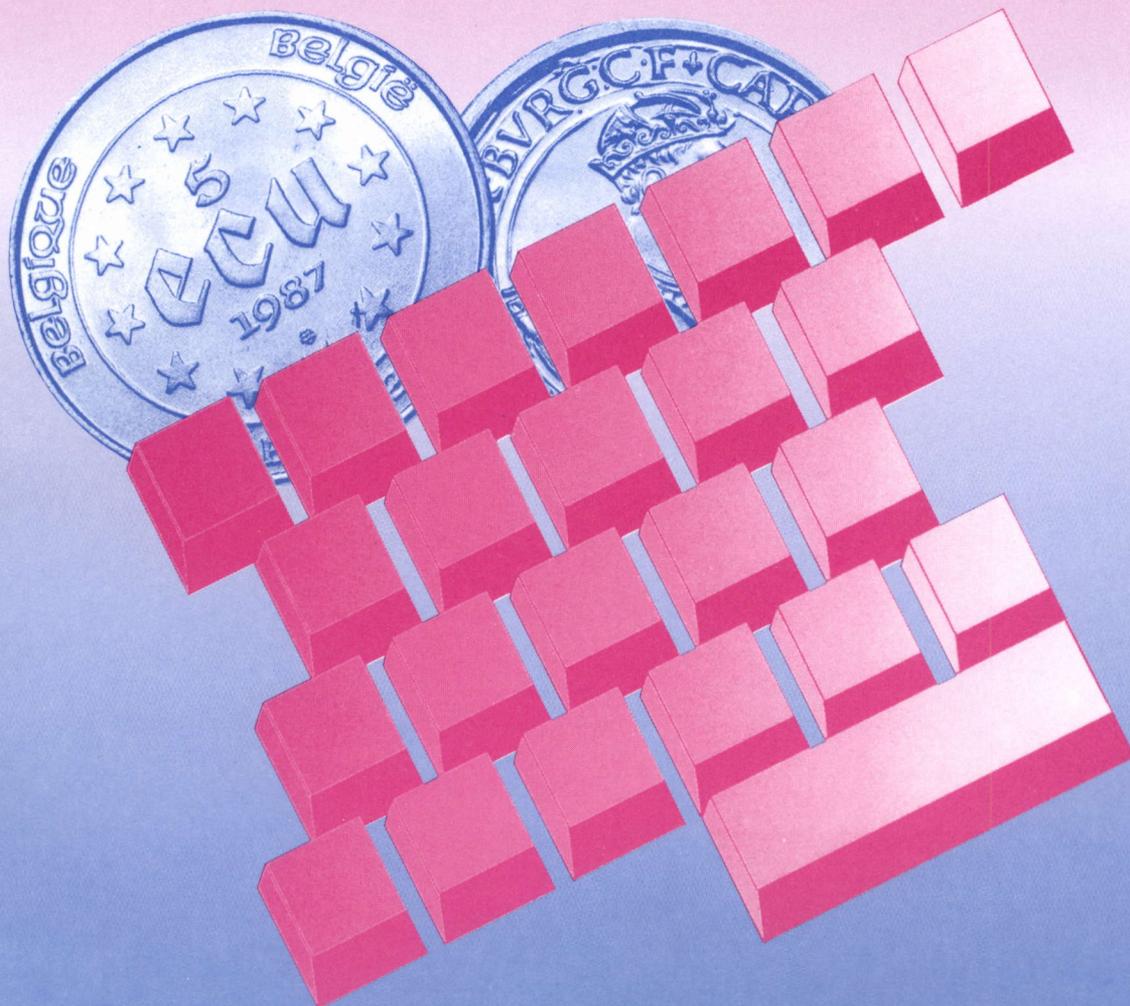


Commission of the European Communities

# TEDIS



## THE LEGAL POSITION OF THE MEMBER STATES WITH RESPECT TO ELECTRONIC DATA INTERCHANGE



**The Legal Position  
of the Member States  
with respect to  
Electronic Data Interchange**

**Final Report**

**September 1989**

**The views put forward in this report represent the author's own views and do not necessarily reflect those of the Commission of the European Communities.**

**This report was achieved on behalf of the Commission of the European Communities by the Law Office of LODOMEZ, CROUQUET in conjunction with the following law offices:**

**- Scp DUBARRY, GASTON-DREYFUS, LEVEQUE, LEDOUARIN, SERVAN-SCHREIBER, VEIL & ASSOCIES**

**Paris**

**- BRUNI-ABBATESCIANNI  
Milan**

**- ADVOKATERNE AMALIEGADE No 22  
Copenhagen**

**- TAYLOR JOYNSON GARRETT  
London**

**- DUTILH, VAN DER HOEVEN & SLAGER  
Amsterdam**

**- KPMG Estudio Juridico y Tributario  
Barcelona**

**- AGUIAR-BRANCO & ASSOCIES  
Porto**

**- TRIEBEL WEIL ELSING  
Dusseldorf**

**- EUGENE F. COLLINS & SONS  
Dublin**

**- TANASSOULIAS-PSAROS  
Athens**

## CONTENTS

### INTRODUCTION

Section 1.- Electronic Data Interchange (EDI): Concept and Relevance

Section 2.- Obstacles to the Development of Electronic Data Interchange in Europe

§1.- Technical Obstacles

§2.- Legal Obstacles

Section 3.- Action to Date at International and European Community Level

§1.- International Action

§2.- Community Action

Section 4.- Aims and Parameters of the Present Study

Section 5.- Report Structure and Methodology

**CHAPTER 1: ANALYSIS OF THE LEGAL POSITION IN THE  
FEDERAL REPUBLIC OF WEST GERMANY**

**Section 1.- Absence of issue-specific statute**

**Section 2.- The possibility of transferring commercial documents  
between parties by electronic means.**

**Par. 1 -Transferability by electronic means of commercial  
documents of whatsoever nature (purchase orders, transport  
documents, documentary credits, etc.)**

- a) principles**
- b) invoices**
- c) general conditions of sale**
- d) contracts**

**Par. 2 - Exceptions to the principle of transmittability of commercial  
documents by electronic means**

- a) documents requiring certified form**
- b) insurance policies**
- c) deeds of assignment**

**Section 3.- Constraints resulting from fiscal, reporting or other  
requirements to retain documents.**

**Par. 1 - General requirement under German law to retain  
documents**

- a) requirement under company law**
- b) requirement under tax law**
- c) requirement under customs and statistical law**

**Par. 2 - The preservation of records on computer media**

**Par. 3 - Penalties for failure to preserve documents**

**Section 4.- Constraints arising from the obligation to sign  
documents.**

**Par. 1 The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under German law**

a) discretionary proof ("Freibeweis")

b) strict proof ("Strengbeweis")

**Par. 2 - Application to electronic media**

**Par. 3- Evidentiary value of a computerized document**

**Par. 4- Final considerations on proof**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of German law**

**CHAPTER 2: ANALYSIS OF THE LEGAL POSITION IN BELGIUM**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

a) General principles

b) invoices

c) General Conditions of Sale

d) contracts

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) documents required to be authentic instruments
- b) hire purchase and instalment credit
- c) pledges of goodwill
- d) surety bonds
- e) instruments embodying a right
- f) agreements assigning jurisdiction

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Belgian law**

- a) obligations under commercial law
- b) obligations under accounting and tax law
- c) obligations under company law
- d) obligations under customs and statistical law

**Par. 2 - The preservation of records on computer media**

**Par. 3 - Penalties for failure to preserve documents**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under Belgian law**

- a) the onus of proof
- b) admissible means of proof in Belgian law
- c) documentary evidence the most cogent
- d) exceptions and modifications
- e) the idea of writing under CC, article 1341
- f) exceptions and modifications to unrestricted proof in commercial matters

**Par. 2 - Application to electronic media**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of Belgian law**

**CHAPTER 3: ANALYSIS OF THE LEGAL POSITION IN DENMARK**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles
- b) invoices
- c) general conditions of sale
- d) contracts

**Par. 2.- Exceptions to the transmissibility of commercial documents by electronic means.**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Danish law**

- a) obligations under commercial law
- b) obligations under tax law
- c) obligations under customs and statistical law

**Par. 2 - The preservation of records on computer media**

**Par. 3 - Penalties for failure to preserve accounting and tax documents**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Admissibility**

**Par. 2 - Evidential weight of a computerized document**

**Par. 3 - Proposed legislation**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of Danish law**

**CHAPTER 4: ANALYSIS OF THE LEGAL POSITION IN SPAIN**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles**
- b) invoices**
- c) general conditions of sale**
- d) contracts**

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) documents required to be authentic instruments**
- b) insurance policies**
- c) instruments embodying an incorporeal right**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Spanish law**

- a) obligations under commercial law**
- b) obligations under tax law**
- c) obligations under customs and statistical law**

**Par. 2 - The preservation of records on computer media**

**Par. 3 - Penalties for failure to preserve tax and accounting documents**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - The rules of evidence under Spanish law**

**Par. 2 - Application to electronic media**

**Par. 3 - Evidential weight of a computerized document**

**CHAPTER 5: ANALYSIS OF THE LEGAL POSITION IN GREECE**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles
- b) invoices
- c) general conditions of sale
- d) contracts

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) documents required to be authentic instruments

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Greek law**

- a) obligations under commercial law
- b) obligations under tax law

**Par. 2 - The preservation of records on computer media**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under Greek law**

1. Legal provisions
2. Subject of evidence
3. Means of proof
  - a) Admissions
  - b) Inspection of the scene or object
  - c) Expert reports
  - d) Written documents
  - e) Examination of the parties
  - f) Witnesses
  - g) oath
  - h) judicial presumptions
4. Agreements as to proof

**Par. 2 - Application to electronic media**

**Par. 3 - Evidential weight of a computerized document**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of Greek law**

**APPENDIX TO THE INVESTIGATION INTO GREEK LAW**

**1. CASE STUDIES**

**2. GOVERNMENT POLICY AND STRATEGY FOR ELECTRONIC DATA PROCESSING IN GREECE**

## **CHAPTER 6: ANALYSIS OF THE LEGAL POSITION IN IRELAND**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles**
- b) invoices**
- c) general conditions of sale**
- d) contracts**

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) tax returns and agreements with the tax authorities**
- b) instruments relating to the formation, management and supervision of companies, and the subscription, holding and transfer of their shares**
- c) instruments concerning real property**
- d) consumer credit, guarantees and indemnities, acknowledgements of debt**
- e) Contracts not to be performed within a year of the date of conclusion**
- f) instruments embodying an incorporeal right**
- g) contracts of hire purchase and for the sale of goods and supply of services**

**Par. 3- Sanctions**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Belgian law**

- a) obligations under commercial law**
- b) obligations under accounting and tax law**
- c) obligations under customs and statistical law**

**Par. 2 - The preservation of records on computer media**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under Irish law**

**Par. 2- Evidential value of a computer document**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**CHAPTER 7: ANALYSIS OF THE LEGAL POSITION IN ITALY**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles**
- b) invoices**
- c) general conditions of sale**
- d) contracts**

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) Insurance policies
- b) transport documents

**Par. 3 - Sanctions for failure to transmit documents in due form by electronic means**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Italian law**

**Par. 2 - The preservation of records on computer media**

**Par. 3 - Penalties for failure to preserve accounting and tax records**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Application to electronic transmission**

**Par. 2 - Evidential weight of a computerized record**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of Italian law**

**CHAPTER 8: ANALYSIS OF THE LEGAL POSITION IN LUXEMBOURG**

**Section 1.- Specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

- a) General principles**
- b) Invoices**
- c) General conditions of sale**
- d) Contracts**

**Par. 2- Exceptions to the rule that documents are transmissible by electronic means**

- a) documents required to be authentic instruments**
- b) hire purchase and instalment credit**
- c) pledges of goodwill**
- d) incorporation of companies**
- e) surety bonds**
- f) instruments embodying a right**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1- The general obligation to preserve under Luxembourg law**

- a) obligations under commercial law**
- b) obligations under accounting and tax law**
- c) obligations under customs and statistical law**

**Par. 2- The preservation of records on computer media**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

**Par. 2- The possibility of signing electronically**

**Par. 3- Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1- Evidence under Luxembourg law**

**Par. 2- Application to electronic media**

**Par. 3- Probative value of an electronic document**

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2- Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of Luxembourg law**

**CHAPTER 9: ANALYSIS OF THE LEGAL POSITION IN THE NETHERLANDS**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

- a) General principles
- b) Invoices
- c) General conditions of sale
- d) Contracts

**Par. 2- Exceptions to the rule that commercial documents are transmissible by electronic means**

- a) documents required to be authentic instruments

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1 - The general obligation to preserve under Dutch law**

- a) obligations under commercial law
- b) obligations under tax law

**Par. 2- The preservation of records on computer media**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

**Par. 2- The possibility of signing electronically**

**Par. 3- Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1- Evidence under Dutch law**

**Par. 2- Application to electronic media**

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

**Section 7.- Conclusions of the survey of Dutch law**

## **CHAPTER 10: ANALYSIS OF THE LEGAL POSITION IN PORTUGAL**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

- a) invoices
- b) order forms and general conditions of sale
- c) contracts

**Par. 2- Exceptions to the rule that commercial documents are transmissible by electronic means**

- a) documents required to be authentic instruments
- b) instruments embodying an incorporeal right

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1- The general obligation to preserve under Portuguese law**

- a) obligations under commercial law
- b) obligations under tax law

**Par. 2- Penalties for the non-respect of obligations under accounting and tax law to preserve documents**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

**Par. 2- The possibility of signing electronically**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1- Evidence under Portuguese law**

- I. Circumstantial evidence
- II. Admission
- III. Documentary evidence
- IV. Expert witnesses, examination and sworn testimony

**Par. 2- Application to electronic media**

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

**Section 7.- Conclusions of the survey of Portuguese law**

**CHAPTER 11: ANALYSIS OF THE LEGAL POSITION IN THE UNITED KINGDOM**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles
- b) invoices
- c) general conditions of sale
- d) contracts

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Spanish law**

- a) obligations under commercial law
- b) obligations under tax law
- c) obligations under customs and statistical law
- d) obligations under social law

**Par. 2 - The preservation of records on computer media**

**Par.3 - Penalties for failure to preserve tax and accounting documents**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Par. 3 - Penalties**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - The rules of evidence under English law**

**Par. 2 - Application to electronic media**

**Par. 3 - Evidential weight of a computerized document**

**Par. 4 Concluding considerations on proof**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of English law**

## **CHAPTER 12: ANALYSIS OF THE LEGAL POSITION IN FRANCE**

**Section 1.- Lack of specific regulation in the matter**

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

- a) General principles
- b) invoices
- c) General Conditions of Sale
- d) contracts

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) documents required to be authentic instruments
- b) instruments embodying an incorporeal right

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under French law**

- a) obligations under accounting law
- b) obligations under tax law

**Par. 2 - The preservation of records on computer media**

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

**Par. 2 - The possibility of signing electronically**

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under French law**

**Par. 2 - Application to electronic media**

**Par. 3- Final considerations on evidence**

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

**Par. 2 - Auditing of computer and electronic data interchange systems**

**Section 7.- Conclusions of the survey of French law**

**CHAPTER 13: An example from North America: the Consumer Credit Protection Act.**

**PART TWO: "HORIZONTAL" ANALYSIS**

**Chapter 1: The regulatory position in the twelve Member States**

**Chapter 2: Legal obstacles to the development of electronic data interchange - Typology of constraints**

**Section 1: Potential constraint No. 1: the obligation to make out, produce, send or preserve signed paper documents.**

**Section 2: Potential constraint No. 2: obstacles arising out of the requirements of proof**

**Paragraph 1 - The development of the "continental" law of evidence**

**A - Positioning of the problem**

**B - Procedural law**

**C - In accounting and tax law**

**Paragraph 2 - The development of the Anglo-Irish law of evidence**

**A - Positioning of the problem in procedural law**

**B - Development of the law of evidence in legal proceedings**

**C - In accounting and tax matters**

**Section 3: Potential constraint No. 3: the difficulty of determining the moment and place at which the transaction effected by electronic data interchange takes place**

**PART THREE: CONCLUSIONS**

## INTRODUCTION

### **Section 1. Electronic Data Interchange: Concept and Relevance**

#### **1.**

The internationalisation of business activities and the increasing number of services rendered by business entities imply a necessity for trade data to be transferred more and more rapidly but also in a reliable way, for the storage of such data to be simplified, and for authorised access to such data to be facilitated.

