

TRADE AND DEVELOPMENT BOARD
Commission on Enterprise, Business Facilitation and
Development
Expert meeting on electronic commerce Strategies
for Development
Geneva, 10-12 July 2002
Agenda item 3

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**Expert meeting on electronic commerce Strategies for Development:
The Basic Elements of an Enabling Environment for E-Commerce**

Draft Chairperson's Summary

Introduction

1. The Expert Meeting on Electronic Commerce Strategies for Development: The Basic Elements of an Enabling Environment for E-commerce was convened from 10 to 12 July 2002, pursuant to the decision taken by the Commission on Enterprise, Business Facilitation and Development at its sixth session in February 2002. The Meeting was to present and discuss national experiences of both developed and developing countries and identify key elements of participatory, comprehensive national e-commerce strategies, their implementation and the impact on developing countries. The discussions of the expert meeting on agenda item 3 were structured according to the following themes:

- (a) The linkages and interactions between e-commerce strategies and other aspects of development strategies and policies;
- (b) Defining national e-commerce strategies: presentation of national experiences;
- (c) Human resources development and training for electronic commerce;
- (d) Legal and regulatory aspects of e-commerce strategies;
- (e) Telecommunication, infrastructure and access;
- (f) Designing e-commerce strategies: roles of governments and non-governmental actors;
- (g) International support for national and regional e-commerce strategies; and

E-commerce, strategies and development

2. The Experts expressed their views on a wide range of issues regarding the development of e-commerce and ICTs and especially as they related to developing countries. In particular, they examined the state of development of e-commerce and ICT, major obstacles faced by the developing countries and strategies that could be used to promote e-commerce and ICT in developing countries. The following is a summary of the main points discussed and on which there was wide consensus.

The contribution of e-commerce and ICT in development

3. The experts expressed their agreement on the importance of e-commerce and ICT to their socio-economic development. Experiences gained in many developed and some developing countries show that e-commerce and ICT have had a significant economic impact on enterprises and society as a whole. In those countries e-commerce and e-business have become an important method for the production and exchange of goods and services.

4. The contribution of e-commerce and ICT is not limited to the exchange in goods and services. They are being applied in many areas of economic and social life as well such as manufacturing, procurement, distribution and financial services. They are sources of improvements in efficiency in these activities, in enterprise management and in workers' skills. They also improve the delivery of public services and access to social services such as education and health.

5. E-commerce has become a driving force for the globalization of the world economy. As a result, many enterprises in developing countries have become integral parts of global networks of production supply chains that increasingly use e-commerce methods. Through these networks enterprises in developed countries induce developing country enterprises to adopt new information technologies. Countries that do not adopt e-commerce may put the competitiveness of their enterprises at risk.

6. Many developing countries are still only beginning to tap into the great potential benefits offered by e-commerce and ICT. As a consequence the gap in e-commerce and ICT between developed and developing countries is still wide. The underlying causes for this situation have been amply articulated. In short, they include the lack of awareness about e-commerce and ICT and their benefits, lack of the requisite telecommunications infrastructure and Internet connectivity, high costs of Internet access, lack of adequate legal and regulatory framework, lack of requisite human capacity, constraint on local language and content, skills and entrepreneurship. Other constraints include the lack of suitable online payment mechanisms, insufficient local market sizes and the lack of brand names and local content for market promotion and e-commerce compatible business models and processes.

The need for strategies to achieve e-commerce and ICT development

7. While the possible benefits of e-commerce and ICT to society and the development process are clearly evident, they are not likely to come about without a conscious effort to formulate and implement e-strategies. The factors that have constrained the development of e-commerce and ICT in developing countries must be addressed through concerted policy actions. In most cases the solutions require political decisions and prioritization. Indeed, the experience of many developed and developing countries that have succeeded in developing e-commerce and ICT demonstrates the key role played by government policies and strategies established and implemented at different levels of society. Governments should focus on establishing a broad and orderly enabling environment for e-commerce and ICT that benefits society at large. In some cases e-strategies may require profound policy and structural reforms which only governments can institute, to provide a catalyst for broader stakeholder participation.

