



**United Nations  
Conference  
on Trade and  
Development**

Distr.  
GENERAL

TD/B/COM.3/38  
TD/B/COM.3/EM.12/3  
16 October 2001

Original: ENGLISH

---

TRADE AND DEVELOPMENT BOARD  
Commission on Enterprise, Business Facilitation and Development  
Sixth session  
Geneva, 18 February 2002

**REPORT OF THE EXPERT MEETING ON ELECTRONIC COMMERCE AND  
INTERNATIONAL TRANSPORT SERVICES: BEST PRACTICES FOR  
ENHANCING THE COMPETITIVENESS OF DEVELOPING COUNTRIES**

Held at the Palais des Nations, Geneva  
26 to 28 September 2001

**CONTENTS**

<b>Chapter</b>	<b>Page</b>
I. Agreed conclusions and recommendations.....	2
II. Chairperson's summary .....	5
III. Organizational matters .....	10
<b>Annex</b>	
Attendance.....	12

## Chapter I

### AGREED CONCLUSIONS AND RECOMMENDATIONS

The Expert Meeting on Electronic Commerce and International Transport Services: Best Practices for Enhancing the Competitiveness of Developing Countries examined the impact of electronic commerce on international transport services, including economic and operational as well as legal and documentary aspects thereof, and decided to bring the following conclusions and recommendations to the attention of the Commission on Enterprise, Business Facilitation and Development at its sixth session.

The experts re-emphasized the necessity and importance of capacity-building in developing countries with a view to introducing electronic commerce in developing countries and integrating developing economies into world trade.

The importance of electronic commerce as a vehicle for improving the efficiency of transport services and for promoting the participation of developing countries in global trade should be recognized. To this end, developments pertaining to electronic commerce and transport need to be addressed and monitored on a regular basis.

The experts considered a number of legal issues and uncertainties arising from the application of existing laws and transport conventions in an electronic environment, including the challenge of replacing the negotiable bill of lading by an electronic alternative.

The experts recognized the value of contractual arrangements as a means of supplementing the current legal infrastructure.

The recommendations set out below should be considered within the context of the general need to design and implement national and regional ICT strategies for development.

#### **A. Recommendations addressed to national Governments and enterprises**

1. Governments are encouraged to promote investment in transport and ICT infrastructure and to ensure its coordinated development.
2. Governments are urged to enter into regional cooperation agreements with the aim of coordinating investment programmes in transport and telecommunications infrastructure.
3. Governments are urged to examine their existing legal infrastructure with a view to streamlining and adapting it to the requirements of electronic transactions.
4. In adapting their legal infrastructure, Governments are encouraged to give consideration to the existing international rules and guidelines, such as the United Nations

Commission on International Trade Law (UNCITRAL) Model Laws on Electronic Commerce and on Electronic Signatures.

5. Governments are encouraged to give consideration to adopting the existing international transport treaties that allow the use of electronic transport documents.
6. Governments are encouraged to simplify administrative regulations and practices, in particular customs procedures, to facilitate electronic commerce and transport operations.
7. Governments are encouraged to participate in the preparation of various legal instruments being considered in international forums.
8. Governments, customs, port authorities, port communities and transport operators are encouraged to undertake the necessary measures to establish port community systems and logistics platforms to facilitate the exchange of information amongst traders, service providers and administrations using international standards.
9. Governments and enterprises are encouraged to undertake the necessary measures to improve connectivity and access to Internet.
10. Governments are urged to introduce a regulatory environment that allows for a reduction in telecommunication and Internet charges.
11. Governments and enterprises are urged to promote public awareness of and education in all aspects of electronic commerce and the opportunities and benefits it offers, and Governments are urged to become model users of electronic commerce.
12. Commercial parties are encouraged to revise their existing commercial practices with respect to the use of traditional negotiable transport documents and to limit the use of such documents, whenever possible. Commercial parties are also encouraged to support and facilitate the use of electronic alternatives to traditional transport documents.
13. Transport operators from developed countries are called upon to enter into joint ventures with developing countries' operators, thus ensuring a transfer of know-how and capital.
14. Transport operators from developing countries are also called upon to enter into joint ventures with other developing countries' operators to further encourage South-South transfer of know-how and capital.

**B. Recommendations addressed to the international community**

15. International organizations involved in electronic commerce and transport should cooperate and coordinate their activities to improve the competitiveness of developing countries' trade and transport operators.

16. International organizations are encouraged to strengthen their legislative, technical and financial assistance to developing countries in the following areas:

- (a) Reviewing and adapting national laws and regulations;
- (b) Promoting awareness, and providing education and training;
- (c) Developing transport and telecommunications infrastructures; and
- (d) Strengthening transport and telecommunications services providers.