The above imperatives are now acknowledged to exert growing influence on commercial competitiveness, irrespective of the size of enterprise concerned.

#### **2.**

While it is true that these communication requirements can already be met with electronic mail, existing processes are perhaps less efficient, however, than electronic data interchange.

Electronic Data Interchange, commonly abbreviated to EDI, differs from conventional methods of transmitting data to the extent that it allows direct computer-to-computer transfer of structured and standardised data.

3.

Beyond any shadow of a doubt, EDI represents the way ahead.

EDI allows commercial partners to communicate standardised messages instantly, instead of transmitting trade documents in paper form.

As a result, EDI is conducive to a reduction both in potential for error and in the costs which are associated, on the one hand, with the need of decoding and re-encoding paperwork communications and, on the other, with typical data transfer costs implied in the use of conventional postal or other delivery services.

Electronic data interchange also enables companies to improve both the quality and cost of inventory management and to shorten the "*order / product delivery or provision of services / billing / payment*" cycle.

EDI also permits more prompt and more accurate response to satisfying customer needs.

EDI thus helps companies improve the quality of service provided to their customers while at the same time reducing financial overheads.

In other words, EDI provides an additional competitive edge.

4.

The European Commission has estimated that, in this context, costs of completing documents, inaccuracies in duplication of data, excessive stocks and delays in offices, factories and at customs, could be equivalent to anything up to 10% of the cost of the exported finished product.

These global estimates are susceptible of confirmation by more detailed reference to specific sectors of activity. In the case of transport alone, the cost of raising conventional documents and the delays attributable to their issue and verification could represent, according to the same source, between 10 and 15% of total transportation costs. (1)

---

<sup>1</sup> COM (86) 662, final, December 1, 1986

Further, private sources also assess the costs of useless paper documentation to be in the region of ECU 5 billion, with the number of relatively complicated commercial documents erroneously completed amounting to 50%. (2)

5.

The advantages linked to electronic data interchange are such that they apply not only to large companies but also to small and medium-sized enterprises. The last-named category, by virtue of their frequent status as sub-contractors and their lack of financial muscle, are actually even more exposed than large companies to financial overhead and cash-flow pressures, not to mention inventory bottlenecks caused by delays in transmitting trade information and settling accounts.

6.

Accordingly, as emphasised repeatedly in the White Paper on the completion of the Internal European Market, (3) ease of information flows between economic entities and the Member States of the Community is an essential condition for the free movement of goods and services and the development of corporate cooperation on the European level.

---

<sup>2</sup> See Valentine Herman in "Electronic Data Interchange - A Key to Business Success in 1992", *Business Journal*, Brussels, February 1989, page 19

<sup>3</sup> COM (85) 310, final, June 14, 1985

**Section 2.-                   Obstacles to the Development of Electronic  
Data Interchange in Europe**

7.

Electronic data interchange has already found widespread application in Member State economies.

It is used to transfer trade documents relating to orders and their confirmation, delivery and reception of goods, and invoicing of products and services provided.

It is also used in the case of so-called "interactive" transactions, such as in travel, hotel and theatre reservations or banking or money transfer operations.

Of more recent date is the application of EDI to electronic points of sale (EPOS), to direct debit payment systems, to electronic funds transfer (EFT), to financial credits, or to computer-assisted trading systems (CATS).

8.

Experience to date nevertheless is reserved in most instances to a specific group or economic sector. (4)

9.

So-called "value-added networks" (VANs) have also been set up; these enable users within the same group or within a sector to communicate with suppliers or clients in both domestic and foreign locations.

The British TRADANET network is an example. This permits more than 950 commercial entities engaged in manufacturing, distribution and the provision of services in various sectors of the economy to transmit by computer orders, dispatch advice, invoices and other commercial documents.

---

4       CEFIC for the chemicals industry, EDIFICE in electronics, ODETTE for the automotive sector, EDICON in the construction industry, SHIPNET for international maritime transport, SITA for international air transport, SWIFT for global inter-bank financial transactions, or CAC CATS for stock exchange trading systems.

**10.**

Despite an undeniable growth in the use of electronic data interchanges, Europe continues to lag relatively far behind in this respect, particularly by comparison with the United States of America.

Indeed, the development of electronic data interchange in Europe poses problems of a technical and/or information technology-related nature, or even of a sociological order. In addition, there are legal obstacles.

**\*1. Technical Obstacles**

**11.**

Today, computers are used to provide all kinds of services increasingly rapidly and at a lower cost.

One such service now taken for granted is computer-assisted or electronic mail.

EDI (Electronic Data Interchange), as noted previously, differs from traditional mail essentially by virtue of the fact that a communication routed by EDI is a structured message comprising data elements - some of which are mandatory, others optional - whose meaning has been precisely determined in advance.

As a result, the development or general use of EDI is, above all, a problem of language, standards and hardware and software inter-compatibility.

This problem is exacerbated by the fact that currently operational systems used to transmit trade data electronically are predominantly closed systems, accessible only to users belonging to a specific group or economic sector and, for reasons of non-compatibility, preclude potential inter-connectibility to other hardware and software data transfer systems.

12.

To permit dialogue, computers are subordinated into communication networks. But the various communication networks operative in Europe are of uneven quality.

Additionally, communication charges on conventional telephone networks vary from one Member State to another and remain generally too high, particularly in the case of international calls, to favour intensive use of the telephone lines for purposes of electronic data interchange.

13.

Moreover, security of data and confidentiality are not always assured or, not always to the extent the partners to a transaction might feel desirable; this is both because of inadequate funding committed by Member States individually and a dispersion of Member State efforts collectively.

#### **\*2.- Legal Obstacles**

14.

The key legal obstacles to EDI result from the priority accorded to written document in Member States national law, and the concomitant requirement in national law to prepare, issue, send and store documents in signed hard-copy form, either to ensure compliance with provisions in respect of validity or negotiability of the document *per se*, or for reasons of accounting or fiscal regulations or for use as evidence.

15.

Accordingly, legal problems linked with contracts formation can arise with EDI, not least because a number of formal conditions, incompatible with EDI, need to be respected if certain contracts are to be deemed valid.

Moreover - and more generally - the use of electronic data interchange, can pose legal problems as to the time and place of the contract, both of which can be of specific relevance in the determination of applicable jurisdiction, in case of litigation.

16.

EDI also poses problems of security and confidentiality.

Electronic processing is reliable, but not necessarily infallible.

Mistakes of a technical nature can happen: hardware or software malfunction or telecommunications system breakdown, of an extrinsic nature (communication failure or distortion due to unfavourable ambient conditions), or as a result of human error (incorrect data input, encoding or programming); equally, errors can arise as a result of modification, destruction, fraudulent misappropriation or non-authorized use of the electronic message. All of these can be so prejudicial to the development of electronic data interchanges that it is necessary to take such technical and legal measures as are appropriate to safeguard against them.

17.

Taking all the above into consideration, it also emerges that the use of electronic data interchange can pose legal responsibility problems.

**Section 3.- Action to Date at International  
European Community Level**

**18.**

One common denominator to emerge from the problem areas identified in the foregoing is that developments and new priorities in business life cannot be accommodated exclusively at the national level.

**\*1.- International Action**

**19.**

Steps have been taken at the level of various international organisations in order to resolve, at least in part, the technical and legal difficulties enumerated above, and to foster increased use to electronic data interchange.

**20.**

At the technical level, the International Standards Organization (ISO) and the United Nations Economic Commission for Europe (UN/ECE) have concentrated on developing a common electronic language. This language focuses on:

- a vocabulary constructed on the basis of the U.N. Trade Element Data Directory (TDED), now accepted as an international standard by the ISO (ISO Standard 7372) and recognised by the UN/ECE; and
- a syntax known as EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport), already adopted as ISO Standard 9735 and recognised by the UN/ECE.

Both vocabulary and syntax serve for the elaboration of standard adaptable messages which have also been recognised by the UN/ECE as United Nations Standardized Messages (UNSM).

These standardised messages, of which three types are currently available <sup>(5)</sup>, together with messages developed at a sectoral level <sup>(6)</sup>, are stored in a database known as the Community Edifact Board Information System (CEBIS). The Edifact Board is a section of the UN/ECE which has the task of submitting UNSM message proposals to the United Nations Economic Commission for Europe.

## 21.

In the legal field "Uniform Rules of Conduct for Commercial Data Transfers by Teletransmission" have been elaborated under the aegis of a special joint Committee of the International Chamber of Commerce (C.C.I.) in Paris, made up of experts drawn from governmental and non-governmental organisations <sup>(7)</sup> and several other C.C.I. committees.

The UNCID Rules have been adopted by the C.C.I. and by the U.N. Economic Commission for Europe <sup>(8)</sup>; they are non-binding, however, and merely provide "commercial partners" *with a foundation on which the parties involved can build a 'communication agreement'; a contract with a legally binding effect* <sup>(9)</sup>.

---

<sup>5</sup> Commercial Invoice, Purchase Order and Despatch Advice

<sup>6</sup> For example, CEFIC, the **Conseil Européen des Federations des Industries Chimiques**, or ODETTE, the **Organisation pour l'Echange de Données par Teletransmission en Europe**)

<sup>7</sup> Namely: The **Commission des Nations Unies pour le Droit Commercial International** CNUDCI (UNCITRAL, the **United Nation's Commission for International Trade Law**), the **Programme Special de Facilitation du Commerce de la Conference des Nations Unies sur le Commerce et le Developpement** (CNUCED), the UN/ECE Working Party on the Facilitation of Procedures for International Trade, **Customs Cooperation Council** (CCC), the **Organisation for Economic Cooperation and Development** (OECD), the **European Commission**, the **International Standards Organisation** (ISO), the **Comite Europeen des Assurances** (CEA), the **Conseil Europeen des Federations des Industries Chimiques** (CEFIC), the **Organisation for Data Exchange by Teletransmission in Europe** (ODETTE), together with a regional organisation and several national trade promotion organisations (NORDIPRO, FINPRO, NCITD, SIMPRO-FRANCE, SITPRO).

<sup>8</sup> UNCID, **Uniform rules of Conduct for Interchange of trade Data by teletransmission**, published by the International Chamber of Commerce, C.C.I. No. 452, January 1988, Preface, at page 5.

<sup>9</sup> *ibid.*, page 5

The Council of Europe (10), the United Nations Commission for International Law (UNCITRAL) (11), and the Customs Cooperation Council (CCC) (12) have also issued recommendations to further harmonisation and impart more flexibility to legislation in this area.

## \*2.- Community Action

### 22.

Activities have been undertaken at European Community level, which takes account of recognised international standards or are taken in association or conjointly with those organisations that are involved in the development of electronic data interchange (13).

### 23.

On June 30, 1987, the Commission of the European Communities issued a Green Paper (COM (87) 290) on the development of a common market for telecommunications equipment and services, described as "*the principal driving force behind The Community economy's entry into the era of information technology*".

This Green Paper was intended to initiate debate and encourage comment from the widest possible range of opinion.

It eventually led to the adoption of various programmes such as INSIS, CADDIA, COST 306,.... and, more specifically, to the launch of the Trade Electronic Data Interchange Systems programme (TEDIS) to which the present study relates.

---

10 Council of Europe Recommendation R(81)20, adopted on December 11, 1981 with respect to the harmonisation of legislation in regard to written documents, the admissibility of facsimile documents and computer records.

11 UNCITRAL Recommendation on the validity of computer records, adopted during 18th Session, 1985, June.

12 CCC Resolution with respect to the use of computer data as evidence before the courts, adopted in Brussels on June 26, 1986 in the course of Sessions 67 and 68

13 The Secretariat of the EDIFACT Board, the body of the UN/ECE, which has one task to submit UNSM message proposals to the United Nations Economic Commission for Europe, is entrusted to European Commission

24.

Upon the proposal of the Commission, the Council adopted the Trade Electronic Data Interchange Systems (TEDIS) programme on October 5, 1987, thus launching a Community-wide programme for trade electronic data interchange.

The objectives of the TEDIS Programme are as follows:

- a) *To coordinate at Community level Member State advances in the development of EDI systems;*
- b) *To heighten awareness at user level;*
- c) *To heighten awareness of EDI's potential among European telematics hardware and software manufacturers and suppliers*
- d) *To provide logistic support for European sectoral groups;*
- e) *To take account of specific EDI trade needs within the Member States of the Community in terms of telecommunications and standardisation policies, and to engage in preparatory work in this respect;*
- f) *To assist in the establishment of hardware and software conformable testing centres for trade EDI applications;*
- g) *To conduct research into legal issues which might inhibit the development of trade EDI and to ensure that regulatory constraints in matters of telecommunications should not hamper the development of trade EDI trade;*
- h) *To study security aspects of trade EDI as to ensure confidentiality of messages transmitted;*
- i) *To examine specific problems posed by Community multilingualism and to assess in this context results obtained or projected within the framework of automatic translation programmes SYSTRAN and EUROTRA;*
- j) *To assess means by which dedicated trade EDI application software might be developed;*
- k) *To list existing or potential sectoral trade EDI projects and effect a comparative analysis of them;*

- l) *To evaluate specific problem areas identified in the implementation of trade EDI systems and assess the extent to which these could be more readily resolved by action at Community level;*
- m) *To determine what assistance would be appropriate for small-to-medium size enterprises to enable them to participate actively in trade EDI; and*
- n) *To consider support mechanisms for pilot projects to be implemented successively with a view to developing general solutions capable of common application to trade EDI use <sup>(14)</sup>.*

#### Section 4.- Aims and Parameters of Present Study

25.

The study presented in the following falls within the overall framework of the Community TEDIS Programme and, more specifically, objective g)

In other words, the study contributes to "*research into legal issues which might hinder the development of trade EDI and to ensuring that regulatory constraints in matters of telecommunications should not impair the development of trade EDI*".

26.

As stated previously, the legal obstacles which could frustrate development of European EDI are many and varied (15).

To the extent that the European Commission has elected to study each group of obstacles separately, the following will deal exclusively with issues arising in connection with statutory Member State requirements that documents be prepared, issued, despatched and stored in duly-signed, hard-copy form to ensure compliance with provisions in respect of validity or negotiability of the document *per se*, or for reasons of accounting or fiscal regulation or for use as evidence or negotiability.