Tailoring e-strategies to individual country requirement

8. Experts stressed that while in broad terms different e-strategies could be applied to developing countries in general, there was no single set of e-strategies that could fit the conditions and requirements of all developing countries. In practice what existed were alternative e-strategies for viable development of e-commerce and ICT for different countries. In particular, the successful application of e-strategies had to be tailor-made to fit the economic, social and political environment of each country, leveraging the emerging body of international good practice and bearing in mind issues such as harmonization and interoperability.

9. E-strategies were to be considered in a complementary manner and as packages of measures. Implementing only a few e-strategies could be insufficient since areas where no action was taken would undermine the effectiveness of those strategies that were put in place. Thus all areas including legal issues, awareness, human resources, infrastructure and access, e-payments, distribution, trade facilitation, etc. have to be considered together and developed in parallel.

The need to involve all stakeholders in e-strategies

10. The government may play an important role in ensuring that stakeholders are fully involved by providing a framework. Successful experiences have shown that the establishment of a unique entity at the highest level of government that includes all stakeholders is a key element of an e-strategy. E-commerce and ICT development is a multidimensional issue and the design and implementation of effective e-strategies requires the involvement of all stakeholders, including high-level government representatives, business organisations, civil society and consumers. It was also stressed that governments should lead by example by adopting e-government practices.

11. Notwithstanding the important role of the government in initiating and implementing e-strategies, in the final analysis much of the required business investments rest with the private sector. Experience shows that the private sector has been the most innovative and the major driving force behind e-commerce and ICT development. In general the modalities of application of technology to business activities are more efficiently decided the market. However, an e-strategy that ensures mutually supportive public intervention with private sector initiative is the only viable one.

Liberalized economic environment

12. Experts thought that the success of e-commerce could be enhanced through reform, including liberalization of activities such as telecom and payment systems. However, experts felt that such a strategy could affect social cohesion if it was not accompanied by remedial measures to take into account the needs of people and regions that may be negatively affected. Far reaching liberalization measures of this nature would need to be instituted in the context of broader national economic structural reforms. Further, liberalization should ideally be introduced consistently in all sectors or services. Liberalizing some sectors while others were not could result in conflict when implementing strategies. The Experts also suggested that where feasible, in order to enhance access and connectivity, liberalization and structural reforms could be supplemented with technology solutions that were non-computer, community-based and that use local languages.

Benchmarking the effectiveness of e-strategies

13. The experts noted that the measurements of the success of e-strategies was essential in order to properly evaluate the effectiveness of e-strategies that were in place and to plan for future strategies. It was noted, however, that measurement methods varied between different countries and thus achievements made by different countries were not easily comparable. Some indicators such as achievement of e-readiness, e-intensity and e-impact such as increased employee productivity due to the application of e-commerce and ICT were possible approaches although in practice these were difficult to implement. Experts also felt that it would be useful to develop a series of internationally comparable indicators to measure e-commerce activities.

Awareness raising and human resources development

14. In many developing countries, there is a low level of awareness about different aspects of e-commerce and ICT such as their benefits, legal and regulatory issues, best practices, technological solutions, etc. This lack of awareness prevails at all levels including government and enterprise decision-makers, and consumers. Therefore, awareness raising is crucial for all stakeholders but especially for SMEs. Awareness raising can be accomplished in a variety of ways including appropriate curriculum in the education system, training by government and at company level and exchanges of information and ideas through workshops and conferences. General public awareness campaigns can also be conducted through the mass media.

15. The experts considered HRD to be a core component of an e-commerce strategy, one of the most challenging bottlenecks for developing countries to successfully engage in an e-commerce and ICT. In many developing countries, the rate of literacy was low and the levels of education were insufficient to fully meet the organizational work changes required for efficient utilisation of e-commerce and ICTs.

16. They recognized that in order to address the literacy and education shortcomings, governments, in cooperation with the private sector, should invest in education and training and formulate appropriate HRD policies, in order to fully benefit from ICTs and e-commerce. They should adapt their educational system and school curricula to fully take into account the requirements of e-commerce and ICT.

