.

By the end of this year, the section connecting from the North City of Luan-Prabang to Vientiane-Savannakhet-Pakse (South) will be completed.



The Internet

There are still many barriers facing the Internet users in Lao PDR. The main thing is price and quality of access. While there are a number of Internet service providers, each tends to pay expensively for international bandwidth per month, and the cost is pushed towards the users.

Besides, the import tariff plus the other taxes of ICT products such as computer hardware or software is still high (up to 15%), making the cost of those equipments unaffordable to the major population.

ADSL service has just started in the Vientiane capital and is still costly. Most still use modem dialup and lease line with 64K bandwidth.

Promotion and Industry

Considering the ICT industry, although it is nearly non-existent, there is a huge potential for development.

At the moment software development is driven by a small group of people (team of programmers from government or quasi-government organization, IT companies and individuals).

With the preparation for the e-infrastructure in nearly all sectors, there are still very much limited skilled human resources to assist in big infrastructure projects.

A mini-software park with high-tech infrastructure was proposed by the ICT policy drafting team, which would focus on government and as well as private sector e-projects. Sector of focus can include content development for Websites, and the various projects under the e-government programs. It will also be able to provide state-of-the-art training facilities, to further develop the skills of modern waves of system analysts, programmers and Data/IT system administrators.

It will also become a point of contact for international or regional ICT consulting companies who want to invest and search for local pools of resources.



Further stage of course would be the development of software for export. At the moment, there are Lao individuals who work outside the countries for such companies or such activities.

Also with improve telecom infrastructure, Laos can develop services such as call center for Thailand, Malaysia or other countries, since human resource is much cheaper.

For hardware industry, they are already a few Japanese investments in electronic part and component. This can be promoted further and enforced to increase further. Especially with the new special economic zone in Savannakhet and maybe other area, there is lot of possibility that medium scale electronic part and components and even products such as UPS can be setup in those zones with special tax-free privilege. In term of work force, if there is not enough quality blue-collar works, plan can be setup to import workers with gradual replacement, as the local workforce is better trained or qualified.

The government has still to enforce the use, application and training of IT from schools, university and institute and for the entire government ministries and organization. Although a latecomer in term in Internet usage, the government has issue various decree to promote ICT especially the use and application of the Internet Infrastructure.

Beside the infrastructure, promotion in term of contents development both in Lao and English need to increase.

In the next version of Microsoft Office 2003 multi-language edition Lao Unicode characters will also be provide ready to use. Instead of installing third party software such as present (ex: Lao Script for windows version 6.1) users can convert directly from MS Office.

On the open source arena, a project with Laonux in the Faculty of Engineering is also under implementation. But still resource and funding are needed to further the results and to make pilot project for application in government or private sector.



Collaboration between the countries of GMS (Greater Mekong Sub-region) and ASEAN in this area will help greatly in reducing the gap since there are already many successful stories of application of open source in the region. And Linux is becoming the Operation System to choice for many Web infrastructure project.

E-Government

Based on the e-ASEAN framework, the government has promoted tremendously the importance of using the Internet in government institutions. Many ministries have initial stage of Internet access and local area network connectivity and some are starting important e-Government infrastructure project.

There a few IT projects regarding the government, such:

- Intranet for the government: Establishment of a private network for the government, which will cover all the ministries and agencies in Vientiane Capital.
- Computerization of Tax and Customs Department
- Legal/Law information system
- Information management system for the government public administration reform program.

Banking

The national banking system is focusing on its reforming process, with the goal of implementing “Universal banking service initiative” to be completed by 2005-6.

With 3 state banks, main products consist of deposits and corporate loans.

At the moment there are just 2 ATMs in Laos with limited Point of sale (POS) coverage by Thai banks and a newly started Joint Development Bank. Settlements are made in Thai Baht or USD outside Lao PDR.

Steps are taken to start the implementation of basic infrastructure for cashless payments and clearing. Beginning with the infrastructure for ATM and core, continue with POS and merchant acquiring services and later full services like credit cards and clearing.



In a year or two the profile of the banking sector in Laos will change enormously. Tourism is one of the areas that will be the most important target.