Accordingly, problems attendant on formation of contracts (16) or posed by security or confidentiality considerations (17), or responsibility (18), will be explored only to the extent that they are closely linked with the statutory requirement to prepare, issue, despatch or store documents in hard-copy form and handwritten signed.

---

15 Cf. *supra*, page 6 et seq.

16 Cf. *supra*, page 6, point 14

17 Cf. *supra*, page 7, point 17

18 Cf. *supra*, page 8, point 18

27.

Equally, the report as commissioned restricts analysis of the role of written form in the national law of the twelve Member States to matters pertaining to commercial relations between private or assimilated trade entities.

As a result, fiscal and customs and excise considerations are reflected solely to the extent that they impose the need for a written communication to confirm trade documents habitually exchanged between private or assimilated trade entities.

The report as commissioned nonetheless requires that there be examination of the extent to which messages that have to be submitted to the tax and customs and excise authorities can be communicated via EDI or other telematic support systems,

together with an examination of the extent to which the relevant Member State tax and customs and excise administrations have access to information systems and electronic records for audit purposes.

## Section 5.- Report Structure and Methodology

28.

Researching solutions to legal impediments which might retard the development of EDI trade applications imposes a two-stage approach:

- First, determination of legal obstacles existing in each individual Community Member State which are liable to impede progressively more frequent use of trade EDI; and
- Second, defining, in terms of perceived needs and on the basis of such experience as is available to date, courses of priority action at legal and Community level which might prove conducive to eliminating such obstacles and favouring EDI's evolution.

29.

In essence, therefore, the study adopts a comparative approach.

It is acknowledged that a comparative approach admits two methods of analysis.

Horizontal analysis entails examining national regulations in order to identify key issues addressed by each. This immediately implies comparing individual legislative and jurisprudential frameworks, noting disparities, divergences and national idiosyncracies, and identifying respective shortcomings and/or virtues.

Analysis may also be undertaken vertically. In that case, the problem is not dissected into specific component questions or criteria but is viewed globally within the context of separate legal systems. Vertical analysis admits only a *posteriori* comparisons, i.e., on the basis of observations intrinsic to each system.

30.

Initially, the second analytical approach was selected. There were three basic reasons for this.

The first reason is of an historical nature. Not all Member States are as yet in the process of making the statutory changes necessary to adapt their legal system to the technological revolution.

The second reason is juridical: even if written documents appear to be the rule almost without exception, approaches vary considerably from one Member State to the next.

The third reason is of a contractual nature: the present report as commissioned is required to be structured to offer a continuing validation of survey results. In consequence, it was felt that, by opting in the first part to follow the vertical approach, those who commissioned the report would be more closely associated with its progress.

31.

On the other hand, the horizontal approach has not been ignored: on the contrary, it has been followed in the second part of this report and in the formulation of the conclusions.

32.

The study results presented on the following pages thus fall into two parts.

The first part provides a vertical analysis within each national legal system.

In the second part, we have attempted to define in summary form a typology of existing constraints and pinpoint common or specific problem areas.

By way of a conclusion, we have appended proposals for action at the levels of national and Community law which should promote the more widespread use of electronic data interchange.

**33.**

Clearly, these proposals take into account existing or projected solutions at international level.

Action at this level will thus be analysed only when recommendations are formulated.

**34.**

Among recognised solutions considered is the U.S. Consumer Credit Protection Act, a brief overview of which is offered at the end of the section devoted to vertical analysis.

45-46

**Part One**

**Vertical Analysis**

**CHAPTER 1: ANALYSIS OF THE LEGAL POSITION IN THE  
FEDERAL REPUBLIC OF WEST GERMANY (1)**

**Based on research into West German law carried out by KURT  
WEIL of TRIEBEL WEIL ELSING Law Offices, Duesseldorf**

**Section 1.- Absence of issue-specific statute**

**35.**

With the exception of the specific provisions in West German company law cited in the following, research revealed the existence of no particular legislation relating specifically to electronic data interchange (hereinafter "EDI").

**Section 2.- The possibility of transferring commercial  
documents between parties by electronic means**

**Par. 1 - Transferability by electronic means of  
commercial documents of whatsoever nature  
(purchase orders, transport documents,  
documentary credits, etc.)**

**a) principles**

**36.**

According to the authors of the West German research, in the absence of issue-specific provisions, it is appropriate to determine in advance the legal function of each of these documents and, subsequently, to determine whether the written form is necessary in order that said function be fulfilled.

---

<sup>1</sup> The text of the present chapter is predominantly based on a preliminary report compiled by Mr WEIL which was subsequently re-edited in the interests of arriving at a unified approach to the study as a whole.

37.

Clearly, German law recognises documents whose material transmission is mandatory to transfer the rights pertaining to them. This is the case as regards bearer shares, as for example trade instruments, negotiable instruments such as bills of lading, consignment notes, warehouse warrants, and so on.

The transfer of rights incorporated into such instruments necessitates their material transmission, i.e., a transfer of possession of the document in question. Such a transfer is clearly not possible other than by physical means. It is therefore evident that such instruments are not capable of being transferred electronically.

38.

In the case of all other commercial instruments, such as purchase orders, order confirmations, invoices, credit notes, debit notes, and the like, no incorporation into a document is deemed necessary to execute their respective functions <sup>(2)</sup>.

To the extent that the function of such documents can be perfectly satisfied by electronic means, there is no requirement that they be in written form.

39.

As a result of the foregoing, it emerges that commercial documents with a legal right which is transferred by the instrument itself, such as all bearer shares and negotiable instruments, e.g., warrants and maritime consignment bills, may not be transferred by electronic means.

By contrast, all other commercial documents may be transferred by electronic means.

As far as the second category of documents is concerned, no specific provisions apply to their transfer by electronic means.

---

<sup>2</sup> With the exception of requirements relating to proof and evidence.

## b) invoices

40.

In the absence of specific provision to the contrary, it is appropriate also to examine in advance the provisions in German law with respect to the issuance of an invoice in order to ascertain whether or not these provisions can be fulfilled by means of electronic transfer.

In the following, we shall confine our remarks to the legal aspects of invoices in civil law, deliberately eschewing comment on the problems of proof and obligation to preserve documents, together with comment on relationships obtaining at fiscal and customs and excise levels.

41.

As far as civil law is concerned, remittance of an invoice can establish a due date with respect to the amount outstanding as invoiced.

42.

In German law, the concept of due date is statutorily defined by BGB Article 271.

Said article provides that:

*"If the date of payment is neither determined nor susceptible of determination by an examination of the circumstances, the creditor can demand immediate payment and the debtor can furnish the same.*

*"When a date has been specified, it shall be presumed in the event of doubt that the creditor cannot require payment before that date but that the debtor shall be free to effect payment before that date."*

43.

The due date of an invoice is thus determined in the first instance by the intentions of the parties and, failing which, by the circumstances of the contract.

In the absence of a due date capable of determination in accordance with these criteria, the creditor can demand immediate payment. For his part, the debtor can also always effect payment immediately.

44.

In law, remittance of an invoice does not normally establish the due date of the debt thus billed.

This principle would even apply in the hypothetical situation where a debtor demands a "detailed invoice", which is to say remittance of an invoice which lists in detail the services performed. (3)

In law, this principle does not apply to the detriment of the debtor inasmuch as, according to Article 198 of the German Civil Code, prescription of a debt runs from the moment of its due date, the result being that a closer due date could even prove advantageous to the debtor.

45.

In certain circumstances, however, albeit exceptional, billing can nonetheless represent a condition of due date.

This is the case with respect to sums due to a contractor supplying property construction services in accordance with the specific provisions established therefor by §16.2 VOB-B-B (4).

It also applies to architects' fees pursuant to the law regulating architects' remuneration, i.e., §8 HOAI (5), and to the payment of doctors' fees pursuant to §12 para 2 of the GoA.

Also payable exclusively on presentation of an invoice are bills in respect of certain public utilities (gas, electricity, water) (6) and amounts outstanding to landlords in respect of heating charges (7).

---

3 Federal Court of Justice in *Wertpapiermitteilungen* 1978, at page 496; Oberlandesgericht (OLG), Celle, in *NWJ* 1986, at page 327; Grimm in *NJW* 1987, at page 468.

4 See Federal Court of Justice, *BGHZ* 53, 225, *BGH* in *NWJ* 1982, at page 1815.

5 See *BGH* in *NJW-RR* 1986, at page 1279.

6 See *BGH* in *NJW* 1982, at page 931.

7 See *BGH* in *NJW* 1982, at page 574.

46.

It may be that the creditor is, by convention, entitled to specify the date of payment for services rendered, in which event the due date can be specified on the invoice.

In such circumstances, the following qualifications are appended: "*payment against invoice*", "*payment against documents*" or "*immediately payable without charges*".

In all such instances, an invoice can thus establish the due date for payment.

47.

An invoice is not required to be prepared in any specific form to comply with these invoicing requirements.

In particular, the provisions in the German Civil Code as to documentary form do not apply.

Thus, transmitting an invoice or invoicing by electronic means is perfectly admissible under German law.

48.

As a consequence of the above and in the absence of specific legislation with respect to the transmission of an invoice by electronic means, an invoice can be a means whereby the due date of the outstanding payment is determined to the extent that the act of invoicing establishes a due date or that the creditor is contractually vested with such an entitlement to determine the due date.

An invoice need be presented in no particular form to meet this invoicing requirement.

It emerges from the above that, in German civil law, there is absolutely no impediment to the invoice being transmitted by electronic means.

**c) General conditions of sale**

**49.**

No specific statutory provisions exist with respect to the transmission of general conditions of sale.

This said, the statutory definition with respect to the law on general conditions ("AGB-Gesetz" of December 9, 1976 <sup>(8)</sup>) implies that general conditions of sale are deemed to be all pre-established contractual conditions irrespective of the form of the contract.

It follows directly from this statutory definition of general conditions of sale therefore, that the conditions as transmitted by electronic means can be construed as general conditions for purposes of German law.

**50.**

The statute relating to sales conditions referred to above does not even exclude electronic transmission of sales conditions with respect to non-commercial parties.

In law, it is only necessary to bring the tenor of the general conditions to the notice of the other contracting party in order that said conditions be deemed an integral constituent of the contract concluded between the parties in question.

To the extent that the recipient of general conditions of sale transmitted electronically is equipped with an appropriate receiver, statutory requirements with respect to general conditions of sale are met.

**51.**

Accordingly, there is no impediment to general conditions of sale being transmitted by electronic means.

No specific form is prescribed for such transmission.

52.

The sole exception which exists in German law is with respect to sales under hire-purchase agreements ("Abzahlungsgesetz"), and to the revocability of doorstep sales ("Gesetz ueber den Widerruf von Haustuergeschaeften").

In these two cases, the purchaser's declaration in written form is mandatory.

The seller can then transmit the general conditions of sale by electronic means. That said, the buyer must confirm in writing his agreement to adhere to said general conditions.

53.

To the extent that the general conditions are binding on a commercial entity, a simple reference to a text transmitted integrally once and for all in writing or by telecommunication means is sufficient to make the text binding on the trader in question.

As far as relations between commercial entities (traders) are concerned, case law has always followed the principle that conditions of sale expressly agreed on the basis of a first contract shall be applied to subsequent commercial relationships <sup>(9)</sup>.

There is no exception to this principle when the first integral transmission of general conditions has been effected by electronic means.

54.

Even where the Law on General Conditions is applied ("AGB-Gesetz"), it is perfectly possible to agree from the onset of a commercial relationship that the general conditions established shall apply to all subsequent dealings.

This reference is also possible when the transmission of general conditions has been initially effected by electronic means.

---

<sup>9</sup> See inter alia Federal Court of Justice, BGH in NJW 1978, at page 2244.

**c) contracts**

**55.**

With the exception of contracts specified in paragraph 2 of this section, contracts may be concluded in German law by means of EDI.

**56.**

The question remains as to determining at what moment and in what place a contract concluded in this manner is to be considered as duly formed.

In the absence of explicit contractual provisions to the contrary, the determination of applicable law and competent jurisdiction to resolve disputes arising from the contractual relationship may depend on the answer to this question.

**57.**

It is appropriate at this juncture to distinguish between:

- a) direct computer-to-computer interchanges without interposition of an intermediary; and
- b) whether the interchange is effected via a VANS or other intermediary.

**58.**

Hypothesis (a) above must be considered as the conclusion of a contract between absent parties as provided pursuant to Article 130 of the German Civil Code.

This common law provision holds as follows:

*"a declaration of intent which must be addressed to another party becomes valid in the hypothetical situation that it is communicated in the absence of that party at the moment the communication is sent. It is not valid to the extent that a revocation is sent to the other party at the same time or previously.*

*"Where the party issuing the declaration dies or becomes incapable of exercising his rights, these facts do not influence the validity of the declaration.*

*"These provisions are applicable even if the declaration of intent has to be addressed to an administrative authority."*

59.

In accordance with the provision cited above, a declaration of intent thus becomes valid at the moment it arrives at the absent addressee.

To the extent that conclusion of a contract is effected via acceptance of an offer, then, in our hypothesis, the contract is formed when the declaration of acceptance is communicated to the offeror by electronic means.

60.

Additionally, Article 151 of the German Civil Code accepts the notion of a contract being concluded even in the hypothetical situation that acceptance is not explicitly confirmed:

*"the contract is deemed valid by the acceptance of the offer even where said acceptance is not communicated to the offeror, where, in conformity with usage, such a declaration need not be anticipated or when the offeror waives it."*

This provision could thus be relevant in the case of a supplier who regularly delivers goods or services on the basis of orders placed by electronic means. In this hypothesis, the customer placing the orders does not anticipate as a matter of course that acceptance shall be communicated expressis verbis on the part of the supplier.

In the event that the supplier and the customer habitually communicate by electronic means, a simple order placed by the computer can give rise to a contract even in the absence of an explicit acceptance by the supplier, other than - clearly - an immediately refusal on the part of the supplier to deliver.

61.

When the order is placed and the contract is concluded by the interposition of an intermediary (an agent or representative), the considerations outlined in the foregoing shall apply to the extent that the intermediary is substituted at the level of the addressee for a declaration of intent. In such a case, it suffices therefore that the declaration of intent be communicated to the intermediary.

62.

Where the intermediary in question is not empowered to accept declarations of intent addressed to his principal but is, in effect, merely a messenger or go-between ("Boten") who effects a technical transmission of the declaration of intent, the contract is deemed to have been formed in German law at the moment when acceptance is communicated to the party which initiated the offer.

63.

In the hypothetical situation of Article 151 of the German Civil Code referred to above, the contract is formed at the moment when the addressee of an offer receives the declaration thereof to accept it without explicitly stating his acceptance.

**Par. 2-            E xceptions to the principle of transmittability  
of commercial documents by electronic means**

**a) documents requiring certified form**

64.

Transmission by electronic means clearly does not apply to acts which, to be effective, must be certified.

In German law, this relates to:

- deeds of assignment of a limited liability company ("GmbH")
- deeds of assignment of realty rights
- deeds of suretyship.

**b) insurance policies**

**65.**

Insurance policies are not binding on an insurer unless they are concluded in written form.

**c) deeds of assignment**

**66.**

As explained earlier, deeds which assign, among other things, a right by transfer of deed cannot be communicated by electronic means.