**C. Recommendations addressed to UNCTAD**

17. UNCTAD should keep under review and monitor developments relating to economic, commercial and legal aspects of electronic commerce and international transport services, and analyse the implications thereof for developing countries.

18. UNCTAD should undertake studies on the use of traditional transport documents in international trade, particularly on the extent to which negotiable bills of lading are necessary for modern-day international trade and the extent to which they can be replaced by non-negotiable transport documents, such as sea waybills, and by electronic alternatives.

19. UNCTAD should conduct research on the extent to which contractual arrangements can be used as a solution to facilitate wider use of electronic commerce in international transport services.

20. UNCTAD should develop and deliver training materials and disseminate information on best practices in the field of electronic commerce and international transport services for developing countries, with the participation of private operators from developed countries. UNCTAD, in conformity with requests or requirements in respect of capacity building from developing countries, should initiate or organize activities to develop human resources in developing countries.

21. UNCTAD should prepare guidelines for the establishment of model port community systems and logistics platforms in developing countries.

22. UNCTAD should give consideration to the possibility of reconvening the group on a regular basis to provide for a forum where developing countries, in particular the least developed among them, can benefit from a institutionalized dialogue on best practices in electronic commerce and international transport services as a means of facilitating trade.

## Chapter II

### CHAIRPERSON'S SUMMARY

1. The Deputy Secretary-General of UNCTAD highlighted the significant opportunities available to traders through the use of electronic commerce. The fulfillment of electronic-commerce-based transactions for physical goods depended on efficient transport and logistics services, and on shippers and service providers sharing information. Information and communication technologies provided means to transmit and process information and documents quickly and effectively. However, many traders and transport providers in developing countries were not using electronic commerce because of limited telecommunication systems and high access costs. Further investments to modernize and improve transport and telecommunications infrastructure were required, together with an appropriate legal and policy infrastructure that was supportive of and conducive to the practice of ICT-based services.

2. While means of electronic communication had speeded up the exchange of information, they had not yet eliminated the time and costs associated with the legal requirements for paper documents arising from mandatory national laws and international conventions applicable to transport contracts and documents. In the maritime transport sector, electronic alternatives for traditional bills of lading were not generally recognized by law, and international conventions did not apply to electronic bills of lading.

3. Thus, while Governments and international bodies had been involved in establishing policy and legal infrastructure for electronic commerce, industry and private sector organizations had been setting up the required technical standards and guidelines. Cooperation among interested parties, including Governments and international, intergovernmental and private sector organizations was essential to create an environment for e-commerce where international trade transactions could be conducted in a secure manner between parties from distant parts of the world.

#### A. Economic and operational aspects

4. The first informal session of the Expert Meeting, on the economic and operational aspects of electronic commerce in relation with international transport services, opened with presentations of national and regional experiences. There were wide disparities amongst the developing countries in their level of development of electronic commerce. Experts from various developing countries noted that their problems relating to the greater use of electronic commerce concerned inadequate basic infrastructure, limited availability of computers, Internet access and transport and communication infrastructure, and lack of basic knowledge. This was confirmed by interventions by representatives of the regional organizations, including ESCWA, ECA and ESCAP. Experts invited Governments to promote the use of electronic commerce for administrative procedures and thus to become model users. The

development and delivery of training materials and the dissemination of best practices in the field of electronic commerce and international transport services were required. International organizations, with the participation of private operators from developed countries, could assist in this context.

5. Experts believed that investment in transport and ICT infrastructure needed to be promoted and coordinated at the national level. Furthermore, regional cooperation agreements could be established with the aim of coordinating investment programmes in transport and telecommunications infrastructure. The experts also considered that a regulatory environment should be introduced to favour a reduction in telecommunication and Internet charges. The experts believed that North-South and South-South joint ventures between transport operators would allow a mutually beneficial transfer of know-how and capital and thus develop national capacity.

6. Experts benefited from presentations by Maersk Sealand (global container carrier), and UPS Europe (global express package carrier) on their use of electronic commerce. For these companies, the development and use of information and communication systems had been an integral part of their business plan and commercial success. They had full confidence in the use of web-based information transfer. By working towards the development of partnerships with their clients and the establishment of agreements, procedures for arranging transport services had been greatly simplified. The representatives from the private sector encouraged developing countries to seize the opportunity to fully utilize ICT for arranging and improving their transport services.

7. The representatives of the Port Authority of Valencia and the International Association of Ports and Harbors (IAPH) made presentations on the development of port community systems. Such systems offered the possibility of information exchanges between the main partners within a port: Customs and other administrations, ocean carriers, land transport operators, terminal operators, freight forwarders and the trading community. To facilitate the development of such systems, the exchange of information amongst all the partners should be based on international standards for messages. The representative of IAPH reported that a number of major ports from developed countries were cooperating with some developing country ports in the establishment of ICT-based port community systems. For the landlocked countries, the use of such systems, through Internet connections, could facilitate and increase documentary security on transit cargo from seaports. Guidelines for the establishment of model port community systems and logistics platforms in developing countries would be extremely useful.

