

Internet: Lack of Lao script widens digital divide

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Information Technology officials have applauded Dr Shun Ishizaki, Chairman of the Asian Forum for Information Technology for his recent promise to consider solving problems associated with using Lao script on Internet browsers.

Lao characters were first provided with International Standardisation Organisation codes (ISO) 10646 in 1993 and in 1996 the government issued the Lao national standard of the Lao character set but both of them are different from each other. Currently however, some Lao characters are still unable to be typed or sent via the Internet.

The Lao script, Lao language software, has been created and recently has been upgraded to version five. Unfortunately, the problems persist because Laos does not have its own version of Windows like neighboring countries such as Thailand and Vietnam.

The Lao PDR, Cambodia and Pakistan were admitted as new members of the Asia Forum for Information Technology (AFIT) at its first forum on November 7-8 in Vientiane, hosted by Science Technology and Environment Agency (STEA) and Center of International Cooperation for Computerisation (CICC).

Dr Shun said that now that Laos is a member of the AFIT, it will have an opportunity to share IT development experiences with its members because the forum will be held every year and next year it will be held in Mongolia.

During the forum, Director of Information Technology Center, STEA, Mr Phonpsit Phitsamay asked if the CICC would help solve the problem of Lao characters that do not appear while browsing on the Internet or sending e-mail in Lao language. Dr Shun agreed to consider the Lao request.

The CICC is a non-profit organisation to assist developing countries in their computerisation and it is under the auspicious of the Japanese Ministry of Economy, Trade and Industry. The CICC is actively implementing various cooperation programs with support from its member companies and other organisations.

Dr Maydom Chanthanishin, Executive Director, National Internet Committee said that since Microsoft has not released a standard version of Microsoft Windows for use with the Lao language, a number of the other partial solutions were created to allow the use of Lao with Windows applications. This can be confusing, as these solutions use different coding systems, and some use a keyboard manager to allow the use of the standard Lao typewriter layout with various Lao fonts code. The most important problem in these code tables is that the same character appears in different positions, and that they encode different character sets.

Dr Maydom gave an example, "If we produce a document in Lao language on one computer, then put that file on a floppy disk and take it to another computer, we may just find that we see garbage when we look at the document on another computer, because the internal coding of the fonts on the second computer may be different from that on the first computer."

At present, the unavailability of a Lao language software platform does not appear to be an inhibitor to the use of informatics in commercial enterprises and the public service. Those likely to be able to afford to purchase a computer or educated to a standard to be able to use one are reported to be able to read and write in English. As economic conditions continue to improve and the Government services become more and more widespread throughout the country, including the rural areas, the lack of Lao language applications may become an inhibiting factor in the future, Dr Maydom said.

Today's global society has been connected via the Internet. Individuals are connected with each other and other organisations in every part of the world through e-mails. We also gather global information through Internet. Under these conditions, native culture and language support is important to bridge a "digital divide" of non-English speaking people.

The International Standardisation Organisation and International Electro-technical Commission (IEC) are organising a special joint technical board, called JTC1 for international standardisation activities in the field of Information Technology (IT). There is a special working group for character code sets called Sub Committee Two, Working Group Two, (SC2, WG2). This group aims to create a multilingual environment in computerisation and has the authority on technical decisions on international standards on character code sets.

There are many non-standard Lao character support solutions available in Laos but these solutions are not compatible and not inter-operable with ISO/IEC JTC1 standards even though there is an international standard Lao Script. The cause of non-standard solutions to Lao Script will foster the "digital divide" in the Lao PDR.

Takayuki K Sato, Chief Researcher at CICC Japan said that bridging the digital divide has become a popular goal in many countries and communities today. In terms of technology adoption, "we hope that international standards can help to bridge the

digital divide in Asia." "We also note that the standard development organisations are giving more recognition to de-facto standards. Organizations in Asia need to actively enhance cooperative activities and increase participation in the development of international standards so that they better meet the needs of Asian countries, said chief of researcher."

Mr Takayuki added that the digital divide referred to the gap between people who have access to information technology and those who do not. The concern is that the poorer families without access to information technology would be further marginalised in the IT age. Countries in Asia face a different digital divide because they are forced to use computers using a non-native language, especially English.

While vast software and resources are available in the English medium, non-English speaking countries and racial groups are often left out of such benefits. It has become a large handicap for these users. Mr Takayuki continued to say that it might be almost impossible to overcome this disadvantage, as even if translations were available, the design of the original system is not readily amenable to modifications to accommodate non-western languages.