While electronic transfer of such deeds is nowhere expressly prohibited by law, it is a consequence of a legal requirement to the extent that the transfer or assignment of the rights pertaining to such deeds cannot be effected other than by an agreement complemented by the physical transfer of the deed in question.

**Section 3.- Constraints resulting from fiscal, reporting or other requirements to retain documents**

**Par. 1- General requirement under German law to retain documents**

**a) Requirement under company law**

**67.**

The general accounting or reporting requirements applicable to traders, commercial enterprises and companies were significantly amended by the enactment into German law of the 4th, 7th and 8th Accounting Directives of the Council of the European Communities on December 19, 1985 ("Bilanzrichtliniengesetz") which came into force as of January 1, 1986. Instead of creating a separate code for accounting and financial reporting procedures, the legislators opted to incorporate the provisions of the above-mentioned directives into relevant extant statute.

68.

As a result, the principal source of financial reporting legislation is the Commercial Code, into which a third Book has been inserted; Part I of this Book contains provisions of general application to all commercial entities, whereas Part 2 contains provisions specifically applicable to companies.

69.

Pursuant to Article 238.1 of the German Commercial Code, every commercial entity is obliged *"to maintain sets of accounts with respect to its business and its assets which present a consistent and true account thereof"*.

For the purposes of the present context, Article 238.2 further enjoins every commercial entity to retain a faithful copy of the original of all correspondence emanating from his enterprise, said copy to be in written form, by phot-reproduced means or by other data-support system.

70.

Article 239.4 of the German Commercial Code authorises accounting requirements to be satisfied by means of a computer.

According to this provision, commercial sets of accounts and all other requisite written documents ("sonstigen erforderlichen Aufzeichnungen") may be maintained by filing voucher documents ("Belege") or by electronic means via computer, to the extent that these procedures fulfil the requirements of consistent and true accounting, that the data remain accessible throughout the full mandatory period during which they must be maintained, and that they can be reproduced in legible form within a reasonable delay.

71.

According to Article 257.1 of the Commercial Code, every commercial entity must retain the following documents:

- operating records, inventory records, opening balances, annual statements, board of management reports, consolidated financial statements and reports on consolidated financial statements;
- commercial correspondence received;

- a copy of all correspondence sent;
- all vouchers pertaining to written materials entered in the books as required by Article 238.1 of the Commercial Code.

72.

Article 257, indent 3 of the Commercial Code authorizes the conservation of the documents referred to in article 238 § 1 of the Commercial Code with the exception of opening balance sheets, annual balance sheets and consolidated balance sheets, by any means of image reproduction or on any other electronic data carrier, provided the medium used meets the requirements for the keeping of fairly presented accounts and that:

- the data carriers used permit the accurate reproduction in readable form of the documents stored thereon in both form and content; and
- the information so stored remains accessible throughout the compulsory preservation period and may be rendered readable within an appropriate time.

73.

Documents referred to in article 257 § 1 of the Commercial Code must be conserved for ten years; all other documents for six years.

**b) requirement under tax law**

74.

Article 140 of the German General Income Tax Code (Abgabeordnung) provides that the requirement to keep fairly presented business books and financial statements is essentially a civil law obligation.

Consequently, merchants, trading companies and all other commercial undertakings will comply with the tax obligations to conserve documents if they are in compliance with the accounting obligations prescribed by commercial law.<sup>75</sup>

The Income Tax Code also extends the bookkeeping obligation to other categories of taxpayer not falling within the scope of the Commercial Code.

Those particularly concerned are businessmen such as farmers achieving a specified annual turnover or net profit. This class of taxpayer is subject to accounting obligations under article 141 of the German General Income Tax Code (Abgabeordnung).

76.

On conservation of documents, article 147 of the German General Income Tax Code (Abgabeordnung) provides that:

" *The following documents shall be kept in a proper manner:*

1. *books and memoranda, inventories, annual balance sheets, annual reports, opening balance sheets and the operating instructions needed to understand them, together with other organizational documents;*
2. *incoming business mail;*
3. *copies of outgoing business mail;*
4. *accounting vouchers;*
5. *all other documents likely to be relevant to the assessment of tax liability".*

77.

Article 2 of the above-mentioned tax law provision authorizes the conservation of documents by any means of image reproduction or on any other electronic data carrier, provided the technique used meets the requirements for the keeping of fairly presented accounts and that:

- the data carriers used permit the accurate reproduction in readable form of the documents stored thereon as regards both form and content; and
- the information so stored remains accessible throughout the compulsory preservation period and may be rendered readable within a suitable time.

78.

Article 146 § 5 of the German General Income Tax Code (Abgabeordnung) authorizes the reproduction of computerized accounting records, i.e., transfer by electronic means.

**c) requirement under customs and statistical law**

79.

Customs law and the Federal Statistics Act contain no particular provisions regarding accounting obligations and the preservation of records.

**Par. 2 - The preservation of records on computer media**

80.

The conclusion to be drawn from the foregoing is that German law draws no distinction between method of communication and method of conservation.

The above-mentioned provisions assume that business letters and accounting vouchers will originally be created in written form. As the foregoing considerations indicate, however, such records do not necessarily need to be preserved in paper form thereafter. With the exception of opening balance sheets, annual balance sheets and consolidated balance sheets, these documents may be stored on microfiche or computerized provided their perfect reproducibility can be assured. The original written instruments do not need to be preserved, therefore.<sup>81</sup>

The conclusion can therefore be drawn that such documents, when transferred by EDI, may be preserved in the same manner and still comply with the tax and accounting requirements of German law on preservation of records.

**Par. 3 - Penalties for failure to preserve documents**

82.

Article 283 (b) of the German Penal Code provides that breach of an accounting requirement like the preparation of an opening balance sheet (unlike the duties arising under article 257 § 3 of the Commercial Code) may, in the event of bankruptcy, incur a criminal penalty.

It does not, however, constitute a breach of civil law.

83.

Documents not kept in accordance with statutory requirements for taxation purposes may be disallowed in calculating the basis of taxation. In such circumstances, the inland revenue authorities may make an empirical assessment (Schätzung).

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

84.

Routine business documents do not, as a general rule, need to be signed.

85.

The same does not apply to negotiable instruments like drafts and cheques, any other bearer instrument and instruments transferable by endorsement (art. 363, Commercial Code).

The annual balance sheet must be adopted and signed by the trader (art. 245 § Commercial Code).

**Par. 2 - The possibility of signing electronically**

86.

In cases where the law requires writing, article 126, indent 1, of the German Civil Code prescribes that the signature must be handwritten and be accompanied by the name of the signatory.

A signature affixed by a mechanical process is not acceptable <sup>(10)</sup>.

Hence, a telegram will not qualify as writing, even where initially signed by the sender <sup>(11)</sup>.

Telegraphic or telex transmission will be acceptable for procedural law, however <sup>(12)</sup>. In either case, an initial document signed in the sender's own hand is required, however.

87.

The foregoing shows that, where writing is required, the signature must always be handwritten and may not be replaced by any form of mechanical process.

**Par. 3 - Penalties**

88.

Where writing is a statutory requirement, electronic signature will invalidate the instrument in question.

---

<sup>10</sup> Federal Court of Justice, BGH in NJW, 1970, p. 1078.

<sup>11</sup> Federal Court of Justice, BGHZ 24, 298.

<sup>12</sup> Federal Labour Court in NJW, 1971, p. 2190 and Federal Court of Justice, BGH in NJW 1983, p. 1498; Federal Labour Court in NJW, 1984, p. 199.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under German law**

89.

The German Code of Civil Procedure admits two means of proof.

**a) discretionary proof ("Freibeweis")**

90.

The discretionary proof system obtains only when considering the admissibility of proceedings.

In considering whether or not a suit is admissible, the court has regard chiefly to matters of form such as whether the originating application is sound on the face of it, the competence of the court in which proceedings are brought and the "locus standi" of the parties.

Where any fact has to be examined not merely on grounds of admissibility of the proceedings, but also for the merits of the action, that fact is taken as going to the substance of the action and may not be proved by discretionary evidence.

**b) strict proof ("Strengbeweis")**

91.

For the remainder, the German Code of Civil Procedure applies the strict proof ("Strengbeweis") system.

92.

The Code of Civil Procedure thus countenances only five methods of proof, namely:

a) proof by inspection (Augenschein): articles 371 to 372 of the German Code of Civil Procedure;

- b) proof by testimony: articles 373 to 401 of the German Code of Civil Procedure;
- c) proof by expert testimony: articles 402 to 414 of the German Code of Civil Procedure;
- d) proof by documentary evidence: articles 415 to 444 of the German Code of Civil Procedure;
- e) proof by examination of the parties: articles 445 to 455 of the German Code of Civil Procedure.

#### Par. 2 - Application to electronic media

93.

An electronic recording cannot be a "document" within the meaning of article 415 of the German Code of Civil Procedure.

For German jurisprudence, the notion of "document" for the purposes of this provision assumes "*the embodiment of an idea in writing*" (13).

Records may be supplied on microfilm or computer data carriers by special dispensation under article 261 of the aforesaid Commercial Code.

It has been accepted that this provision applies to instances in which a party wishing to adduce proof uses computerized records to do so (14).

In such a case, the party on whom the burden of proof lies must provide at his own cost all the technical resources necessary to put the computerized data into a readable form and must, if necessary, have the data printed out on paper at his own cost.

---

<sup>13</sup> Thomas/Putzo: Kommentar zur Zivilprozessordnung, 15 Auflage, vor 415 ZPO, Anm. 1.94.

<sup>14</sup> Baumbach-Duden-Hopt, Commentary on art. 261 of the German Commercial Code

95.

Computer-stored or electronically-held data may therefore be used for proof "by inspection" within the meaning of articles 371 and 372 of the German Code of Civil Procedure <sup>(15)</sup>.

"Inspection" for these purposes means the immediate apprehension of the existence and characteristics of a person, thing or occurrence.

With this means of proof, the court itself determines the facts upon which the judgement is based, while documentary evidence merely establishes what the creator of the document was thinking.

96.

In addition to the facility provided by article 261 of the Commercial Code, the court may require experts to be present at the inspection.

Such experts have authority to certify the occurrence of past facts. Verification of whether or not information is still recorded today, however, is a matter of present facts, in which case experts give their evidence more in the "inspection" procedure than as strictly expert testimony <sup>(16)</sup>.

97.

Oral testimony, albeit very liberal in scope <sup>(17)</sup>, is inappropriate in this area as consisting in giving evidence as to facts capable of being perceived, which is not the case where electronic data interchange or even ordinary computing is used, except for the technique provided in article 261 of the Commercial Code.

---

<sup>15</sup> BGH in NJW 1982, S.277; Pleyer in ZZP 69, 322

<sup>16</sup> Thomas/Putzo, op. cit, vor § 402, Anm. d.97.

<sup>17</sup> any person not a party to the proceedings may be called as a witness.

98.

Proof by examination of the parties is a merely subsidiary form of proof, admissible only where the party on whom the onus of proof lies cannot prove the facts otherwise. In such circumstances he may call the other party as a witness to the alleged facts. The court may examine the parties if the hearing and the manner in which other evidence has been presented are not sufficiently persuasive.

The purpose of examination in this case is the same as testimony. This means of proof is thus unsuited to electronic data interchange or computing, even if theoretically available to establish facts electronically transferred or recorded.

99.

Finally, it is important to emphasize that, in German civil procedure, the parties to the proceedings are under obligation to tell the truth (Wahrheitspflicht).

Falsified or incorrect reproduction of computer data may constitute fraudulent procedure (Prozessbetrug) punishable under the German Penal Code.

100.

The foregoing shows that microfilm or computer media may be adduced as evidence under article 261 of the Commercial Code and as part of proof by inspection.

In such circumstances, the party on whom the burden of proof lies must provide at his own cost all the technical resources necessary to put the computerized data into a readable form, using a printer if needs be.

There is no requirement to use an expert for these purposes.

**Par. 3- Evidentiary value of a computerized document**

101.

A computer data carrier has no greater or less probative force than a written document.

The matter is not regulated. The principle is that the probative force of evidence is within the sole discretion of the court.

The court, in application of this principle, is thus free to attach what evidentiary value it will to a computer data carrier.

In so doing, it will have regard to the credibility of the person adducing the evidence, as well as the form and content of the document itself.

Since electronic storage is legally-permitted<sup>(18)</sup>, the court would controvert the general principles of evidence were it to attach lesser probative force to an electronic record a priori.

102.

In principle, the computer data carrier would have to satisfy the criteria in article 261 of the Commercial Code in being accurately reproducible and readable.

**Par. 4- Final considerations on proof**

103.

The foregoing considerations arise out of case law. Detailed regulations on the admissibility as evidence of telex, fax and other computerized processes would be welcome.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

104.

The Federal Minister of Finance has made an Order under article 150 of the General Income Tax Code (Abgabeordnung) relative to the making of tax returns on mechanical media. The text of this Order is annexed<sup>(19)</sup>.

---

18 cf, supra, points 80 and 81

19 cf Annex 1

This is the only statutory regulation of the matter.

105.

The essential requirements is that a specialized computing firm approved in accordance with article 3 of the Order be used. The taxpayer must also confirm the accuracy of the computer-generated data on an official printed form, and is solely liable for doing so. Article 9 of the Order, however, imposes liability on the specialized firm for negligence or wilful misconduct.

**Par. 2 - Auditing of computer and electronic data interchange systems**

106.

As yet, there are no provisions for this type of audit. Government departments have no access to information held by private individuals.

Relations between government departments are governed by the Federal Computerized Data Protection Act (Bundesdatenschutzgesetz) regulating the validity of electronic transmission, the protection of recorded data and protection of the privacy of the individuals concerned. This Act is included in the annex (20).

This aside, government departments have no access to private computer systems.

107.

Where computerized data transfer and storage are authorized by commercial and tax law (21), businessmen must ensure that the process operates correctly, otherwise they will suffer the consequences, which are partly criminal, partly of a tax nature (22).

---

20 cf Annex 2

21 cf, supra points 80 and 81

22 cf, supra points 82 and 83

**Section 7.- Conclusions of the survey of German law**

108.

The survey of German law showed that transfer of commercial data by electronic means is admitted as a general rule.

This general rule does not obtain where the information medium must comply with specified requirements as to form or where physical delivery is required. This exception clearly includes negotiable instruments and other commercial documents where physical delivery is of the essence (drafts, cheques, bearer instruments and instruments requiring indorsement).

109.

The practical requirements of evidence also constitute impediments to electronic interchange of commercial data.

The "strict proof" ("Strengbeweis") method of the German law of evidence makes computer media admissible as proof.

However, practical difficulties stand in the way of production of that proof.

110.

In the authors' opinion, a need to regulate the electronic interchange of commercial data does exist in various areas.

111.

That harmonization aspect aside, any common regulation put forward by the Commission would need to lay down the detailed conditions governing electronic data interchange.

In particular, this would mean defining the equipment admissible as providing proof of receipt. Facsimile machines may be cited as an example. The fax transmitting machine produces a report on what has been sent at the end of each transmission session. A similar procedure could be envisioned for equipment transmitting computerized data, with the report being produced immediately the addressee has actually received the information transferred in due form.

dable form, using a printer if needs be.

112.

Community legislation also appears to be necessary with regard to the transfer of submissions and other documents to administrative authorities and to courts.

German law, as it stands today, offers rather little satisfaction in this field, since the transfer of data through telex or telefax has not so far been accepted by the courts and since the latter naturally have not always taken the same stance in their rulings.

