VIII. INITIATIVES FOR E-COMMERCE CAPACITY-BUILDING OF SMEs IN SRI LANKA

BY MS W.M.S.K. SOVIS, ASSISTANT DIRECTOR
DEPARTMENT OF COMMERCE
SRI LANKA

A. Current situation of e-commerce development and its potential in the economy

1. Description of the country

Location: Near major Indian Ocean Sea Lanes
Area: 65,610 sq km
Climate: * Topical Monsoon, Northeast monsoon (December to March)
         * Southwest Monsoon (June to October)
Population: 19,408,635 million (July 2001)
Population growth rate: 87 per cent (2001)
Literacy rate: 90 per cent
Unemployment: 7.6 per cent
GDP growth (rate): 5.6 (2000)

2. The current status and prospects of e-commerce

(a) E-commerce awareness among government

The telecommunications sector in Sri Lanka was at first a state owned department. The department was converted to a corporation and regulation was introduced in 1991. The Sri Lanka Telecommunications Authority (SLTA) was created by an Act of Parliament in 1991. It was converted to a Commission in 1996. The dominant operator Sri Lanka Telecom (SLT) was privatized in 1997 with the government of Sri Lanka disposing of 35 per cent of the shared to the NTT Corporation of Japan. Licenses were issued to two operators for fixed access telephone services using WLL technology to compete with SLT. At present there are also four cellular operators, six facility based international data transmission providers, twenty-two licensed ISPs and two licensed pay phone operators.

The new National Telecom Policy recommends the support for the establishment and promotion of the Sri Lanka information infrastructure and includes focus on new ICTs such as the Internet and e-commerce. A significant growth can be seen in ICT sector in Sri Lanka.

In order to develop information technology, the Council for Information Technology (CINTEC) was established under an act of parliament in 1984. CINTEC is the apex body on information technology
in Sri Lanka. CINTEC has been involved in the development of e-commerce in Sri Lanka. It has several sub-committees and one of them is on law and computers.

This institution came under the purview of the Ministry of Telecommunications and Information Technology when the government was re-elected in October 2001.

(b) Usage trend of ICT

The attitude of communities is changing with the introduction of information technology at all levels. It is now used extensively in schools, universities, private and government organizations, banks, journalists, and business organizations. This is a very important aspect of the development of e-commerce in Sri Lanka. A limited number of the organizations are using e-commerce for their international business activities. In Sri Lanka, the key developments in the use of Internet applications (for commercial purpose) began in the mid-1990s. The business community of the country started to gradually experience applications such as online merchandising, stock trading, banking and information database. These applications promote the e-business culture locally. There is a growing electronic marketplace in Sri Lanka and e-business transactions exist between business to business, business to consumer, business to government according to researchers. Sri Lanka is also in the process of establishing an Electronic Data Interchange Network, which would link up all key public organizations. This development will help to the penetration of an e-business environment in Sri Lanka.

(c) Growth of the sector

The growth of the telecommunications sector has given the foundation for developing the e-commerce industry in Sri Lanka. Within this improvement, e-commerce has received the attention of consumers, business persons, journalists, private and government organizations during the last few years. It is a new trend in the policy agenda of Sri Lanka. With the development of technology and Internet applications the e-commerce operations are becoming very fast, cheap and simple. The growth of the telecom sector is given in the table below.