ICT POLICY DEVELOPMENT

With assistance and cooperation between the Science, Technology and Environment Agency (STEA), APDIP and UNDP, a National ICT Policy and e-Strategy Task Force has been formulated consisting of all Government ministries, agencies and the private sector to draft the first Lao National ICT Policy and e-Strategy.

Five workgroups has been setup consisting of :

1. Infrastructure and Industry
2. ICT Application
3. Standardization
4. Human Resources Development
5. Legal Framework

A National Consultation has been scheduled for November 2003

WTO AND GLOBALIZATION

Lao PDR has received strong support from ASEAN and the US for accession to WTO.

Normal Trade with the US is also getting a boost with preliminary signing by both governments.

REGULATORY FRAMEWORK

Lao PDR communications sector had developed quite rapidly in the last decade, especially in mobile service, even as most changes occurring in 4 or 5 of the biggest cities. Many districts, in fact, were still not connected- 1.31 per cent of Laotian households had fixed line service. While the ICT industry was virtually non-existent, the potential for development was huge. So far, there was a lack of legal regulations governing electronic signatures, validity of electronic documents, or definitions of computer crimes.



The Ministry of Education defined Internet development, in terms of awareness and education,, although it was ideal if a bottom- up approach was also developed by the government. IT education, in government schools, made available only two academic programs for teachers and students. Though the slack was assumed by the private sector educational institutions, so much was left to be desired: either the slots in those schools were fewer than what the country really needed or only very basic courses were taught. The quality of instruction was also a cause for concern in some schools.

Government, in an apparent effort to modernize itself had plans for the establishment of a government Intranet linking the ministries, agencies, and provincial offices. There were also efforts towards the computerization of the tax and Customs Departments. Enactment of a legal/law information system was also in the works. Lastly, government had also planned an information management system for the government public administration reform program.

The IT sector had been in existence for twenty years, although the development had not been dramatic because of a small urban, computer-literate population. Cost had gone down and in the last 4-5 years, IT had become affordable and reliable.

Because of lacking in funding, the government was dependent on bilateral and multilateral assistance grants. But, in order to ensure proper implementation of the projects government and private sector worked hand-in-hand in a National Committee.

Finally, there must be banking and legal reforms, together with capacity building and government promotion to ensure the success of e- business in Lao PDR.



CONTENT

Major government website includes:

www.moc.gov.la (Ministry of Commerce)

www.mic.gov.la (Ministry of Information and Culture)

www.stea.gov.la (Science Technology and Environment Agency)

www.laoembassy.org (Lao Embassy to USA)

www.bankoflao.com (Central Bank)

www.invest.laopdr.org (Foreign Investment Committee)

PUBLIC PRIVATE PARTNERSHIPS

The IT private sector in Lao PDR was established nearly 2 decades ago. However with a small urban and computer literate population, the development of ICT in the private sector has just been accelerating.

With wireless technology available (802.11a,b,g), growth in this area is increasing rapidly, especially, hotels, guesthouses and other tourist destinations.

With the Banking reform in infrastructure in place, the participation of the private sector will further increase many folds. Technology has changed the world.

Customers, users know that anywhere, anytime convenience is possible, and they want it.

The government will always lead the initiative; decide on the policies and strategies that are jointly design from the National e-Taskforce, to move the country into the map of e-ASEAN. While promoting e-Government for the various ministries, the government is the key motivator, facilitator and promoter for e-Business and e-commerce in the private sector area, within the country, region and globally.

With so limited ICT human resource the partnership between the Public and Private sectors are crucial if not decisive.



CONCLUDING REMARKS

The e-ASEAN framework has become a very important vehicle to guide and streamline the development of ICT for its member countries. Especially for those that still lags behind and with limited resource.

The Development of the human resource infrastructure to assure the success of e-government projects or e-commerce developments is crucial and needs to be take care of with special care to ensure the development of various level and skills from users to administrators and decision makers. So that quality knowledge is transferred and continuously upgraded.

Since the ICT policies have impact on some existing government rules and regulation, close supervision from top leadership into ICT development issue is crucial.

With the Asian ICT economy growing in an amazing speed, the cooperation between the have and the have not is very important, to create a marketplace of growth and wealth for all Nations of the region.