113.

As to the preservation of electronic data, national legislations should be harmonized with respect to the obligation of preservation prescribed within various fields of law by the laws of the different countries involved.

114.

It is essential that the developments of electronic transfers in trade practices be harmonized at Community level. Today, harmonization is proceeded to solely on the basis of technical developments which move forward in a more or less identical manner in the different Member-States, due to an increasing international interpenetration.

**CHAPTER 2: ANALYSIS OF THE LEGAL POSITION IN BELGIUM**

**Findings of the research into Belgian law conducted by Me Patricia FOSSELARD of the law practice LODOMEZ & CROUQUET.**

**Section 1.- Lack of specific regulation in the matter**

115

The research brought to light no particular legislation specifically concerned with the electronic interchange of commercial data.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

116.

Subject to what will be said later in the chapters on evidence <sup>(1)</sup>, below, and the tax, customs, statistical, commercial and/or accounting obligations to preserve written records <sup>(2)</sup>, there is nothing to prevent the transmission of a document by means of electronic data interchange.

That said, there are exceptions to this rule, which will be examined in paragraph 2 of this section.

---

1 cf, Section 5

2 cf, Section 3

**b) invoices**

117.

There are no specific regulations as to the transmission of invoices. As regards the act of transmission itself, therefore, there is no reason in law why an invoice should not be transmitted by electronic means alone.

118.

It must, however, be determined whether this initial postulate is not in fact controverted by accounting, custom and/or tax requirements.

119.

Evidentially, moreover, and all questions of the admissibility of an invoice transmitted by EDI aside, consideration needs to be given to whether such transmission enables certain elements - such as the date of origination or receipt of the document, for example - on which the implementation of an entire series of provisions relative to calling in of payment, default interest, penalty clauses and the like may depend, can be established.

120.

Note also that in Belgian commercial law, an invoice accepted by a trader enjoys more cogent evidential value. Article 25, indent 2, of the Commercial Code provides that:

*"Proof of purchase and sale may be furnished by an accepted invoice, without prejudice to other means of proof admitted by commercial law."*

Legal theorists are agreed that the system instituted by this provision establishes an irrebuttable presumption deduced from the acceptance of the invoice by the business customer.

The actual fact of dispatch or acceptance by computerized telecommunication may be established by all evidential means available. The customer's acceptance may be express or implied. In certain circumstances, silence may be deemed an implied acquiescence in accordance with the ordinary law of contract.

The use of computerized telecommunications should not, therefore, raise an obstacle to application of the irrebuttable presumption arising under article 25, indent 2, of the Commercial Code.

This article does not, however, apply to non-commercial customers, against whom only the strictly civil law forms of evidence are admissible. The admissibility as evidence of an invoice transmitted by electronic means, therefore, would be limited by article 1341 of the Civil Code (3), which could considerably slow down the development of electronic invoicing for non-commercial customers, particularly since the courts will be far more reluctant to accept implied acceptance in the case of non-commercial customers.

### c) General Conditions of Sale

121.

The foregoing considerations apply equally to general conditions.

No specific regulations apply to general conditions of sale and the manner in which they must be communicated to be enforceable against third parties.

122.

Jurisprudence and case law refer on this point to article 1134 of the Belgian Civil Code which provides that "*Legally formed agreements have the binding force of law on those who have made them*".

Both, consequently, consider that the general conditions, once accepted by the parties, are binding upon them.

123.

The difficulty essentially resides, therefore, in establishing that the other party has accepted the general conditions.

---

3      cf, Section 5

This question has been the source of much academic and judicial discussion, on the particular issue of the enforceability of general conditions contained only on the back of the document signed, clauses scattered throughout a catalogue (mail order sales), conflict between the general conditions of vendor and purchaser, etc...

124.

As we have just seen <sup>(4)</sup>, the Commercial Code provides that an invoice accepted by a businessman provides irrefutable proof of the contract and its essential conditions (subject-matter and consideration).

The majority view holds that this presumption extends to other conditions of the contract, but the presumption here is no more than a rebuttable one which can be disproved by the other party adducing evidence to show that he could not have had notice of them.

125.

Where the parties have had regular dealings, a first accepted invoice containing or expressly referring to the contentious general conditions may suffice to render those conditions applicable to subsequent transactions between the same parties.

126.

There is nothing to prevent general conditions being transmitted by electronic data interchange.

Nor is there any reason why general conditions should not simply be referred to in a document transmitted by electronic data interchange.

For such conditions to be enforceable as against third parties, evidence would have to be adduceable, where applicable, to show that the contracting party had taken or could have taken cognizance of them, did not contest the application of any of the clauses in those conditions, and consequently accepted them by implication.

---

4 cf, N° 120, above

The distinction drawn in the previous paragraph between business and non-commercial customers applies no less here. Aside from the fact that article 25 indent 2 has no application to non-commercial customers and that evidence in civil law, unlike commercial law, is bound by strict rules, it should likewise be emphasized that the courts will be far less ready to admit implied acceptance from non-commercial customers.

It would therefore seem advisable that the full general conditions should be communicated in writing to non-business customers.

#### **d) contracts**

127.

With the exception of the contracts mentioned in section 3 of this chapter, contracts may be concluded by electronic data interchange under Belgian law.

128.

The question then arises, however, as to the time and place a contract concluded by such means will be considered to have been formed.

Failing express provision in the contract, the answer to this question will determine the applicable law and court with jurisdiction to adjudicate in any disputes arising in relation to the contractual relations.

129.

A distinction must be made here between:

- a) messages exchanged directly from computer to computer, without intermediary; and
- b) messages exchanged via a VANS or other intermediary.

130.

There are two broad lines of thought in Belgian jurisprudence as to the time of conclusion of the contract: the time of expedition\*, and that of information\*.

131.

The expedition theory holds that the contract is formed when the offeree manifests his intention to accept.

This has been severely criticized, however: as to fact, because of the insurmountable evidentiary difficulties it raises, in particular; and as to law, because agreed intent assumes far more than the mere coexistence of intentions: there must be a manifest consensus of wills.

132.

The information theory holds that the contract is formed only when the expressed intentions actually meet, i.e., when each party is made aware of the other's assent.

This theory leaves the problem of evidence intact: how to prove that acceptance was indeed communicated to the offeror, and at what precise time?

133.

The Belgian courts have tended in favour of a variant of the information theory - that of reception\*.

The contract is concluded when the acceptance is received at the offeror's domicile or its other correct destination. The contract is then formed, regardless of whether the offeror is actually informed or not.

This theory offers a means of circumventing certain evidentiary difficulties which may result from the behaviour of the offeror who, knowingly or unintentionally, takes cognizance of the acceptance only later.<sup>134</sup>

134.

Doctrine, however, holds that this latter view of contract itself applies only subject to the overriding principle of what the parties intended.

135.

The Belgian Court of Cassation (supreme court of appeal - Tr.) has repeatedly affirmed, however, that formation of a contract by parties not in each other's presence (in absentia) is a question of fact to be determined by the trial judge.

This view is questionable: in seeking to determine the intention of the parties, it is clear that the solution to the problem is a question of fact. By contrast, efforts to adduce a general principle applicable without regard to the intention of the parties are essentially a problem of law, and thus not a matter for judicial discretion.

This obviously gives rise to legal uncertainty.

136.

For contracts in absentia, which are formed - as a general rule - only when the offeror is informed of the acceptance of his offer, the place of formation of the contract is that at which the offeror receives the acceptance.

137.

Contracts concluded by exchange of correspondence are formed at the place of residence of the party receiving notice of acceptance of the offer he has made to the other, unless provided otherwise. Each party thus assumes the risks inherent in the transmission of his own intimation of intention.

138.

Contracts concluded by telephone are generally considered as being concluded by parties in direct communication for the time, but in absentia for the place.

139.

For computer-mediated transmission, therefore, the contract may be considered made when the offeror receives the offeree's statement of acceptance.

140.

The exception to this rule lies in circumstances where acquiescence is presumed from silence ("circumstantial silence"). Here, the contract is formed at the moment when, no refusal having been received, the offeror was entitled to treat the contract as made.

In this regard it should be emphasized that Belgian courts have been very ready to uphold acceptance by silence between businessmen.

Hence, where a man places an order with a regular supplier, the contract will normally be made when the order is executed, for example, at the time when the supplier despatches the goods.

141.

The principles outlined above apply even where the contract is formed through the intermediary of a third party.

Here, however, a distinction is to be drawn between a simple broker or messenger and the authorized agent or representative.

142.

The ordinary middleman has no authority to bind his principal. His commission is merely to transmit the declaration by technical means. If he acts on behalf of the offeror in receiving the acceptance addressed to him, the contract will be formed only at the time and place when he passes that acceptance on to the offeror.

Where he acts for the acceptor, the contract is not made until receipt of acceptance is confirmed and will be formed only at the time and place of receipt of the acceptance by the offeror.

143.

By contrast, the agent has authority to bind his principal. The contract is therefore formed at the time and place where the agent receives the acceptance or, where the acceptor acts through an agent, at the time and place where his message is received by the offeror.

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

144.

A number of transactions must be made by deed to be enforceable against third parties.

The principal ones in Belgian law are:

- assignments of debts and other choses in action which must be made by duly served process or accepted by notarial deed (Civil Code, art. 1690);
- conveyances of real property rights;
- the deed of conveyance is preceded by a contract for sale which may be made by simple contract with no particular requirement as to form;
- mortgage deeds;
- leasehold terms over 9 years;
- deeds of incorporation of companies.

Article 4 of the Coordinated Trading Companies Acts provides that public limited companies, private limited companies and partnerships limited by shares must be incorporated by official document to be valid.

Ordinary partnerships limited liability partnerships and cooperatives must likewise, to be validly formed, be created by special deed, official document or private deed (in the latter case, in compliance with article 1325 of the Belgian Civil Code - as many original copies as contracting parties).

**b) hire purchase and instalment credit**

145.

Hire purchase sales and instalment credit, whether personal credit or otherwise, "must be made by contract executed in as many original copies as contracting parties with distinct interests"( 5).

**c) pledges of goodwill**

146.

The goodwill of a business may be pledged only by deed or private contract (6).

**d) surety bonds**

147.

Under article 2015 of the Belgian Civil Code, "suretyship is not presumed; it must be expressed and cannot be extended beyond the limits within which it is contracted".

**e) instruments embodying a right**

148.

Unlike other countries, Belgian legislation contains no general rules applicable to negotiable instruments in general. Only particular classes of instruments are statutorily regulated under Belgian law: bills of exchange, promissory notes and cheques.

---

<sup>5</sup> cf, articles 3, 12 and 19a of the Act of 9 July 1957 concerning hire purchase sales and their financing

<sup>6</sup> cf, art. 3 of the Act of 25 October 1919 regulating the pledging of goodwill

Various types of transferable security fall within the scope of the diffuse provisions of different statutes. Other forms of instrument - bills of lading, insurance policies to order and bearer policies - are virtually ignored as negotiable instruments by the law.

149.

None of these negotiable instruments can be transmitted by electronic means.

The transfer of the rights embodied in these instruments requires physical delivery of the instrument itself, i.e. transfer of possession of the document to the one to whom the rights are assigned.

150.

Negotiable instruments, moreover, are subject to strict requirements as to form, and the conditions prescribed by statute for their issuance - including that of signature - are irreconcilable with transmission through computer communication.

151.

In this latter regard, and as we shall see later, no legislation has yet come onto the statute books authorizing any form of electronic signature in any area of life whatsoever.

#### f) agreements assigning jurisdiction

152.

Article 17 of the Brussels Convention provides that agreements assigning jurisdiction must be made in writing, or verbally and evidence in writing, or, in international trade, in a form accepted by custom and practice in the trade and known or deemed to be known to the parties.<sup>(7)</sup>

---

<sup>7</sup> cf article 17 of the Convention between EEC Member States on Jurisdiction and the Enforcement of Judgements in Civil and Commercial Matters signed at Brussels on 27 September 1968, as amended by article 11 of the Luxembourg Convention of 9 October 1978.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Belgian law**

**a) obligations under commercial law**

153.

Firms are obliged to preserve their business books for ten years from 1 January of the year following their closure <sup>(8)</sup>.

The originals must be kept of certain records like the combined journal and ledger and the general ledger, while originals or copies may be kept of the other books <sup>(9)</sup>.

The Act of 15 July 1975 as amended also provides that:

*"Ledgers and journals shall be kept in a manner assuring their physical perpetuation, and the due execution and irreversibility of the entries "* <sup>(10)</sup>

and that:

*"Books shall be kept in chronological order with no blanks or gaps. If adjusting entries are made, the original entry shall remain legible".*

The originals or copies of supporting vouchers must be kept for 10 years <sup>(11)</sup>

---

<sup>8</sup> cf article 9 § 2 of the Act of 17 July 1975 on the accounting and annual accounts of companies, as amended by the Act of 1 July 1983.

<sup>9</sup> cf article 9 of the Royal Decree of 12 September 1983 implementing the above-mentioned Act of 17 July 1975.

<sup>10</sup> cf article 8 § 2

<sup>11</sup> cf Act of 17 July 1975, article 6 par. 4

**b) obligations under accounting and tax law**

154.

Tax law imposes a duty to preserve supporting vouchers for five years <sup>(12.)</sup> The records must be original copies.

The Royal Decree of 10.12.1868 on Government accounting obliges public and semi-public bodies to issue only certified true invoices. Individual exemptions from this duty may be granted under article 1 of the Royal Decree of 20.06.1966.

**c) obligations under company law**

155.

Business records must be kept for 5 years <sup>(13)</sup>.

Employers may keep company personnel records in any form they wish, provided they are clearly legible and the form of reproduction chosen permits effective supervision <sup>(14)</sup>.

**d) obligations under customs and statistical law**

156.

Customs law also imposes a duty to preserve records, referring to accounting obligations <sup>(15)</sup>.

157.

Importers and exporters of goods must submit special declarations to the customs authorities for statistical purposes <sup>(16)</sup>.

---

12 cf Income Tax Code, art. 221 - Coordinated Acts of 26 February 1964 - Value Added Tax Act of 3 July 1969, arts. 60 & 61.

13 Royal Decree of 8 August 1980 on the keeping of company records, art. 25.

14 art. 24 of the Royal Decree cit.

15 Coordinated Acts of 18 July 1977, art. 203.

16 Coordinated Acts of 17 July 1977, art. 145

**Par. 2 - The preservation of records on computer media**

158.

Belgian law does not prohibit the keeping of books of account in the form of computer-generated documents, provided they comply with the various requirements of accounting law, in particular those of direct intelligibility and irreversibility <sup>(17)</sup>.

The irreversibility rule will be satisfied where the computer-generated documents are printed out in an ordinarily readable form.

The inalterability rule will be satisfied by appending a signature which straddles the page of the book and the computer-generated printout affixed to it.

159.

As regards taxation, the Belgian VAT, Land and Deed Registries in association with the Inland Revenue Service, issue particular authorizations allowing the documents mentioned below to be reproduced on film or microfiche; for the purposes of the government departments concerned, the paper documents thus stored on film or microfiche can then be destroyed.

Notwithstanding article 221, indent 3, of the Income Tax Code and article 60 of the Valued Added Tax Code or - where the COM system is involved - article 7 of Royal Decree No 1 of 23 July 1969 on measures to assure the payment of value added tax, companies are therefore authorized to substitute microfiches or microfilms for the documents concerned.