<table>
<thead>
<tr>
<th>Services</th>
<th>Number of subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireline telephones</td>
<td>254 500</td>
</tr>
<tr>
<td></td>
<td>315 241</td>
</tr>
<tr>
<td></td>
<td>455 598</td>
</tr>
<tr>
<td></td>
<td>580 199</td>
</tr>
<tr>
<td></td>
<td>653 144</td>
</tr>
<tr>
<td></td>
<td>708 200</td>
</tr>
<tr>
<td>Cellular mobile telephones</td>
<td>71 029</td>
</tr>
<tr>
<td></td>
<td>114 888</td>
</tr>
<tr>
<td></td>
<td>174 202</td>
</tr>
<tr>
<td></td>
<td>256 655</td>
</tr>
<tr>
<td></td>
<td>451 269</td>
</tr>
<tr>
<td></td>
<td>667 662</td>
</tr>
<tr>
<td>Radio paging</td>
<td>10 721</td>
</tr>
<tr>
<td></td>
<td>10 829</td>
</tr>
<tr>
<td></td>
<td>10 511</td>
</tr>
<tr>
<td></td>
<td>10 300</td>
</tr>
<tr>
<td></td>
<td>7 009</td>
</tr>
<tr>
<td></td>
<td>6 535</td>
</tr>
<tr>
<td>Internet and e-mail</td>
<td>2 504</td>
</tr>
<tr>
<td></td>
<td>10 195</td>
</tr>
<tr>
<td></td>
<td>18 984</td>
</tr>
<tr>
<td></td>
<td>25 535</td>
</tr>
<tr>
<td></td>
<td>40 497</td>
</tr>
<tr>
<td></td>
<td>61 532</td>
</tr>
<tr>
<td>Public payphones</td>
<td>3 002</td>
</tr>
<tr>
<td></td>
<td>3 682</td>
</tr>
<tr>
<td></td>
<td>4 761</td>
</tr>
<tr>
<td></td>
<td>5 799</td>
</tr>
<tr>
<td></td>
<td>8 222</td>
</tr>
<tr>
<td></td>
<td>7 281</td>
</tr>
<tr>
<td>Trunked mobile radio</td>
<td>463</td>
</tr>
<tr>
<td></td>
<td>467</td>
</tr>
<tr>
<td></td>
<td>513</td>
</tr>
<tr>
<td></td>
<td>511</td>
</tr>
<tr>
<td></td>
<td>528</td>
</tr>
<tr>
<td></td>
<td>504</td>
</tr>
<tr>
<td>WLL telephones</td>
<td>527</td>
</tr>
<tr>
<td></td>
<td>26 381</td>
</tr>
<tr>
<td></td>
<td>67 931</td>
</tr>
<tr>
<td></td>
<td>91 717</td>
</tr>
<tr>
<td></td>
<td>114 267</td>
</tr>
<tr>
<td></td>
<td>121 082</td>
</tr>
</tbody>
</table>

There has been a rapid growth in the telecommunications sector as a result of the policies adopted by the government. It has influenced the development of the telecommunications infrastructure and country’s economy. There are more than 800,000 fixed access subscribers with a teledensity of four. The waiting list has reduced considerably and there is a significant development in network rollout and quality of service during the past few years. The mobile sector has also shown a rapid expansion during the last few years. The operators are covering more and more rural areas and as a result subscribers in rural areas are also getting more connections.
(d) **Legal and regulatory framework**

CINTEC has a subcommittee on “Electronic Commerce and Law” to carry out research on legal implications of e-commerce and recommend proposals for legislation in Sri Lanka. CINTEC’s IT Law Center is engaged in the formation of proposed laws on computer crime, dishonest, misappropriation of property and fraud. CINTEC is in the process of drafting the Electronic Transaction Law. The other research carried out by the Law Center of CINTEC are in the areas of data protection, Reform of Intellectual Property Laws for the protection of computer software, EDI and Electronic Commerce, Electronic banking and Digital cash, Internet and the law. CINTEC provides advice and assistance to the private sector on IT Law issues and also functions as the network information center for the 1 k domain registry for development of ICT sector.

The CINTEC Committee on Law and Computers has carried out following work:

- **Evidence (Special Provisions) Law:** Drafting of legislation for the admissibility of evidence produced by computers.
- **Computer Crime:** In 1994, CINTEC initiated a project to examine the Penal Code and to make proposals for sustenance criminal law provisions to be dealt under the existing law.
- **Legislation on Electronic Commerce:** Preparation of draft legislation to facilitate electronic commerce.
- **Data Protection:** The Committee on Law and computers has also initiated the drafting of a proposal for legislation on data protection.

(e) **Financial framework**

The EDI is being used quite extensively by the financial sector in Sri Lanka. EDI does not use the Internet as the operating platform. It uses private platforms. Banking institutions in Sri Lanka use EDI predominantly for financial services. Those services are fund transfers using society for worldwide inter bank financial telecommunications (SWIFT) system, automated teller machine services and consumer banking.

CINTEC and the Sri Lanka Export Development Board (EDB) first initiated work in the area of EDI in the mid-eighties. These two organizations held several seminars at that stage to promote EDI. The Sri Lanka Ports Authority (SLPA) commenced developing EDI activities in 1986 with MARITIME information network – MARINET, which was finally implemented in 1989/1990. All shipping agents involved in container handling activities are connected electronically with the SLPA computer though the MARINET system. In May 1995, CINTEC established a working group with representation from over 20 organizations, to function as a forum on EDI.

The discussion at the above forum lead to the establishment of the national EDI Committee in August 1995. The EDI Committee was recognized as a National body/focal point in January 1996 with technical, administrative and financial support from CINTEC. The National EDI Committee worked towards the establishment of Sri Lankan EDI Network Services (Private) Limited (SLENS), which was incorporated in 1977. Sri Lanka became a member of Asia EDIFACT Board (ASEB), now designated as the Asia Pacific Council on Trade Facilitation and Electronic Business (AFACT) in June 1995.

