E-commerce: I. What for? II. What are the technical and legal requirements? III. What should Governments do to enhance its development?

<u>CHECKLIST</u>

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I. What for?: What are the benefits for a country to go into e-commerce? Definition (source UNCTAD): E-commerce is about doing business electronically. It is based on e-processing and transmission of data, text, sound and video. It implies many diverse activities such as e-trade of goods and services, online delivery of digital content, e-funds transfer, e-trade sharing, e-bills of landing, public procurément, direct consumer marketing, after sales services, etc. It involves products, services (information services, financial and legal services), health care, education, and virtual malls. (11)

Information society. The Internet is a major research tool. The Net makes societies more efficient. The Web is a great tool for distributing technical and scientific information. It has become a mean to get and give advise through discussion forums, chat rooms, etc. It is a source of new ideas without geographic or time barriers.(3)

- E-government/E-Administration/E-Voting/E-Procurement. Governments are being reinvented with Internet (US White House). Governments can take profit of e-commerce in terms of the services it delivers and its relationship with the citizens. Internet is a new tool for personal and political expression for citizens. (10)
- E-Entertainment/Travel/Games/Music/Books/Software. The Internet provides <u>new offerings on entertainment</u> such as new ways to get information. <u>Multimedia</u> offers applications such as design, learning, marketing, consumer services, news and information, education, health care, and entertainment. Internet allows virtual travel agencies which combines price advantages with ready access to a server available 24h a day. (5)
- E-Learning. Students across the world are discovering a huge quantity of data via Internet. The Internet is at the center of a learning revolution that is being adopted by many business entities. (e.g. online training, self-study courses at a supplier's website, online classrooms). Computer based training programmes provide flexibility in skills acquisitions and are more affordable than traditional seminars. (8)
- E-Health. Doctors use telemedicine to administer off-site diagnoses to patients in need. Improved health conditions and access to health information contribute significantly to economic growth (e.g. healthier workers are more productive). Government policies that promote health education help people lead healthier lives by increasing their access to relevant information. IT & e-commerce <u>health care applications</u> can reduce costs. (8)
- Jobs. E-Commerce represents a strategic window of opportunity to promote <u>iob-creation</u> and entrepreneurship. (3) Employment is not concentrated in firms, but is diffused on Internet. Such developments make that the patters of work move away from fixed time slots and locations, offices and factories, suburbs and shopping centers, etc. (5) Information and Communication Technologies (ICTs), international trade, and product market competition have an impact on the labour market. The demand for skills (i.e. IT professionals and computer engineers combined with strong business application skills) is being affected by the spread of Internet, the growth of e-commerce, and on-line activities. There is a need for a multi skilled work force. E-Commerce needs people with a waste range of skills. Another event that affects the labour market is that the international competition and trade have increased because of the falling cost of telecommunications and increased availability of ICT. Unnecessary business travels are reduced by using ICT. (8) The Net encourages unique products, flexible working arrangements, and the easy entry of competitors from the world over into an equal market. Jobs and disabled people. Certain disabled people benefit from IT and e-commerce and work from home. They can also play their role as consumers with IT and e-commerce tools. (8)
- Business. E-commerce expands business opportunities, reduces costs, increases efficiency, improves the quality of life, and facilitates the greater participation of small businesses (SB) in commerce. The technology offers significant advantages and added value to SB. They can now gain access to many support services which were too expensive or difficult to obtain and offer services which were too expensive or difficult to deliver. E-Commerce is creating markets and new products and is forging new and more direct relationships between and among enterprises, individuals and governments. (6) E-commerce low the costs. i.e. Entrepreneurs are able to start new businesses more easily, with smaller up-front investment requirements by accessing the Internet. Virtual enterprises are reaching costumers faster for a small fraction of the cost of physical stores and salespeople.(4)
- Business I. It is less expensive to maintain an online storefront than a physical one. The "company is always open" and can be accessed by anybody around the world. This situation, avoids duplicate inventory costs and multiple stores in different zones or countries. The transaction costs are transferred to consumers when publishing on the Net the merchants' information (e.g. products information). Advertising is cheaper than in

other medias. The Customer Support is also being transferred to the Net, reducing the costs and improving the quality of services. Products that most be sold quickly because of a daily lose such as computers, are sold on the Net to reduce inventory costs. Another important service on-line, is the one that allows costumers to costumise their order or select from different choices. This new service reduces inventory costs and allows the seller be aware of the costumer's preferences. It also allows sellers to respond more efficiently to demands. The seller can also pass the information to its partners, its suppliers, lowering costs and even the price of the product. (8) E-commerce advertises in more markets at less expenses, obtains feedback from costumers, uses e-mail as marketing and costumer and communication tool, offers paperless documentation, conducts foreign market research, promotes products and services, and provides services out of normal working hours.