8. Experts stressed that the use of ICT called for simplified and transparent port and Customs procedures. This required first a simplification of the procedures used by each port user group before their integration into a community system. In this regard, trade facilitation bodies could play an important role in building up the necessary team spirit, trust and know-how among the concerned partners. Such facilitation bodies would be instrumental in the simplification of administrative regulations and practices, in particular customs procedures, to facilitate electronic commerce and transport operations. The representative of ECE recalled

that CEFACT Recommendation No. 4 on Trade Facilitation Bodies provided useful guidelines on their establishment. Various countries indicated that they were using UNCTAD-developed ICT applications (ASYCUDA and ACIS) to streamline and improve their national Customs clearance process and their transport operations.

## **B. Legal and documentary issues**

9. In considering legal uncertainties arising from the use of electronic means of communication in international trade and transport, experts recalled that a number of Governments had enacted, or were in the process of enacting, legislation in order to adapt their laws to the requirements of e-commerce. It was noted that the legal requirements in national laws and transport conventions for 'written', 'signed' and 'original' documents would constitute barriers to the development of e-commerce. Furthermore, the transport sector faced the particular challenge of replacing negotiable transport documents such as bills of lading with electronic alternatives.

10. In this context, a representative of UNCITRAL explained that the UNCITRAL Model Laws on Electronic Commerce (1996) and on Electronic Signatures (2001) aimed at providing States with a set of internationally acceptable rules and principles in removing some of the legal uncertainties and creating a favourable legal environment for electronic commerce. References were made to articles 16 and 17 of the Model Law on Electronic Commerce that dealt with the issues of carriage of goods and attempted to cover matters pertaining to electronic transport documents. It was also pointed out that UNCITRAL's future work on electronic commerce included the preparation of an international convention on electronic contracting and of a possible international instrument to overcome form requirements arising from the existing international conventions and instruments applicable to international trade and transport.

11. It was further stressed that a number of legal questions raised by electronic commerce could be addressed through contractual arrangements as preliminary measures pending adjustments to the legal framework. Indeed contractual terms and conditions could supplement legal frameworks and provide solutions to some of the uncertainties of electronic commerce.

12. In discussing the role of transport documents in international trade, the functions of bills of lading as evidence of contract, receipts for goods and documents of title, as well as their essential role in letters of credit, were highlighted. Experts and panellists stressed that in most transactions it was information and evidence of facts that were needed and not a physical or negotiable document. A survey of letters of credit calling for negotiable bills of lading showed that in the majority of cases there was no need for a document of title. Negotiable documents were only required in cases where there was a need to transfer title to goods in transit. Indeed the ICC Uniform Customs and Practice for Documentary Credit (UCP 500) included non-negotiable sea waybills and stressed the importance of evidence and

authentication issues. It was further noted that the draft eUCP prepared by ICC was expected to be finalized in November 2001.

13. Bearing in mind that the replacement of negotiable documents with electronic alternatives was indeed a challenge for the transport sector, experts and panellists called for a change of attitude and approach by commercial parties in relation to their documentary practices. It was stressed that the use of non-negotiable documents would clearly facilitate the transition to electronic commerce.

14. Experts also held discussions on the systems that aimed at replacing trade and transport documents with electronic substitutes. A representative of @Global Trade Secure Payment and Trade Management System explained that the system, which was still at the pilot stage, followed the documentary credit process, allowing the parties to create electronic equivalents of their paper documents, duly authenticated and signed. It complemented the traditional letters of credit and was in conformity with eUCP 500. It was an open system with no need for registration charges or any new software. Applicants would pay their credit-issuing banks a fee for issuance of L/Cs through @Global Trade, as they currently did. It used non-negotiable electronic sea waybills. The key challenge was considered to be the involvement of all actors in trade transactions involved.

15. A representative of Bolero International explained that the Bolero system aimed at facilitating international trade through electronic means, focusing on trade documents and providing a common legal and security basis for such transactions. Unlike @Global Trade, Bolero was a closed system and its services were only available to its members. Thus the system needed the involvement of all the players in the international trade chain to succeed. As the Bolero Bill of Lading (BBL) was not recognized by law, the Rule Book provided the contractual basis that was binding on all members. The challenges facing the system after two years of operation included encryption regulations and macro-economic unease on the part of would-be implementers. Paperless trade was clearly faster, cheaper and more secure than paper-based transactions. However, the most important problem for the implementation of the system was considered to be people's attitude to change from their traditional habits.