17. HRD plans should include a shift from transmitting information and knowledge to learning critical and creative thinking. Also, HRD policies should be designed to ensure equal access to opportunities in the labour market for men and women. Measures should be taken to remedy losses in skilled labour due to brain drain. For this purpose, schemes could be established to keep track of nationals employed in high skill developed countries and those returning from those countries and providing them incentives upon their return and also to encourage them to return. Several experts reported success stories in this regard.

18. The experts also noted that the availability of specialized IT skills in developing countries could be instrumental in attracting IT companies from developed countries to set up IT enterprises or subsidiaries in the developing countries.

Legal and regulatory aspects

19. The need for a legal and policy infrastructure that is supportive of and conducive to the e-commerce activities constitutes one of the main issues that policy makers should address when defining an e-commerce strategy. Legislation should aim at providing legal security and predictability, technological and commercial neutrality and removing barriers to access, use and the free movement of e-commerce. Thus, it is paramount to ensure that electronic transactions online are legally valid, binding, and enforceable. Although a number of issues such as applicable law, jurisdiction, consumer, privacy and data protection remain unresolved at the international level, a number of Model Laws and international instruments have been prepared by the international community with a view to accommodate e-commerce. Experts recognized, among others, the importance of the 1996 UNCITRAL Model Law on E-commerce and the 2001 UNCITRAL Model Law on Electronic Signatures with its Guides to Enactment. The flexibility inherent in model legislation was in many cases appropriate for States wishing to make various modifications to the uniform text.

20. National policy priorities need to be reflected in the legal framework to maximize certainty and encourage confidence and use. The legal framework, a key element in the enabling environment, affects market participation. Therefore, the process and sequencing of reform was emphasized. Experts stressed the importance of carrying out a broad public consultation and debate with all stakeholders before preparing e-commerce legislation to ensure fairness and an equitable balance between different interest at stake.

21. Experts emphasized the importance for States to consider their own special needs when adopting any new e-commerce legislation. In doing so, the international character of e-commerce and the desirability of regional harmonization and compatibility of regulations should be taken into consideration.

22. Experts identified a number of important legal issues such as alternative/online dispute resolution (ADR/ODR), electronic contracting, consumer protection, privacy and data protection, cybercrime, taxation, customs, jurisdiction, import and distribution, and intellectual property rights including digital rights management (DRM). They stressed the importance for developing countries in participating in the current international debate. In addition, recognizing the convergence nature of e-commerce, experts noted the increasing importance of and reliance on general competition law principles to ensure against anti-competitive activity in the e-commerce space.

23. It was underlined that in a number of areas such as taxation, custom duties, data privacy and security, harmonization would be difficult to achieve due to the different socio-economic conditions of countries. It was nevertheless important that a certain degree of interoperability was achieved to avoid barriers to the development of e-commerce. Other areas of concern noted by experts was the extraterritorial application of some national laws governing e-commerce that could come into conflict with other national legislation. It was underlined that the disappearance of territorial borders raised questions about the applicability of traditional principles on jurisdiction and applicable law in an electronic environment.

24. Although it is well known that commerce and technology often advances ahead of the law and that historically the law has adapted to serve commercial and financial demands and to facilitate trade, it is equally true that technology needs to take into account the legal requirements. This is very much the case in e-commerce as the law of many countries contains strict requirements concerning issues such as negotiability and documents of title.

Furthermore, to regulate efficiently e-commerce issues like spam and digital rights management, legislative solutions should be accompanied by technical solutions.

25. The importance of media neutrality was underlined by experts as an important principle to be considered by Governments when enacting legislation.

26. Experts recognized the importance of electronic signatures in the context of e-commerce as a vital tool to ensure authentication of electronic communication. It was important that countries wishing to use various electronic signature techniques enact appropriate legislation to ensure that e-signatures can be used with legal effect. Although a large number of countries have enacted legislation that recognizes the validity of electronic signatures progress was still missing in the cross-border recognition of foreign certificates and electronic signatures.

27. The need for technical assistance to developing countries in adapting their national law to accommodate e-commerce was viewed by many experts as a priority. Requests were addressed to the international community for enhancing their activities in these areas. Furthermore, the need for training and education was considered an essential element in the development of e-commerce.