- Business II. The Net enables a considerable <u>redistribution</u> of economic and political decision making power from the hands of managers and representatives in to the hands of individuals engaged directly in adding-value and shaping their community based on in-depth personal knowledge and taste. (5) Internet allows delivery of many kinds of information in a digital format and <u>reduce transport and distribution costs</u>. Distribution costs are reduced for digital products which are important e-commerce segments. All the goods that can be ordered via Internet such as books, CDs, flowers, groceries, computers face a problem regarding shipping costs and custom duties. There are huge savings compared to the traditional distribution (e.g. songs that can be downloaded from producers on Internet and news that can also be obtained directly from the journalist on Internet). To download products avoids shipping costs and this is a strong stimulus to trade and, in particular, to SMEs. (8)
- Business III. E-Commerce affects the content related industries (e.g. software, digital products, entertainment), the financial sector, the postal sector, advertising, travel, and transport. It implies major changes in the financial transactions, with e-financial services replacing traditional modes of payment. (8)
- Business IV. Producers sell products directly to consumers eliminating intermediaries and reducing time. Intermediaries perform the transportation, wholesaling and retailing services.
- Consumers. Internet is revolutionizing retail and direct marketing. E-Commerce provides consumers with considerable benefits in the form if increased choice, access and goods and services and a new medium for interaction with suppliers.(3) <u>Consumers</u> can shop in their homes a wide variety of products from manufacturers and retailers all over the world. Buyers can more easily and at lower cost compare prices and services from suppliers worldwide because the research of prices, quality, delivery schedules, products content is located on the Net.

II. What are the technical and legal requirements?

- A. Technical requirements: The growth of global e-commerce depends upon global information infrastructure.
- Proper functioning and affordable communications networks (e.g. fixed line telecommunication networks, wireless networks and cable) are an essential condition for the development of e-commerce. Only users who are able to access these networks, through proprietary or shared access devices or terminals/kiosks/cyber cafes, are able to participate in e-commerce. (1) The solution for countries with a very low tele-density should be based on institutional or organizational access from schools, libraries, tele-centres, post offices, universities, franchises shops, etc. (8)
- □ E-commerce has <u>greater bandwidth requirements</u>. Limitation on bandwidth availability will restrict the maximum number of users able to benefit from e-commerce. The growth of the number of Internet users and the development of more mature forms of e-commerce will increase the demand for greater bandwidth. (1)
- Need for affordable infrastructure charges for both individual and business users.
- □ There is a need for <u>appropriate terminals to access the Internet and e-commerce applications</u> (e.g. personal PCs, non PC Internet devices such as cell phones). Need for <u>affordable ISP services</u> (e.g. access to the basic infrastructure, and content hosting) (1)
- □ E-commerce transactions of individual businesses and other organizations depend on the infrastructure, networks and systems built and maintained by <u>traditional IT and operation services</u>. E-Commerce requires a <u>reliable infrastructure services and connections</u>. A high level competition in the markets for communication infrastructure provisions and terminal equipment will have a positive impact in the prices and quality of these products and services. (1)
- □ Need for a physical distribution system reliable, fast and affordable. (e.g. transport & customs services) (1)
- □ Need for a <u>rapid and efficient custom clearance</u>. The ideal environment is the pre-clearance through paperless document exchange (source EDI) (1)
- □ There is a need for an <u>advanced payment system</u>

Need for <u>qualified people</u> to develop and implement e-commerce technologies. Users also require basic information technology skills and can benefit from understanding IT concepts in taking advantage of e-commerce.