16. Experts acknowledged that, while legislative initiatives by national Governments and international organizations were continuing with a view to establishing the necessary legal framework, the possibilities of contractual arrangements would need to be further explored. It was recognized that contractual terms and conditions could not be used to overcome all legal obstacles and uncertainties arising from the use of electronic commerce, but they could nevertheless play an important role in this context. Unlike laws and regulations, they could be easily adapted to technological changes. Such contracts could also serve as a source of knowledge for Governments in making changes or adjustments to the legal framework. References were also made to the recently adopted international instruments applicable to different modes of transport that permitted the use of electronic transport documents.



### **C. Future direction**

17. The Meeting provided an excellent opportunity for an exchange of views among experts and representatives of international governmental and non-governmental organizations. It was an important occasion for taking stock of commercial, operational and legal developments at the national and international level. It enabled participants to give consideration to the various aspects of electronic commerce in the context of international transport services, including their impact, problem areas and possible solutions. The discussions of the experts resulted in the agreed set of recommendations for national Governments, enterprises, the international community and UNCTAD.

### **Chapter III**

#### **ORGANIZATIONAL MATTERS**

##### **A. Convening of the Expert Meeting**

18. The Expert Meeting on Electronic Commerce and International Transport Services: Best Practices for Enhancing the Competitiveness of Developing Countries was held at the Palais des Nations, Geneva, from 26 to 28 September 2001.

##### **B. Election of officers**

(Agenda item 1)

19. At its opening meeting, the Expert Meeting elected the following officers to serve on its bureau:

Chairperson: Ms. Joan Remsu (Canada)

Vice-Chairperson-cum- Rapporteur: Mr. Sugeng Rahardjo (Indonesia)

##### **C. Adoption of the agenda and organization of work**

(Agenda item 2)

20. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in document TD/B/COM.3/EM.12/1. The agenda for the Meeting was thus as follows:

1. Election of officers
2. Adoption of the agenda and organization of work
3. Electronic commerce and international transport services
4. Adoption of the outcome of the Meeting

##### **D. Documentation**

21. For its consideration of the substantive agenda item, the Expert Meeting had before it a document prepared by the UNCTAD secretariat entitled: "Electronic commerce and international transport services" (TD/B/COM.3/EM.12/2),

**E. Adoption of the outcome of the Meeting**

(Agenda item 4)

22. At its closing meeting, the Expert Meeting authorized the Rapporteur to prepare the final report of the Meeting under the authority of the Chairperson.

## Annex

### ATTENDANCE \*

1. Experts from the following States representatives of UNCTAD attended the Meeting:

Angola	Jamaica
Bahrain	Jordan
Bangladesh	Kyrgyzstan
Benin	Lebanon
Bolivia	Lesotho
Burkina Faso	Madagascar
Cameroon	Malawi
Canada	Malaysia
Cape Verde	Mali
China	Mexico
Colombia	Morocco
Costa Rica	Nepal
Cuba	Nicaragua
Democratic People's Republic of Korea	Nigeria
Democratic Republic of the Congo	Poland
Egypt	Republic of Korea
Finland	Russian Federation
France	Rwanda
Gabon	Saudi Arabia
Gambia	Sweden
Georgia	Thailand
Guinea	Trinidad and Tobago
Honduras	Turkey
India	Uganda
Indonesia	United Republic of Tanzania
Italy	Venezuela
	Zambia
	Zimbabwe

---

\* For the list of participants, see TD/B/COM.3/EM.12/INF.1.

2. The following intergovernmental organizations were represented at the Meeting:

Arab Labour Organization  
Intergovernmental Organisation for International Carriage by Rail

3. The following specialized agencies and related organizations were represented at the Meeting:

International Labour Organization  
World Trade Organization

4. The Economic Commission for Europe, the Economic and Social Commission for Asia and the Pacific, the Economic Commission for Africa and the Economic and Social Commission for Western Asia were represented at the Meeting.

5. The following non-governmental organizations were represented at the Meeting:

*General Category*

Exchange and Cooperation Centre for Latin America

*Special Category*

International Association of Ports and Harbours  
International MultiModal Transport Association

6. The following special invitees attended the Meeting:

Ms. Ida Stier, Managing Director, Stier Shipagents, Las Palmas, Spain  
Mr. Per Vestergaard Pedersen, Associate, Bech-Bruun Dragsted Law Firm, Denmark  
Mr. Aaron Mak, Chief Executive Officer, Logistic Information Network Enterprise,  
Hong Kong  
Mr. Samir Baradhi, Assistant General Manager, Babylos Insurance Company,  
S.A.L., Beirut, Lebanon

*Panellists*

Mr. Poul Bjerre, Maersk Sealand  
Mr. Michael White, UPS Europe  
Mr. Marcelo Burgos, Valencia Port Authority  
Mr. Renaud Sorieul, UNCITRAL  
Mr. Vincent O'Brien, Obrico Limited Global Trade and Finance  
Mr. Alan Asay, Bolero Operations Limited