Telecommunications, infrastructure and access

28. The experts considered the issue of telecommunications, infrastructure and access (TIA) from several angles. The issue was discussed in the light of the diverse technological and societal differences among developing countries, but also within the rural and urban divide in particular countries. The target of Universal Service was extended beyond simple telephony and aimed to embrace Internet and e-commerce technologies. When discussing models and policies through which TIA could be supported in rural areas, experts agreed that access and infrastructure together with local content in local languages relevant to local communities was a worthy goal.

29. It was noted that developing countries, and in particular their rural communities, could not wait for state-of-the-art technologies to materialize before embracing Internet and e-commerce practices. Policies and practices could be developed and implemented in real-world conditions in relation to existing entrepreneurial activities. Community projects, even those that are low-tech by nature - such as community or PTT sponsored e-mail, should be encouraged to improve social cohesion.

30. A discussion on the possible role of so-called "open-source" provided several policy indications about ways developing countries could benefit from it. Open source could be important for developing countries because it is low-cost and allows for the development of local language applications and can be used in TIA community development. While not necessarily free-of-charge, open source software is frequently available at prices significantly lower than those paid for commercial products. However, it requires investment in training and awareness-building about its features and shortcomings. It was also noted that open source, within the context of the overall global market for computer software, brought more choice to consumers and counters monopoly practices. Many governments and their agencies in developed and developing countries have adopted open source operating systems and applications.

31. The use of both open source and commercial software depends on access to affordable hardware. A number of policy models were discussed, including subsidizing household ownership of PCs, and establishing and subsidizing community access centres. Questions were raised about how to encourage users to embrace technology for business and development purposes (health, education, etc.). Intensifying commercial ICT use by enabling TIA needs to be complemented by government policies aimed at getting the financial sector online. Another issue raised was the need to critically assess the areas where the private sector best perform and where the public sector cannot significantly contribute.

32. E-strategies relating to telecommunications, infrastructure and access needs to be developed and implemented taking into account all segments of society to minimise digital exclusion. For rural areas where private investment in telecommunication development would not be profitable, Government funding or other forms of subsidies need to be considered in terms of long-term development goals.

33. Experts discussed several strategies to intensify business-oriented use in community-based access points such as schools, cyber cafés, telecentres and other public facilities. Experts felt that community-based project need local entrepreneurship in which open source software has a role to play. Community services could also be easily run on open source software.

International support for e-strategies

34. The international community could play a supportive role in efforts to develop and implement national e-commerce strategies. Global initiatives that have recently emerged, such as the Digital Opportunity Task Force (dot force) of the G8 or the UN ICT Task force, have included the topic of national e-strategies in their plans of action, aiming at reducing the digital divide as a key element of global efforts to reduce poverty. The importance of linking these efforts with those of other international organizations in the area of ICT and development was stressed.

35. Experts welcomed the fact that all major donor agencies have embarked on a process of reviewing their policies with the objective of mainstreaming ICT in their development programmes. To the extent possible such support should be coordinated to minimise duplication.

36. When providing development assistance to developing countries, donor agencies should include an e-commerce and ICT development component in their assistance. When available, the national e-strategies of developing countries should be used to identify the priority areas for international support.

37. Experts agreed that e-strategies are the cornerstones of a global "ICT for development strategy or approach". The emphasis in international initiatives had to shift from a narrow focus on infrastructure and access to a holistic approach, integrating human resource development, capacity building at the level of the enterprise, and community involvement. It was important to utilize ICT within a development framework that would maximize its socio-economic benefits, including its positive fallback of the new technologies on public health, poverty reduction, the redress of gender imbalances and democratic governance.

38. It was also highlighted that regional networks are important – on the one hand to exchange experiences among countries sharing similar challenges and socio-economic background – and on the other to ease the tension between technological dynamism and the need for interoperability that tended to push countries towards standards setting. A possible solution could be found in evolutionary standards defined at the regional level.

39. Experts also felt that there were some constraints that ICTs could not address, so that action taken at the international level to harness the development potential of the new technologies had to be complemented by action on other fronts, including for example maximizing market access for developing countries' exports.

40. When designing their e-commerce strategies, developing countries should contemplate ways to enhance their participation in different international fora where e-commerce and ICT policy and regulatory issues are discussed, including WTO, ITU, WIPO, UNCITRAL and ICANN.