



**Asian Forum on  
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**Sri Lanka – Country Report**



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## ICT DEVELOPMENTS IN SRI LANKA

- ***Fixed Access Operators, Mobile Operators, ISPS***

There are amongst others 03 Fixed Access Operators, 04 Mobile Operators and 32 Internet Service providers (ISP's).

- ***.lk Country Code Top Level Domain***

Registrations under the Sri Lanka Country Code Top Level Domain .lk and under second level domains are popular with businesses, educational institutions, non-governmental organizations etc. Organizations in Sri Lanka using the Internet, for email, hosting web portals and web servers, etc. have been encouraged by CINTEC to register themselves with the .lk (Sri Lanka) Internet domain. Details are available at [www.nic.lk](http://www.nic.lk). Internet Service Providers (ISPs) in Sri Lanka can support subscribers who have their own domain names.

- ***Domestic Internet Exchange***

The Internet Exchange (IX) in Sri Lanka, routes local traffic in Sri Lanka, thus saving bandwidth on the international circuit. The IX provides an interconnection for member Internet Service Providers (ISPs) to exchange Internet traffic through an agreement and allows them to easily interconnect within Sri Lanka and therefore improve connectivity and service to customers. The Domestic IX was formally launched by CINTEC and the Licensed Internet Service Providers Association (LISPA) in June 2001.

- ***Standards for Electronic Interchange of Data***

Sri Lanka has adopted **ISO 9735 Version 4** as a voluntary Sri Lanka Standard, i.e. Sri Lanka Standard for Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) - Application Level Syntax Rules (Syntax Version No. 4) UN/EDIFACT (United Nations/Rules for Electronic Data Interchange for Administration, Commerce and Transport) comprise a set of internationally agreed standards, directories



and guidelines for the electronic interchange of structured data. ISO 9735 specifies the syntax in respect of UN/EDIFACT.

- **Codes for EDI**

The issue of standardizing of EDI codes for locations and ports terminals has been addressed by Sri Lanka with the involvement of the relevant agencies. The container terminal codes recommended by Sri Lanka have been accepted by the Sri Lanka Ports' Authority and the South Asia Gateway Terminals, and are now uploaded on the UN/CEFACT<sup>1</sup> web site.

## ICT POLICY DEVELOPMENT

The Government of Sri Lanka first recognized the need for the development of ICT through the National Computer Policy of 1983. (COMPOL)

The COMPOL report gave rise to the establishment of CINTEC by Act No. 10 of 1984 as the "*Computer and Information Technology Council of Sri Lanka*". The Science and Technology Development Act No. 11 of 1994 changed the name to "Council for Information Technology" but retained the acronym CINTEC.

The "e-Sri Lanka", project launched in November 2003 was tasked with development an ICT Roadmap for Sri Lanka. The e-Sri Lanka policy resulted in the implementation of the Information and Communication Technology Act, No. 27 of 2003, which ensued in the establishment of the *Information and Communication Technology Agency of Sri Lanka*, (ICTA), repealing the relevant section of the Science and Technology Act which established CINTEC. The ICTA has been operational since 1<sup>st</sup> July 2003. The mandate of the e-Sri Lanka policy is to build a national information infrastructure, create a framework for the promotion of software and ICT enabled industries, re-engineering Government and developing ICT human resources.

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<sup>1</sup> UN/CEFACT – UN/Center for Trade Facilitation and Electronic Business



In 2001 the Government of Sri Lanka also entered into a contract with the Swedish International Development Agency (Sida) and this initiative addresses the drafting an *ICT Policy for the Government Sector* together with the relevant Action Plans for deployment. This Policy is within the context and read in conjunction with the provisions of the e-Sri Lanka Policy.

## REGULATORY FRAMEWORK

- **Licensing**

The international voice telephony sector has been liberalized and more licenses to operate external Gateway services have been issued recently. The new licenses have resulted in a reduction in tariffs for international calls.

The Telecommunications Regulatory Commission of Sri Lanka (TRCSL) has taken action to minimize interconnection disputes and regularize interconnection between operators, by rules were formulated by TRCSL in terms of Sec. 68 of the Telecommunications Act.

The bypass of international traffic by illegal operators is another issue that has been addressed by the TRCSL in recent times. Measures have been taken to formulate rules to curb this illegal activity and a committee vested with investigative and punitive powers has been appointed to deter such illegal operations.

- **Numbering**

A 10-digit numbering plan is currently being implemented to accommodate the increasing demand for fixed, mobile and other services in line with regional and international standards.

Steps have been taken to educate the public and subscribers on the implementation of this plan through awareness campaigns. The TRCSL



has guided the operators in this regards and the operators and the TRCSL are carrying out a coordinated campaign at present.

- ***Universal Service Obligations - Telephones for rural Sub- Post Offices***

The TRCSL is currently taking action to provide telephone services to 595 rural Sub- Post Offices throughout the country that require such facilities urgently.