---

17 Act of 17 July 1975, art. 8 § 2 and 9 § 1

The documents concerned are:

- duplicates of correspondence and documents drawn up by the company (sale invoices, credit notes issued,...) not completed by the addressee, except for documents bearing an official authenticating stamp (e.g., transport documents, documents evidencing the import, export or transit of goods); originals of purchase invoices, credit notes and bills received, bank and national giro statements therefore being excluded;
- documents not forming part of the accounting records prepared by companies for the various allocations required by its business, accounting records such as asset and liability accounts, income and expenditure accounts, with the exception of the books and ledgers falling within the scope of article 5 of the Royal Decree of 12 September 1983 implementing the Act of 17 July 1975 concerning the accounting and annual accounts of companies.

Application for the above-mentioned authorizations is made to the central VAT authority, Deed and Land Registry authority and Inland Revenue Authority. They are granted after a tax audit on the responsibility and solvency of the company, other than which the procedure is highly flexible.

The authorizations are solely for tax purposes and have no influence whatever on the law of evidence with regard to third parties <sup>(18)</sup>.

160.

As regards company law, the reply to a parliamentary question made it clear that article 24 of the Royal Decree of 8 August 1980 on the keeping of business records allows the employer to keep company records in a form other than their original form provided they are readable and the form of reproduction chosen allows them to be effectively controlled <sup>(19)</sup>.

---

<sup>18</sup> Question No 264 of 29.04.87, Q.R. Senate, 19.06.87, No. 36

<sup>19</sup> Parliamentary question No 212 of 26 September 1980, Q.R. House of Representatives, 4 November 1980.

161.

In the customs field, in addition to the SADBEL system, introduced to allow information to be passed to the customs and excise authorities by computer communications <sup>(20)</sup>, a series of practices have grown up designed to allow companies to work on computers and the authority to carry out controls on computerized data submitted by companies.

Among these are the "authorized tax reductions" at source and destination issued on a case-by-case basis to companies organizing audits of the computerized accounting systems of companies located in certain enterprise zones and the so-called "inward processing" system under which companies receive permission to process temporary import procedures on computer.

Customs legislation has not yet been amended to incorporate these various adjustments, albeit a number of bills to do so are in the pipeline.

### **Par. 3 - Penalties for failure to preserve documents**

162.

Civil sanctions exist to deal with bankrupt businesses which have failed to keep the requisite accounting records.

In all other areas, the sanction takes the form of allowing the authority to disregard the information concerned should it so wish and, naturally, apply fines.

---

20 cf, point No. 198.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

163.

The general rule is that no particular form is required to bring a valid contract into existence.

As we have seen, however, there are wide exceptions to this rule where writing is required for the instrument to be valid. In such cases, the written document must be signed to have force as a private instrument, the notions of writing and signature being indissociable in Belgian law.

Likewise, a written instrument must be signed to have evidentiary value in civil law as a private instrument.

**Par. 2 - The possibility of signing electronically**

164.

Neither statute nor case law at present condones the signing of documents by electronic means.

Signature being defined in Belgian law as a handwritten indication where a written instrument is required, it cannot be replaced by any mechanical process.

**Par. 3 - Penalties**

165.

Where the law makes the validity of an instrument contingent upon its being in writing, lack of a signature will invalidate the instrument.

166.

In all other cases, an unsigned instrument may be regarded as circumstantial evidence by writing admissible, where appropriate, against or in addition to a written commercial document and permitting proof by testimony and presumption.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under Belgian law**

**a) the onus of proof**

167.

The principle *Actor incumbat probatio* (the burden of proof is on the plaintiff) obtains in Belgian law.

The courts, however, have certain powers to intervene in the procedure of production of evidence. They may order discovery of documents (art. 871 Civil Code - CC); they may summon witnesses to be heard (art. 915 Code of Civil Procedure - CCP); they may order an expert report (CCP, art. 962), they may defer the oath administered to parties in case of insufficient evidence (CC, art. 1366).

168.

The burden of proof may, however, be shifted by the application of presumptions of law - consequences drawn from known facts to elucidate an unknown fact<sup>(21)</sup>.

---

21 cf, N° 173 above.

**b) admissible means of proof in Belgian law**

169.

The Belgian legal system admits two types of evidence: regulated evidence, the ordinary law method introduced by article 1341 of the Civil Code, and unrestricted evidence introduced by article 25 of the Commercial Code.

170.

Not all exhibits adduced by parties to a civil case can be freely admitted by the court as evidence. The means of proof are exhaustively listed by article 1316 of the Civil Code: they are documentary evidence, proof by witnesses, presumption, admissions, and administration of oath.

171.

Documentary evidence or proof by writing (arts. 1317 to 1340) comprises:

- instruments which are written documents prepared to provide proof; these are of two kinds: authentic instruments and private instruments;
- other writings (letters, books of record,...).

172.

An admission (arts. 1354 to 1356 CC) is a unilateral, voluntary acknowledgement by one party of a fact adverse to him. A distinction is drawn between admissions made out of court (extra-judicial - informal) and admissions *litis pendens* (judicial - formal).

Judicial or formal admissions are irrevocable and final, and the court is bound by them.

The court is not bound by an extra-judicial or informal admission and has absolute discretion to assess its evidentiary worth.

173.

An oath (CC, arts. 1357 to 1359) is a solemn declaration made to the court by a party as to the existence of a fact favourable to his cause.

A distinction is drawn between the decisive oath, required by one party of the other during the trial, and the oath administered to a party by the court in case of insufficiency of evidence.

If the opposing party tenders the oath, that party succeeds. If he refuses the oath, he loses. The oath is effective only as between the parties to the proceedings.

The court may administer the oath for insufficiency of evidence as a supplementary means of proof. The court is bound neither by the oath nor the refusal to tender it.

The oath may equally be estimative (CC, art. 1369) where it is used by the court as an expedient where other forms of proof are lacking.

174.

Testimony (arts. 1341 to 1348) are statements made by persons not privy to the proceedings. Their evidentiary weight is relatively limited compared to the processes already listed. These, together with presumptions, are considered "imperfect" means of proof.

The weight to be attached to them is within the discretion of the court, which is never bound by them.

175.

Presumptions are the consequences drawn by law or the court from a known fact to an unknown fact (CC, art. 1349).

Legal presumptions are those which are specially attached by law to certain acts or facts (CC, art. 1349) <sup>(22)</sup>.

Presumptions other than legal presumptions are circumstances of fact to be accredited to the submissions of a party. They are within the discretion of the court which may admit only "weighty, precise and concordant presumptions" (CC, art. 1353).

176.

To this category are attached the many other means of proof admitted by the Civil Code, such as opinions of expert witnesses and affidavits, the Code of Civil procedure and specific statutes.

177.

The various modern methods of reproduction (photographs, telex, recordings, photocopies,...) are often also attached to this class.

Hence the decision that "a taped recording constituting a known fact from which the court may draw an inference may be adduced by the court as a presumption" (23).

### c) documentary evidence the most cogent

178.

Article 1341 of the Belgian Civil Code applies the "best evidence" rule to documentary evidence (24).

179.

The principal consequence of this provision is that written evidence is required of all agreements or unilateral legal instruments involving sums in excess of BF 3,000 (an amount unrevised since 20 March 1948, albeit absolutely derisory at present day values).

This first rule enunciates no more than a general principle. Other statutory provisions require written evidence regardless of the amount of money involved. Hence article 25 of the Insurance Act of 11 June 1874, article 1715 of the Civil Code on agricultural leases, article 2044 of the Civil Code on establishing transaction,...

---

23 Cass. 24 Nov. 1961, Pas. 1962, I, 367.

24 "An instrument must be executed by notary, or private signed instrument, for all matters of a value exceeding three thousand francs, including voluntary deposits; and no proof by testimony against or in addition to the content of the instrument, nor that which is alleged to have been said before, during or since such instrument, even where the value or sum involved is less than three thousand francs; without prejudice to the provisions of the commercial laws."

180.

Another consequence of the above-mentioned article 1345 is that witnesses and presumptions cannot be adduced or raised in addition to or against a written instrument, even for agreements with a value less than three thousand francs.

**d) exceptions and modifications**

181.

The principles set forth in article 1341 of the Civil Code are subject to a series of exceptions and modifications:

- They apply only to legal instruments and not to legal facts which may be established by any means of proof.
- The prohibition on adducing proof against or in addition to the content of written instruments applies only to contracting parties - not to third parties.
- It is not a matter of public policy; contractual exclusions thus remain possible.
- Article 1341 does not apply to proof of undertakings in commercial matters.
- The requirement for writing is likewise dispensed with by the Contracts of Employment Act (Act of 3 July 1978, art. 12).
- The article 1341 rules do not apply where there is prima facie evidence in writing (CC, article 1347).

This is a written instrument which does not meet the criteria to qualify itself as an evidential document, but does allow proof by testimony and presumptive evidence when issued by the opposing party and establishes the prima facie truth of the alleged facts.

- Article 1348 admits other exceptions in cases where a creditor has been unable to secure proof in writing and for those whose written instruments have been destroyed by act of God.

Such impossibility may be substantive, but may equally be moral as for example where the personal relations between the parties or usage makes writing impossible.

- Finally, judicial admission and decisive oath may always be adduced in evidence in the absence of or to controvert a private instrument.

**e) the idea of writing under CC, article 1341**

182.

Evidentiary writing within the meaning of article 1341 of the Civil Code must be an instrument, i.e., writing executed with the intent of serving as an instrument of proof. Not all instruments have the same evidentiary weight. The essential distinction is between authentic instruments and private instruments.

183.

An authentic instrument is one executed with the requisite formalities by a duly-authorized public officer (CC, art. 1317).

Any such instrument not complying with the requisite formalities will be void as an authentic instrument, but may have evidential value as a private instrument if signed by the parties (CC, art. 1318).

Authentic instruments have added cogency as evidence. They can be controverted only by proof of forgery, other than by error on the face of the record (CC, art. 1319).

Their evidentiary value is, however, unconnected with the content of the instrument per se, and relates only to the fact that the statements of the parties were as stated in the instrument, the signature of the public officer and parties, the date, the fact of appearance and, more generally, all matters which the executing officer was empowered to record.

Authentic instruments are enforceable as against third parties. Unlike the signatory parties, however, third parties may attack the truth of the content of those statements by all legal means, while the parties are strictly bound by the writing.

184.

The private instrument is a memorandum in writing executed by the parties to evidence a legal act and signed by the parties or at least that one against whom it is adduced (CC, art. 1322).

Signature is an essential element: this is a handwritten token by which a person customarily indicates his approval of a document. It must be orthographic: a stamp or seal will not suffice.

A handwritten signature is the only formality required for a private instrument.

In certain sections of business life, however, the rule is manifestly relaxed. For clear practical reasons, certain unsigned written instruments (railway tickets, deposit slips, etc.) have been admitted as evidence.

185.

If the instrument is executed to evidence a synallagmatic contract, it must be executed in as many duplicate originals as there are parties to the contracts with distinct interests. Additionally, each original must mention the total number of originals executed (CC, art. 1325).

The courts, however, have tended to hold that a party who has part-performed the contract forfeits his right to contest the validity of the evidential instrument on the grounds of the defect in form of the duplicate.

The same applies to either party who immediately performs his obligations.

Where a multilateral obligation refers to a sum of money or other object of substantial quantity, the promise referring to it in a private instrument must be entirely handwritten in the debtor's own hand or bear his signature under the words "bon pour" (good for) or "approuvé" (approved) and the amount written in full in his own hand (CC, art. 1326).

Where the signatures are not contested, private written instruments are binding on the parties. Their content can be contested only by another written instrument.

Third parties may contest them by any legal means. They may even dispute the date, save in the three situations provided by article 1328 of the Civil Code where the date of private writings is considered probative: the date of registration, the death of a subscribing party, or the date the substance of the writing is recorded in an authentic instrument.

The evidential cogency of a private instrument lying chiefly in the signature of the party against whom it is raised, it is clear that where such signature is contested through the proof of writing <sup>(25)</sup> procedure, the evidential value of the instrument will be temporarily suspended until completion of the procedure.

186.

- In civil matters, the business books of traders are evidence against them <sup>(26)</sup>.

- Family registers and papers are proof against the one who has written them when they formally declare a payment received or when they expressly state that the record is made to make good a defect of title in favour of a party <sup>(27)</sup> (in whose favour an obligation is declared to exist - Tr.).

- Ordinary letters may on occasion furnish elements of proof: prima facie evidence in writing, presumption, extra-judicial admission. An ordinary letter may even be an instrument where it records a unilateral undertaking. Two letters taken in conjunction may evidence the existence of a contract where the obligations of each party can be established from his letter.

- Telegrams are less cogent evidence than letters as being merely copies of originals delivered to a post office employee. An unsigned original may constitute prima facie evidence in writing.

- The same applies to unsigned copies of private written instruments. In certain circumstances, copies of authentic instruments may themselves be authentic if the original instrument has disappeared <sup>(28)</sup>.

**f) exceptions and modifications to unrestricted proof  
in commercial matters**

187.

Even in commercial law, a number of areas fall outside the rules of unrestricted proof.

---

25 Civil Code, art. 1324; Code of Civil Procedure, art. 883-894  
26 CC, arts. 1329 and 1330.  
27 CC, art. 1331  
28 CC, arts. 1335 and 1336

188.

The best-known example arises out of article 25 of the Non-Marine Insurance Act of 11 June 1874, which provides that the insurance contract must be evidence in writing regardless of the value of the insured object, although proof by testimony will be admitted if there is prima facie evidence in writing.

This provision is not a matter of public policy, but is stricter than article 1341 in requiring perpetuation of evidence in writing, even where the subject of the contract has a value below BF 3,000.

189.

Usage also plays a major part in commercial law and, in a judgement of 29 March 1976, the Court of Cassation held that commercial usage may, for example, require that complaints about invoices should be made in writing for commercial transactions of a given magnitude or frequency <sup>(29)</sup>.

190.

As we have seen, the law in many cases requires writing for purposes other than evidence. This indirectly conflicts with the scope of application of the admissibility of evidence rule.

## **Par. 2 - Application to electronic media**

191.

We have seen that article 1341 of the Civil Code lays down the general rule that writing is required to evidence any legal act involving consideration in excess of BF 3,000, and prohibits proof by testimony or presumptive evidence in addition to or against a written document even for contractual agreements with a consideration under BF 3,000.

---

29 Pas, 1976, I, 552.

Now, a message stored on an electronic or magnetic medium cannot be regarded as "written" within the meaning of this provision, in particular because the essential element of writing as defined by the Belgian Civil Code - namely, the signature - is lacking, and with it the identification of the sender of the message.

For if at the present time the computer terminal from which a message originated can be identified with certainty, the same is not true of the real sender.

Following this principle, records of contracts concluded by data communications stored on magnetic or electronic media will be admissible as proof only for agreements with a consideration of less than three thousand francs.

192.

Are we to conclude, therefore, that in all other cases, any attempt to adduce proof using these records will be declared inadmissible?

No, because the fact of the matter is that the exceptions provided by the Civil Code as enlarged upon by the courts leave wide scope for the admissibility of proof by any evidential means.

193.

The fact is that all agreements which can be described as commercial fall outside the scope of article 1341 of the Civil Code and can be proved by all evidentiary means.