(f) **Physical infrastructure**

There should be excellent data communication infrastructure, high-speed Internet connections and fast PC’s to develop the e-commerce sector. The competition in the telecommunications sector has helped a lot in developing the infrastructure facilities. The telecommunications facilities are developing
at a slower pace in rural areas than in urban areas. Still the demand for telephones is not catered for some areas of the country where there is a waiting list.

With development of the data communication infrastructure in 1990, the banking sector and shipping companies developed more reliable and speedy data transmission facilities. Adequate data communication backbone facilities and wide area computer networking infrastructure is necessary for Sri Lanka to become a centre for trade in Asia.

The two mobile operators Celltel Lanka Limited and Dialog GSM have offered some valuable features to their customers via Internet. Customers pay their mobile bills online and also have access to customer services through their web sites.

For the first time dialog GSM has introduced “Mobile Internet” to their customers. These services are referred to as WAP services. They are progressing with WAP services. This is an encouraging factor in Sri Lanka e-business.

In Sri Lanka some degree of e-commerce activities take place in the private sector. But the essential elements such as low cost telecommunications facilities, legislation and security measures are not yet available.

- **Electronic shopping malls and trade:** The first Sri Lankan electronic shopping mall (Avakasakade), launched by the Ceylinco Group, commenced operations in 1997. There are about 200 companies associated with this mall. The Golden Key credit card company acts as the financial partner for the mall. This shopping mall is well known to the e-business community in Sri Lanka.

- **Trade information network:** The computerized Trade Information Network (Trade net SL) which was established under the Ministry of Internal and International commerce and food at the Sri Lanka Export Development Board has successfully established electronic trade information services and continues to manage, maintain and enhance the electronic trade information base and the computing and network infrastructure. It has now developed a range of e-commerce services in a very professional manner with the establishment of the Cyber Trade the service of Trade net SL. This opportunity is promoting the use of the electronic medium within the Sri Lankan business community overseas.

- **Banking:** The Union Bank and Sampath Bank, which are, considered as the pioneer Internet banking service providers in Sri Lanka. They have earned credit for developing the facilities here. However now there are in few other private banks that allow limited services (like money transferring, account opening, bill payments) to customers through their web sites. The state banks have not yet started the Internet banking facilities.

Seylan Bank has introduced e-commerce as their top priority in future plans. They have been studying all electronic delivery services consolidated on a simple platform. They are paying greater attention to introduce Internet Banking in the near future.

Sri Lanka’s first independent smart card e-commerce network is expected to be fully operational next year. This is established mainly to secure payment and fund transfer applications. This network will be operated by Smart Net Lanka Pvt. Ltd. A few private and state sector banks have shown interest in using this facility to introduce their proposed smart-card based applications, including online and offline debit cards and credit cards loyalty cards and utility payments cards. It will cover all provinces excluding North and east in Sri Lanka. The Smart Net Infrastructure will enable clients of the participant banks to pay up to five different utility bills and routine payments such as those for electricity, water, telecommunications, as well as hire purchase premiums and loan.
• **Air lines**: Sri Lanka Air Line has also started their business functions on Internet by offering the air ticket booking facility via its web sites.

• **Library services**: Some reputed business organizations sell their products and services via Internet. Industrial Technology Institute (ITI) library is a very good example. ITI formally known as CISIR (Ceylon Institute of Scientific and Industrial Research), is the country’s leading scientific research institute. Its members and outsiders could access the ITI library through the Internet and could receive and have books reserved. The ITI’s library has provided opportunities for Sri Lankan businessmen to interact with the country’s scientific community via the Internet.

• **Web content in local languages**: The <Kaputa.com> is a web site that contains information in local languages, which introduces e-business in local languages.

(g) **Issues**

The major barriers for the development of e-commerce are:

• Inadequate existing infrastructure facilities (low teledensity)
• Legal infrastructure
• National communication backbone
• Cost of Internet access
• Usage of computers
• Lack of human resources

3. **Government policy for promoting e-commerce market**

The new National Telecommunications Policy and Information Technology Policy proposals recommend and promote Internet and e-commerce in Sri Lanka. The government is in the process of developing an information technology policy with emphasis on the new technologies and applications like e-commerce.

CINTEC has facilitated e-commerce development in Sri Lanka. CINTEC conducts seminars, exhibitions to educate organizations and the general public about these new developments.

B. **Suggestions for creating a more favourable cooperation network in the Asian and Pacific region**

1. **Recommendations on actions to be taken at the national level**

Sri Lanka has taken the following steps to develop the telecommunications infrastructure in the country.