- ***Telecommunication facilities for people with disabilities***

The regulator has been a facilitator to provide telecommunication access to people with disabilities. Several payphones have been installed at Centers where people with disabilities, live learn or work. At the request of the TRCSL, Braille bills will be provided by the three fixed access operators and special telephone equipment will be installed for hearing impaired at a school for hearing impaired children at an Institution in the Central Province of Sri Lanka.

- ***Mobile Cellular Services***

Studies are currently underway to examine to move to a Calling Party Pays (CPP) regime in Sri Lanka. An international consultancy is in the process of making its final report on this proposal.

The sale of 02 slots in the 1,800 MHz band of spectrum to 02 mobile operators who wish to expand their services is being affected at present. An international consultancy to recommend improvements to the Spectrum Management functions of the TRCSL has recently been concluded.

- ***Legislation on Intellectual Property Rights***

The new Intellectual Property Act No. 36 of 2003 supercedes the Code of Intellectual Property Act No. 52 of 1979 and provides for the protection of software and computer programs, and is fully WTO and TRIPS conformant.



- **Computer Crime**

The Penal Laws of Sri Lanka are founded on principles, which are over a hundred years old and some reform of the law was deemed essential in the areas of computer related crime. A project was therefore initiated examine the Penal Code and to make proposals for substantive criminal law provisions to deal with computer crime, if such laws were not already dealt with under the existing laws. The draft proposals for legislation have now been passed by the Cabinet.

- **Evidence (Special Provisions) Act No. 14 of 1995:**

The Evidence Ordinance enacted in 1895 was inadequate to cope with issues that were likely to arise with modern transactions, which were either assisted by or totally dependent on computers and communications. The existing laws were inadequate to provide for the admissibility of information produced by the use of computers and other electronic and mechanical devices. The work carried out by CINTEC resulted in the Evidence (Special Provisions) Act No. 14 of 1995, which provides for the admissibility of audio-visual recordings and information contained in statements produced by computers, in civil and criminal proceedings.

- **Electronic Transactions**

Sri Lanka has also agreed on the necessity for legislation to facilitate electronic commerce. The issues addressed include types of electronic transactions covered; legal recognition, retention and attribution of data messages; the manner in which requirements for writing, the placing of signatures and an original document can be satisfied in an electronic medium; admissibility and evidential value of data messages; validity of contracts; and liability of third parties, etc. The issue of drafting proposals for legislation is being addressed by the ICTA and Ministry of Justice.



- **Data Protection**

With the advent of the global information society there has been growing concern about the protection of individual privacy. The European Union has introduced Directive 95/46/EC, adopted in October 1995, on the protection of individuals with regard to their personal data and on the free movement of such data. Member States were required to have domestic legislation giving effect to the Directive, and Sri Lanka is in the process of preparing concept paper.

## CONTENT AND APPLICATION

- **Local content scenario in Sri Lanka, and deficiencies**

One of the major impediments to the development and use of the Internet in Sri Lanka, especially into rural areas is the lack of local language content. One of the principal impediments encountered by content developers is the lack of a standard Sinhala (or Tamil) font (character encoding). Although there are many Sinhala fonts available, none of them are ubiquitous. Users who access many Sinhala web sites must install several different fonts to use all of them.

Currently, many fonts in Sinhala and Tamil (the local languages) and applications are available in Sri Lanka. Deficiencies are as follows:

1. Each Sinhala/Tamil package uses its own proprietary standard. Therefore documents, etc. produced using one application can only be accessed using that application.
2. Each package is specialized, e.g., for word processing, and do not integrate with other applications, standard databases, etc. Also, functions such as sorting, etc. are not standardized among applications.



3. Most applications use character representations based on how the characters are displayed on the screen. While this may be suitable for word processing, a character representation based on the logical organization of letters is more suitable for databases, etc.
4. Many of the available fonts are commercial, and need to be purchased at additional cost.

A number of Tamil fonts and applications are produced in India, Sri Lanka and other countries. It is estimated that less than 10% of computers in Sri Lanka use Sinhala or Tamil, and of these almost all are used only for word processing and publishing. There is negligible use of databases, etc. in local languages.

- ***Standard Code for Sinhala and Tamil/Unicode compatible Sinhala fonts /keyboard***

A standard Sinhala font, known as SLSCII, was approved by the Sri Lanka Standards Institution (SLSI) in 1996. However, no popular implementation of SLSCII was achieved.

Unicode was proposed to handle all the world's character sets. Unicode includes provision for many languages, including Sinhala and Tamil,. Most modern computer systems, including Windows XP and Unixes support Unicode. Windows XP supports Tamil directly.

The availability of a high quality, free, and standards-conformant Sinhala font would enable content providers to create Sinhala language content. As a first measure towards this objective, Sri Lanka, through CINTEC, formed a *Committee on Unicode Compatible Sinhala Fonts*.



The Committee has been working on:

- The representation of the Sinhala character in Unicode.
- Keyboard layout and operations.
- Printed and on-screen representation of characters

Sample Sinhala fonts on Windows and Linux are now available.

References: *e*-Sri Lanka Road Map  
Information and Communication Technology Act, No. 27 of 2003  
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