The same will apply to so-called "mixed" instruments (i.e., commercial for one party, and purely civil for the other), for which all evidentiary means will be admissible against the commercial party.

194.

The scope of article 1341 of the Civil Code can also be circumvented by application of article 1348 of that Code, i.e., by pleading the impossibility of evidencing the matter in writing as being not, or no longer, the custom for that type of transaction in the business community concerned.

Theory and case law are agreed that this provision must be construed widely. It would therefore offer a suitable legal framework to include computer-generated documents in our law of evidence, in particular by sanctioning the use of public videotex networks as falling within the exception provided by CC, article 1348. This solution, indeed, has already been adopted by French legislation.

195.

Another exception which might find application is that contained in article 1347 of the Civil Code providing that article 1341 does not apply to prima facie evidence in writing. Certain authors consider that the use of computer systems and videotex networks might fall within this exception.

196.

Finally, doctrine and case law also concur in regarding article 1341 CC as neither of strict application nor a matter of public policy.

User bodies are therefore free to propose to their addressees general regulations assigning conclusive force to the electronic media on which their data are recorded provided it can be established that the regulation concerned has actually been brought to the user's attention and accepted by him.

197.

All this leads to the conclusion that, in many cases, the stringent evidentiary requirements introduced by article 1341 of the Civil Code may be circumvented in favour of a system of proof by any evidentiary means in which proof by electronic medium would be admissible as circumstantial evidence.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

198.

The Belgian customs authorities have developed a computerized customs clearance system named SADBEL.

This system allows users to link up to the central customs computer from an intelligent terminal or system via a modem over a telephone line. The declarant enters a set of data prescribed by the customs service. A code sheet has been developed to help them enter their data. The user-input data are checked for admissibility by the computer. Errors can be detected and corrected during data entry.

Once a correct declaration is entered, the receiver's accounts are updated and the declaration can be edited; the declaration number is displayed on the terminal operator's screen along with the amounts payable.

Intelligent systems can also receive the duties and taxes calculated, customs value, VAT value, the office's accounting week and identification number; these data can then be processed immediately for accounting, invoicing, register, etc. purposes.

The customs authority's computer generates a customs document from the user-entered and -corrected data.

The declarant can have this document printed out in his offices as soon as he wishes for use in completing future customs formalities.

This system is currently operational in 10 Belgian customs offices, but can also be applied in the country's other customs offices using what is known as the mini-SADBEL procedure. Over 100,000 customs declarations are currently edited on the system each month.

199.

In a Circular of 20 March 1986 <sup>(30)</sup>, the Belgian VAT Authority expressed the hope that Belgian companies who keep their accounts on computer would also make maximum use of the potentials offered by computing in preparing their lists of VAT-taxable customers.

In particular, the Authority emphasized the reliability of magnetic media as offering a markedly lower error rate both in compilation of the listing by the company and its use by the appropriate departments.

The Circular in questions describes the requisite characteristics of the magnetic tape or floppy disk, describes the record layout, etc...

Firms are therefore free to furnish the annual list of their VAT-taxable customers to the VAT administration on magnetic media either by delivering it to the senior VAT inspector or sending it to him by post.

**Par. 2 - Auditing of computer and electronic data interchange systems**

200.

Article 221, indent 1 of the Income Tax Code (ITC) requires taxpayers to produce to the inland revenue authorities for on-site auditing, all books and documents necessary to determine the amount of their taxable income.

Indent 3 of the same article specifies that the books and documents in question must be made available to the inland revenue authorities in the taxpayer's business premises where the books are kept, made up or addressed.

---

<sup>30</sup> Circular 3/86 of the Ministry of Finance, Administration of Value Added Tax, Land and Other Registration, VAT Division.

Likewise, any official of the central government tax administration duly commissioned to conduct an audit or inquiry related to the application of any tax on any individual or legal entity is authorized by operation of law to take, search for or collect all information required for the proper collection of all other taxes charged on that person or entity <sup>(31)</sup>.

Current thinking holds that the right of inspection conferred on the tax authorities by these provisions includes the right for tax inspectors to ask to examine a taxpayer's computerized accounts, in particular to check their conformity with the tax returns submitted by the taxpayer.

201.

This right of inspection does not, however, include a right for the tax inspector to call for what is known as "the keys of the system", i.e., information from the taxpayer on the procedure to be followed to access the document.

A Private Member's Bill to plug this loophole is currently before Parliament. It would amend the Code to include a provision common to all taxes obliging taxpayers to hand over the keys to their computing system to tax inspectors.

#### **Section 7.- Conclusions of the survey of Belgian law**

202.

The foregoing shows that, overall, Belgian legislation presents no major obstacles to the transfer or perpetuation of documents by electronic data interchange, nor to the admissibility of evidence in the form of documents recorded on electronic media.

203.

As regards transmissibility, there is, in principle, no reason why invoices should not be sent or contracts concluded by computer communications systems.

---

31 Income Tax Code, art. 242 - provision common to all taxes.

There are, however, a number of exceptions to this, notably:

- all instruments whose enforceability against third parties depends on formal publication;

such instruments are nonetheless binding on contracting parties from the time of their conclusion; this exception does not, therefore, in my view, constitute a major impediment to the development of EDI.

- negotiable instruments, which, at the present time, still have to be physically delivered;
- clauses assigning jurisdiction within the meaning of the 1968 Brussels Convention.

204.

As regards perpetuation of documents, the various government departments have found ways, most frequently by issuing circulars, of allowing accounting, company, customs and tax documents to be preserved, and indeed transmitted, by computer communications.

Legislation in this matter does not, therefore, seem essential other than perhaps with a view to assuring legal security in an area which is at the present time merely one of concessions and documents not binding on the authorities.

205.

In this area, Belgian legal provisions are couched in sufficiently general terms to assure inspectorates of access to documents contained on computerized media or magnetic tape.

The current wish of Belgian government departments to see their rights of inspection extended to the "keys" of taxpayers' systems nonetheless carries the risk of a violation of taxpayers' privacy and as a clandestine extension of the prerogatives of administration beyond the bounds of the acceptable.

It might therefore be preferable to regulate the conditions and limits of the right of access enjoyed by civil servants with regard to the individual taxpayer.

206.

As regards the law of evidence, a distinction should be drawn between commercial matters and civil matters.

In commercial matters, proof may be adduced by any means and production of a magnetic tape poses no problems as regards admissibility of evidence.

The courts are also ready to infer implied acceptance of invoices and contracts where both parties concerned are businessmen.

Evidence in civil matters is regulated. However, the development of both doctrine and case law enables solutions to be evolved which constitute a wholly satisfactory palliative to the lack of specific regulations authorizing proof by electronic or magnetic media.

One such solution would be to greatly extend the application of article 1348 of the Civil Code and consider that, in cases where EDI is used, it has been impossible to constitute a written instrument within the meaning of that article and that consequently, circumstantial and presumptive evidence can be adduced. Documents transmitted by EDI would then be admitted in that capacity.

In point of fact the chief obstacle to the development of EDI in both areas is the reluctance of the courts to attach evidentiary weight to such documents. Some judges, indeed, have clearly expressed their lack of confidence in documents whose reliability they doubt.

Judicial confidence will not be legislated into existence, but will develop over time, as this type of transmission proliferates and technology advances. Research currently under way should lead to further advances along this path, enabling us to establish with certainty:

- the fact that an agreement exists;
- the identity of the sender; and
- the content of the agreement transmitted and the lack of any subsequent amendments.

**CHAPTER 3: ANALYSIS OF THE LEGAL POSITION IN DENMARK( <sup>1</sup> )**

**Findings of the survey conducted into Danish law by Messrs P.R. MEURS-GERKEN and ESKIL NIELSEN of the Amaliegade No 22 law practice, Copenhagen.**

**Section 1.- Lack of specific regulation in the matter**

207

The survey revealed no particular regulations dealing with the specific issue of the electronic transmission of commercial data and the matters falling within the scope of this study.

208.

Reference should, however, be made to Act No. 84 of 11 May 1897 on the telecommunications monopoly arrogated to the Danish State together with that on the Central Securities Department of the Danish stock exchange laying down a number of rules regarding proof of securities listed on the stock market by electronic data interchange.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mes P.R. MEURS-GERKEN and ESKIL NIELSEN, from which this chapter draws extensively.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

209.

There are no regulations in Danish law specifically prohibiting the transfer of commercial documents by electronic means.

The version which comes into the recipient's possession will not be regarded as an original document, but rather a copy.

In cases where an original is expressly required, transfer by electronic data interchange will be impossible, therefore (2).

**b) invoices**

210.

There is nothing in Danish law to prevent an invoice being sent by EDI.

211.

The only impediment to such a transfer derives from accounting considerations.

Paragraph 7 of the statutory provisions on accounting provide that the principal schedule must be furnished as an original copy on paper or microfilm.

---

<sup>2</sup> Cf, *infra*, paragraph 2.

**c) general conditions of sale**

212.

Denmark has no particular legislation on general conditions of sale.

213.

The enforceability of general conditions of sale depends on an appraisal of the facts. No difficulty would arise in the event of explicit acceptance by an express declaration of acceptance of the general conditions of sale, but tacit acceptance is equally possible.

214.

No particular difficulties seem to arise with the electronic transmission of general conditions, therefore.

215.

The simple reference to a code may suffice to render such conditions applicable after they have been transmitted in full for the first time, either in writing or by telecommunications.

**d) contracts**

216.

With the exception of those contracts referred to in paragraph two, Danish law permits the conclusion of contracts by electronic data interchange.

217.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

Determination of the locus contractus also has tax impacts in Danish law. Documents deemed executed in writing are subject to stamp duty. Article 7, paragraph 3 of the Stamp Duty Act expressly excludes communications by telegraph and telex, which are not considered made in writing. The Act is silent on documents transferred by EDI. As regards place, article 3 of the same Act provides that where one party is domiciled in Denmark and the document is signed in Denmark, stamp duty must be paid. The question therefore arises in what circumstances and at what moment the document is deemed to have been signed.

218.

Neither legislation nor custom have anything particular to say about the time and place of formation of a contract concluded by the exchange of communications between computer systems.

219.

The basic rule on the time of conclusion of a contract in Danish law is that a contract is regarded as made when the offeror receives acceptance of his offer.

This rule is particularly stated in the Conclusion of Contracts Act, articles 2, 3 and 4.

220.

The question as to when a contract is regarded as concluded where acceptance is given by telecommunications will depend on the construction placed on the words "received by" the offeror.

It is normally accepted that the reply must be received at the time and place where the offeror can take cognizance of their content. The contract must therefore be deemed made at the time and place where the acceptance is brought to the offeror's attention in a form accessible to him.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Danish law**

**a) obligations under commercial law**

224.

There is no particular requirement for preservation of documents in commercial law.

225.

To ensure that the necessary proof is always available, however, it is recommended that documents be preserved for as long as proceedings are not time-barred.

Limitation periods vary.

Some common obligations have their origin in routine commercial transactions, for which the limitation period is five years.

Back taxes and customs duty liabilities generally lapse five years after the authorities concerned have been put in possession of the necessary information to discover the existence of the liability.

Special limitation rules apply to situations where the debt is the result of a criminal act.

All debts and financial liabilities are deemed to lapse after twenty years.

**b) obligations under tax law**

226.

Here we must refer to article 7 of the Danish Accounting Order.

Books of account and all accounting schedules, including the principal schedule, must be preserved for five years.

227.

If accounting schedules are microfilmed, the microfilms must be kept for one year following the close of the financial year to which the schedules refer. A copy or duplicate of business papers and letters, together with printed or published computerized documents may be replaced by microfilms (Accounting Order, art. 7, par. 5-8).

228.

Extension of the various methods of preservation to electronic and computerized media is under consideration.

**c) obligations under customs and statistical law**

229.

There seem to be no particular obligations for preservation under either branch of law in Denmark.

**Par. 2 - The preservation of records on computer media**

230.

As stated above, the possibility of preserving documents in a form other than on paper or microfilm is as yet only at the discussion stage.

**Par. 3 - Penalties for failure to preserve accounting and tax documents**

231.

The primary sanction is that the information alleged to be contained in the record will not be taken into consideration.

232.

Failure to comply with the provisions of the Accounting Act may likewise incur penalties.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

233.

Whenever an original document is required, that document must be signed.

Lack of a signature may invalidate the document.

**Par. 2 - The possibility of signing electronically**

234.

It is generally accepted that a document is lawfully signed when it bears a handwritten signature.

**Par. 3 - Penalties**

235.

Where an original copy is to be produced, lack of a signature invalidates the document.

236.

Where an original is not required, the cogency of proof resides wholly in the ability to adduce documentary evidence to show that the electronic signature demonstrates acceptance of the instrument.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Admissibility**

237.

Under Danish law, relevant evidence can always be adduced, regardless of form.

Computer records will thus be admissible as proof <sup>(3)</sup>.

238.

There are no particular formal requirements for submission of evidence.

It is sufficient that the court can understand them.

This therefore imposes de facto technical limits.

239.

Given that, it seems hard to see how providing documentary evidence on a computer screen would be admissible.

If the information is not expressed in a way comprehensible to the court, expert assistance may be called for to assemble the information into a computerized form accessible to the court. If the data are in a specially encoded or special computer language form, expert assistance may even be imperative.

---

<sup>3</sup> See the Supreme Court judgement reported in the weekly law review, Ugeskrift for Resvatsen, 1978, p. 652.

**Par. 2 - Evidential weight of a computerized document**

240.

The probative force of computer records will depend on the extent to which the document concerned can be authenticated. The question which arises, therefore, is whether the document can be considered as a true and faithful expression of its originator's intent.

241.

If a computer-generated document leaves no room for doubt in this regard, it will be regarded as no less cogent evidence than a written document.

242.

Danish law therefore does not differentiate between an evidentiary document furnished on paper and one on a computerized medium.

A written document is no less susceptible to forgery than a computer record.

**Par. 3 - Proposed legislation**

243.

Having regard to the foregoing considerations, there seems no real need to introduce new legislation to confer legitimacy or judicial import on computerized information.

244.

Special measures have been adopted for stocks and shares applicable to the central securities department. Ownership of bonds and certain securities listed on the Danish stock exchange is now registered only on computerized systems.

245.

Some aspects of existing legislation, particularly that relating to the question of when a document can be regarded as original, require amending in order to properly rationalize the "paperless" transmission of data.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

246.

All information addressed to the tax and customs authorities must be furnished in plain language in accordance with the Danish Accounting Order.

The Order provides that: "if a firm's ordinary books of account are computerized, they must include specifications in plain language (conventional entries), on microfilm if so required" (Accounting Order, art. 1, par. 3).

The Order also requires the balance on each account to be accompanied by each accounting entry, such that the annual accounts can be clearly reconciled with each entry.

The commentaries accompanying this definition expressly state that the prescribed conditions will not be met if the specifications are provided in computerized form only.

**Par. 2 - Auditing of computer and electronic data interchange systems**

247.

Danish law contains no provisions regarding computer systems audits. IFAC Statements Nos. 15, 16 and 20 may be applied.

248.

The criminal law allows the public law officer and the tax authorities to search premises under search orders, which may thus afford them access to electronic recordings.

Tax law requires that the tax authorities be furnished with all information useful for calculating the taxable base. Tax inspectors may carry out spot checks.

**Section 7.- Conclusions of the survey of Danish law**

249.