B. Legal requirements:

- □ Governments should <u>eliminate the obstacles to e-commerce</u> Industry self-regulation can provide a flexible and effective alternative to government regulations. Governments should <u>remove legal and policy barriers to</u> <u>e-commerce</u>, and to citizens' access and security priorities. New rules should only be introduced where absolutely necessary, and where private sector self-regulation is proved to be insufficient to generate a climate of trust and confidence.(6)
- □ Not to introduce any tariff on cross-border e-commerce. Internet should be declared a <u>tariff-fee</u> environment whenever it is used to deliver products and services. A tariff free zone for e-transactions is aimed to reduce barriers to international trade.
- Governments should <u>develop the internationally agreed principles</u> for an e-commerce legal environment.
- □ Need for a legal recognition of electronic documents and e-signatures. Government policies should aim to provide a predictable legal framework based on the fundamental concept of freedom of contract. Countries should develop and implement e-signatures laws that include rules pertaining to certification services. The legal acceptability of certificates and e-signatures, both national and internationally should be supported by appropriate government policies. Governments should facilitate the emergence of borderless networks of certification authorities supporting mutual recognition agreements. (12)
- □ <u>Allow</u> for the use of <u>electronic evidence in courts</u>.
- □ Need for an effective <u>copyright protection</u> to ensure that there is adequate incentive for the creation of ecommerce content. It is important that countries adopt and implement the WIPO treaties on copyright and related rights. Establish laws and regulations that provide adequate and effective protection for copyrighted works, including motion pictures, computer software, and sound recording. (10)
- Governments shall promote industry self-regulatory initiatives for <u>privacy protection</u>. (e.g. Introduce privacy legislation).
- Governments should work with international principles and industry self-regulation <u>consumer issues</u>. Promote voluntary consumer protection guidelines, developed jointly by consumer and business leaders.
- □ Shall defend the protection of children.
- □ ISP' limitation of liability. ISP's cannot be liable for all contents carried on their services. ISP's shall take action if they have been notified of a website with harmful or illegal content. Governments should avoid creating liability rules that can impede the advancement of e-commerce and should work with business to identify areas where liability rules are required.

III. What should Governments do to enhance its development?

Governments need to tailor their policies to most effectively address the specific needs of their economy.

- **Rules and Regulations.** Governments must adopt a non-regulatory, <u>market-oriented approach</u> to ecommerce that facilitates the emergence of a transparent and predictable legal environment to support global business and commerce. (10) Parties should be able to enter into legitimate agreements to buy and sell products and services across the Internet with minimal government involvement or intervention. (3)
- □ **E-Government/E-Procurement.** Governments should <u>put their services on-line</u>, including transactions, procurement and payments.
- □ Investment. Governments should encourage the adoption of e-commerce by the business sector and the rest of the community. by investing in Internet technologies and e-commerce for its own requirements. (1)
- □ Education/Trainings. Governments should create awareness and disseminate best e-commerce practices among small and medium size enterprises. Governments should <u>develop the necessary skills</u> in society through schools, higher education, on-the-job <u>training</u> and adult education are essentials for a society to benefit from e-commerce. (1) Need to invest in the citizens in partnership with business, educators, community leaders, and other levels of government.
- □ **PKI technology.** Implement governments' <u>PKI</u> to allow for the secure exchange of information and payments within the government (G2G) and between the government and the citizens (G2C). PKI creates digital identities. Digital certificates are like passports. PKI enables the use o digital signatures. PKI meets the

requirements of trusted e-commerce: authentication, confidentiality, integrity and non-repudiation. Promote the use of strong <u>cryptography</u>. Develop <u>certification and authentication</u> practices.

- **Taxation.** Governments should avoid any type of <u>taxes</u> on commercial activities that take place via Internet.
- Dispute settlement. Governments should promote <u>alternative dispute resolutions</u> mechanisms and third-party schemes for compliance with self-regulation.
- Free markets/Competition/Liberalization. Governments should promote competition among providers of authentication services. Encourage a liberalized market to conduct the development of telecommunications because of the possibility it opens to private investment.
- Cyber-Crime. Governments should prevent fraud, and foster transparency.(3) Electronic authentication techniques are important for users to protect themselves against fraud. Criminal laws, courts and enforcement agencies should develop expertise to deal with e-commerce fraud and computer crime. (12)

IV. Bibliography

1. APEC, E-Commerce Readiness Assessment Guide, APEC Readiness Initiative, 2000 Version 5.0. pp. 30.

2. None

3. Electronic Commerce in Practice, The World Business agenda, ICC, pp. 160.

4. International Trade Centre, Secrets of e-commerce, A guide for SM Exporters, technical publication for developing countries, Trade Secret Series questions, answers and reference guides, Geneva 2000, pp. 215.

5. MILLER, Riel, Highlight of the OECD Information Base, No. 14 May 1997, The Internet in Twenty Tears: Cyberspace, The Next Frontier?, International Futures Programme, pp. 9.

6. OECD, Global Electronic Commerce, Realizing the Potential, Ministerial Conference, Ottawa, Canada 1998.

7. None.

8. OECD, Chapter 2: The Impact of Electronic Commerce on the Efficiency of the Economy; Chapter 4: Electronic Commerce, Jobs and Skills; and Chapter 5: Societal Implications of Electronic Commerce.

9. None.

10. The White House, A Framework for Global E-Commerce, 1st July 1997, pp. 20.

11. UNCTAD, Building Confidence, Electronic Commerce and Development, 2000, pp. 156.

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