• Development of a new policy focusing on the facilitation of ICT
• Adoption of a liberalized procedure for licensing of ISPs
• Focus on revision of tariff structures in response to technological developments
• Priority to telecom development in the rural sector
  – Payphone subsidy – a subsidy is given to payphone operators to install payphones in rural areas
  – Provision of telephone facilities to the Sub Post offices
• Plans to set up tele-centres with telephone, fax, e-mail and Internet
• Bandwidth available via satellites
• International Voice Monopoly to end next year

2. Recommendation on actions to be taken at the regional level

(i) Successful participation by developing countries in electronic commerce will rely on the strengths and resources available in the developing countries themselves. These would include:

a. The level of Internet connectivity and the quality of the telecommunications infrastructure;

b. Innovation in the techniques and modalities of international trade as well as in the use of the Internet;

c. Mutual respect and collaboration between the Government and the business sector; and

d. A significant presence of local enterprises involved in e-commerce.

(ii) Participation in electronic commerce will not be at the level of its potential unless existing obstacles are clearly identified and tackled adequately. The main obstacles for increasing the participation of developing countries and their businesses in electronic commerce are the following:

Access – Measures need to be taken to allow enterprises (especially SMEs) to get better access to the telecommunications infrastructure and the Internet; this include not only physical access but also economic access. All measures (normative, fiscal, technical, and so on), aimed at bringing down the cost of Internet and electronic commerce access, deserve close attention. In particular, the liberalization and deregulation policies of the telecommunications sector and of Internet access should be considered critical instruments to stimulate electronic commerce.

Content – International information flows are still characterized by a significant imbalance in favour of the most advanced countries. For many enterprises in developing countries, this situation means additional difficulties to their participation in electronic commerce. Therefore, the creation of a more national and regional content is an aim that needs greater cooperation between the State, enterprises and learning institutions.

Knowledge – In the field of electronic commerce the lack of knowledge could be a major source of “fear” and could hinder a more active participation by developing countries and their enterprises in the most modern part of global trade. Those who practice electronic commerce are the ones who know most about it. This means that additional efforts should be made to enhance the practice of electronic commerce in developing countries, particularly among SMEs. In this context, the support provided by international and regional organizations could be an essential instrument to contribute directly to the efforts of the Governments and businesses of the developing countries, and to stimulate exchange of experiences among the countries.

Trust and security – Trust-based relationships between all those involved is a crucial element for the development of electronic commerce. More national and regional initiatives are required...
to create the necessary instruments for the adoption of digital signatures, electronic payments and contractual guaranties for electronic transactions. In this context, regional norms could be a vitally important instrument.

Legal and normative framework – Besides deregulation of the telecommunications sector, measures should be taken to overcome the insufficiency of legal instruments for the development of electronic commerce. The Modal Law of the United Nations Commission on International Trade Law can prove to be an instrument of great help for countries that want to establish their own legal framework for electronic commerce.

Training – The development of national and regional capacities in the field of electronic commerce has to be encouraged at all levels. The inclusion of subjects related to information, Internet and electronic commerce within primary and secondary schools and university curriculum can be complemented by training programmes for entrepreneurs. Particular efforts should be made to favour the “training of trainers”, and can include the participation of such international organizations as United Nations Development Programme (UNDP), the World Bank and United Nations Conference on Trade and Development (UNCTAD).

(iii) Developing countries should participate actively and positively in the implementation of international rules affecting electronic commerce. Developing countries must prepare themselves to get actively involved in WTO discussions on commerce. Furthermore, this active participation should be reflected in other frameworks such as the discussions about domain names (Internet Corporation for Assigned Names and Numbers [ICANN] and Internet Domain Name Processes [WIPO]) and about the future of the telecommunications norms and related arrangements (accounting rates) which will be discussed in the framework of the International Telecommunications Union (ITU).

(iv) It will be important for developing countries to be able to count on international support in order to obtain projections and economic analyses about different fiscal scenarios and to stimulate co-operation among countries.

C. Conclusion

The major problems facing the development of e-commerce are the lack of suitable infrastructure and their costs. Sri Lanka Telecommunications regulatory Commission has taken steps to address these issues by implementing programmes to provide telephone subsidies to operators who provide pay phones in rural areas, provide telephone facilities to sub post offices in rural areas which do not have the facility and the setting up of tele-centres in rural centres with facilities such as telephones, e-mail and Internet. The Telecommunications Regulatory Commission has already taken steps to promote Internet usage by approving a very low tariff during the night. There is a huge demand for telephone facilities but the price is high and not affordable to the general public and also schools and institutions. The laws necessary for the successful implementation of e-commerce in Sri Lanka are being drafted and will be implemented in the future. A programme is underway to develop human resources by the Universities in Sri Lanka with Colombo University introducing a BTech programme over the Internet.
REFERENCES


<www.cintec.lk> (Sri Lanka, Council for Information Technology).