Mes MEURS-GERKEN and NIELSEN are of the opinion that Commission action on legal rules addresses no particular need in Danish law.

They believe greater attention should be paid to harmonizing technical standards.

Legally and technically, standardizing cryptography techniques would be enough.

**CHAPTER 4: ANALYSIS OF THE LEGAL POSITION IN SPAIN <sup>(1)</sup>**

**Findings of the survey conducted into Spanish law by the KPMG law practice, Barcelona.**

**Section 1.- Lack of specific regulation in the matter**

250.

The survey revealed no particular regulations dealing with the specific issue of the electronic transmission of commercial data.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

251.

There are no regulations in Spanish law which specifically prohibit the transfer of commercial documents by electronic means.

The requirements for formal validity in each case, however, differ according to the purpose for which the documents thus transmitted are destined (conclusion of contract, preservation, evidence).

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by KPMG, from which this chapter draws extensively.

**b) invoices**

252.

In principle, there is nothing in Spanish law to prevent an invoice being sent by EDI, provided it contains the information required by tax law to identify the issuer, viz., the tax identification number (T.I.N.), and trade register number.

**c) general conditions of sale**

253.

The information made available to us seems to indicate that Spanish law contains no particular provisions regarding the transmission of general conditions between businessmen or private individuals *intra se*.

By contrast, contracts between traders or companies and individuals are governed by a Consumers and Users Act (Ley de 26/1984 de 19 de Julio, "General de defensa de los consumidores y usuarios", LGDCU).

Article 10.1.a) of this statute provides that consumers must be furnished with the firm's general conditions. If they refer to other documents, he must have received those documents first.

This, however, is an obligation to inform, which can be complied with in any manner.

Article 10.1° of the same statute also requires "precision, clarity and simplicity of drafting and direct comprehensibility"; these criteria also apply to any other documents referred to.

Reference to a code may well suffice, therefore, if it complies with the clarity requirement. Use of a standard phrase such as "complies with the documents (...) which have been supplied to the customer" may well be enough.

There is nothing to prevent the transmission of general conditions, by computer communications, therefore.

**d) contracts**

254.

Both Spanish civil law and commercial law provide that contracts require no formalities (Civil Code, article 1278; Commercial Code, article 51).

With the exception of those contracts referred to in paragraph 2 of this section, Spanish law permits the conclusion of contracts by electronic data interchange.

255.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

256.

Article 1262,2° of the Civil Code provides that a letter of acceptance binds an offeror only from the time he becomes aware of the existence of the acceptance (the knowledge rule).

The Commercial Code, on the other hand, provides that contracts made by exchange of correspondence are deemed made at the moment of the offeree's reply accepting the offer or the conditions amending it (the declaration rule).

257.

In civil matters, the contract will be deemed concluded at the place where the offer was made.

In commercial matters, it would appear that the locus contractus is that where the offer was accepted.

The same rules apply to contracts made by telephone.

258.

Article 51-2° of the Commercial Code provides that an exchange of telegrams will be binding only on contracting parties who have agreed to this method of communication beforehand in writing, and provided the telegrams fulfill all the conditions or contain all such indications as the contracting parties may have agreed on.

259.

This legal precept does not apply to contracts concluded by telex, since commercial usage considers or presumes that the person using the telex terminal is, in principle, either the owner of it, or someone enjoying the full confidence of the owner, and the problem of identification therefore does not arise, be it with a member of the professions, a public corporation, commercial company or non-commercial individual.

By analogy, it can be reasonably supposed that facsimile machines likewise fall outside the scope of article 51-2°.

260.

Consequently, for negotiations conducted over data communications systems, the contract will be deemed formed, either:

- when the offeror receives the declaration of acceptance by electronic means (in civil law contracts); or
- when the promisee demonstrates his acceptance by electronic means (commercial law contracts).

261.

It would appear that Spanish law makes no distinction as to whether the exchange of messages takes place directly from computer to computer without intermediary, or whether it takes place via a VANS or other intermediary.

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

262.

Article 51 of the Commercial Code, providing that contracts may take any form, is qualified by article 52, which provides that:

"the following are exceptions to the preceding article:

1° Contracts which, by virtue of this Code or particular statutes must be made in writing or in a particular form or following a particular procedure to be valid.

2° Contracts made in a foreign country requiring a particular instrument, form or procedure to be valid which would not be required under Spanish law. In either case, contracts not complying with the prescribed formal requirements will give rise neither to an obligation nor legal proceedings."

**a) documents required to be authentic instruments**

263.

Article 1280 of the Civil Code lists the instruments required to be in authentic form. They are:

1. - instruments and contracts creating, transferring, modifying or extinguishing rights in rem over immovables;
2. - leases of immovables for six years and longer;
3. - ante-nuptial agreements and any amendments thereto;
4. - the assignment, repudiation or renunciation of rights of inheritance or rights arising out of ante-nuptial agreements;
5. - capacity to marry, the general authority to institute legal proceedings, special authority required to be produced *litis pendens*, together with those conferred for the purpose of executing an instrument which must be executed in authentic form or which may prejudice third party rights;

6. - the assignment of original rights arising out of an authentic instrument.

Other types of contract in which the consideration proffered by either or both contracting parties exceeds 1,500 pesetas must likewise be made in writing, even if by private deed.

The courts would seem to have construed this provision not as one going to the validity of the instrument concerned, but as having no purpose other than to enable one contracting party to oblige the other to evidence an otherwise validly concluded contract in writing.

The effect of this provision would thus seem to be that proof of the instrument or contract can only be adduced in the prescribed form ("forma ad probationem").

#### **b) insurance policies**

264.

Article 5 of Act 50/1980 of 8 October provides that contracts of insurance must be made in writing.

#### **c) instruments embodying an incorporeal right**

265.

Bills of exchange and other instruments transferring an incorporeal right must be in writing.

Some documents, however, such as certificates of deposit and Treasury bills may already be transferred by electronic data interchange via "*account annotations*".

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Spanish law**

**a) obligations under commercial law**

266.

Article 45 of the Commercial Code specifies the business documents which those engaged in trade must preserve:

*"Those engaged in trade will preserve the books, correspondence, documents and supporting vouchers relating to their business, correctly ordered, for five years from the date of the last entry therein. This provision applies in all cases, except where particular provisions prescribe a different period".*

This article was amended by Act 19/1989 of 25 July on the Partial Reform and Adjustment of Commercial Legislation to the EEC Directives on Company Law, raising the preservation period to six years.

This statute came into force on 1 January 1990.

**b) obligations under tax law**

267.

The "Ley General Tributaria" imposes an obligation to preserve books of account, accounting records and other documents for five years.

**c) obligations under customs and statistical law**

268.

The author of the study is of the opinion that, considering the tax implications of these documents, the perpetuation period under customs law can be assumed to be five years also.

**Par. 2 - The preservation of records on computer media**

269.

There seem to be no major obstacles to storing these records in computerized form.

**Par. 3 - Penalties for failure to preserve tax and accounting documents**

270.

Since this is a formal requirement, the Ley General Tributaria" treats its breach as an infringement of regulations punishable by a fine of from 25,000 to 100,000 pesetas.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

271.

Instruments required to be in writing "ad solemnitatem" must be signed; the author cites articles 688, 1223, 1225, 1226 and 1277 of the Civil Code.

In all other cases, signature is not a condition of validity of a contract.

It can be deduced, therefore, that in all cases where writing ad solemnitatem (and hence a signature) is not required, a contract will be valid even if not signed.

**Par. 2 - The possibility of signing electronically**

272.

There seem to be no major obstacles to the possibility of an electronic signature.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - The rules of evidence under Spanish law**

273.

Article 1.215 of the Civil Code provides that proof may be adduced by:

- "instrumentos" (documentary evidence)
- admission
- personal inspection by the court
- experts
- witnesses and presumptions.

The author indicates that this provision is enumerative and that albeit part of the *ius publicum*, it acknowledges the merits of the operative principle under which the parties may select what they consider the most suitable means of proof.

Article 578 of the Civil Procedure Act provides that:

The admissible means of evidence are:

1. Judicial admission (admission in court)
2. Formally-executed official public documents
3. Private documents and correspondence
4. Business books kept in accordance with the formal requirements of the Commercial Code
5. Expert opinions
6. "Reconocimiento judicial" (inspection of place or thing by the court)

## 7. Testimony

The author indicates that as far as admissibility of these means of proof is concerned, the provision in no way ranks them by degree of cogency, and while it is true that the concept of a "document" has been traditionally equated with writing, it nonetheless remains true that other, equally reliable means of proof may be found today which can be assimilated to writing by analogy.

Hence, a decision of the Spanish Supreme Court held that the word "instrumentos" used in article 1215 of the Civil Code included the showing of a videocassette.

Article 51 of the Commercial Code provides that legal proceedings may be based on a contract regardless of the form in which concluded, provided its existence can be established by one of the accepted civil law means of proof.

It nonetheless provides an exception for testimony, which will not be admitted to prove the existence of a contract with a value above 1,500 pesetas, except where testimony is used to corroborate other evidence.

### **Par. 2 - Application to electronic media**

274.

The author consequently concludes that there is no reason why videocassettes or magnetic tapes should not be admissible as evidence.

### **Par. 3 - Evidential weight of a computerized document**

275.

Despite the free admissibility of magnetic tapes before Spanish courts, the court may still deny any evidential value for such means of proof.

This could constitute an obstacle to the development of proof of the transmission of messages by electronic data interchange.

**CHAPTER 5: ANALYSIS OF THE LEGAL POSITION IN GREECE <sup>(1)</sup>**

**Findings of the survey conducted into Greek law by Mes A. THANASSOULIAS and H. PSARROS**

**Section 1.- Lack of specific regulation in the matter**

276.

There are no particular regulations applicable to the electronic transmission of commercial data in Greece.

277.

Mention should be made, however, of the Greek Act 1805/88 adding an indent B and C to article 370 of the Penal Code.

This provision introduces criminal penalties for the misuse of computer data.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mes A. THANASSOULIAS and H. PSARROS, from which this chapter draws extensively.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

278.

Greek law does not, in principle, prohibit the transfer of commercial documents by electronic means between economic operators.

Certain statutes, however, impose specific requirements for formal validity which in fact render telecommunicative transmission a virtual impossibility.

**b) invoices**

279.

Prevailing legal provisions (Presidential Decree No. 99/1977, titled "Code of Taxation Principles", as amended by Decree 356/1986) provides that invoices must be made out on a legally perforated document and the original sent to the addressee by post.

The Code provides that the legally perforated invoice must be drawn up by the one offering the commercial service, who must keep the (carbon) copy of the invoice, likewise perforated, in the invoice book for the purposes of inspection by the tax authorities if required.

The authors of the survey of Greek law consider, however, that existing law and practice could be interpreted to enable invoices to be transmitted by electronic means provided the tax authorities were able to conduct their investigations into the memory of the invoicer's computer system.

This development in business practices, however, seems far from being an established possibility.

### **c) general conditions of sale**

280.

Such specific problems as might arise on the transmission of general conditions of sale are, in principle, governed by usage and custom.

Simple reference to a code may suffice if that code refers to conditions known to the other party and still in force (intrinsic interpretation).

Order forms may be transmitted by electronic means.

### **d) contracts**

281.

With the exception of those contracts referred to in paragraph 2 a) of this section, Greek law permits the conclusion of contracts by electronic data interchange.

282.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

283.

The general principles of the Hellenic Civil Code state the following requisites for the validity of a contract:

1. the will of a person to conclude a contract
2. a statement of that will
3. the conjunction of that statement with that will
4. the acceptance of that statement by the other party

Article 192 of the Civil Code provides that the contract is formed immediately the offeror is made aware of the declaration of acceptance of the offer.

In case 786/1972, the Athens Court of Appeal held that a contract is formed in the place where the offeree who made the declaration is at the time the acceptance is received.

In our view, these principles could apply where messages are exchanged directly between computers without intermediary.

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

284.

In addition to instruments required to be in authentic form, and which clearly cannot be executed by electronic data interchange, therefore, Greek law also imposes the same restriction on transport documents, preventing their transmission by electronic means. Nor can any of the commercial documents required to accompany product sales be transmitted by electronic means. Restrictions of this nature derive from the Code of Taxation Principles (Tax Code).

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Greek law**

**a) obligations under commercial law**

285.

Books of account must be preserved for 10 years.

Article 8 of the Hellenic Commercial Code provides that, in addition to the books used by a trader for the purposes of his business, he must also keep a book known as a "schedule" as proof of his monthly expenditures.

This book, updated daily, shows his current receivables and payables positions, exchange transactions, acceptances, endorsements and, more generally, all incomings and outgoings.

Article 9 of the Commercial Code provides that a handwritten annual inventory of all movables, immovables, payables and receivables must be prepared in a private instrument.

This inventory must be entered in the "inventory book".

The "schedule" and "inventory book" must be numbered and initialled once annually. The same procedure is not required for the book in which the merchant keeps the copies of his outgoing correspondence. All books must be kept in date order, without blanks or marginal annotations.

The books must be numbered and initialled by the appropriate authorities in accordance with the procedure prescribed by article 11 of the Commercial Code.

286.

The regularly kept books of account may be admitted as evidence in commercial disputes between businessmen.

To be admissible as evidence, the books must have been kept by the merchants in accordance with the prescribed procedures as described above.

The court may order discovery of books of account in proceedings for succession, liquidation of community property of spouses, and bankruptcy.

The court may order automatic discovery of books of account where they are intimately connected with the proceedings before it and may take copies of them.

If the books are outside the jurisdiction of the court before which the proceedings are pending, the court may order the appropriate authorities for the district concerned to inspect them and submit a report thereon to the trial court.

**b) obligations under tax law**

287.

Business books must be kept for fifteen years and other business documents for eleven years (Code of Taxation Principles, art. 44§2) (Tax Code).

**Par. 2 - The preservation of records on computer media**

288.

The Code makes no reference to instances of transmission by electronic means.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

289.

1) Article 29 §5 of the Tax Code provides that all commercial documents, except for retail sales receipts, must be signed by the issuer.

2) Commercial usage, however, regards invoices, documentary credits and export waybills as valid even where unsigned if perforated by the competent authorities. These documents cannot be transmitted by electronic means as they must be perforated.

3) Article 393 §1 of the Code of Civil Procedure requires a written, signed document for transactions with a value greater than thirty thousand drachmas.

4) Where the law or the parties require any legal instrument to be in writing, the instrument must be signed by the originator.

For agreements, the contracting parties must both sign the same instrument. If the contract is drafted in multiple duplicate originals, it will suffice if each party's signature figures on the other party's copy (Civil Code, art. 160).

A contract may also be formed by acceptance of the offer made by separate notarial deed (Civil Code, art. 161).

5) Where the parties have prescribed writing, and in case of doubt, the intention of the parties may be confirmed by signed letters and originals of telegrams (Civil Code, art. 162).

### **Par. 2 - The possibility of signing electronically**

290.

Article 163 of the Hellenic Civil Code provides that, for a large issue of bearer securities, a stamped signature mechanically imprinted is equivalent to a handwritten signature.

A Ministry of Finance Circular also provides that a signature may be appended by mechanical means provided the signature is an exact duplicate of the originator's signature.

Interpreting article 163 of the Hellenic Civil Code in the light of the Ministry of Finance Circular, the authors of the present report are of the opinion that an electronic signature could be considered as a signature appended by mechanical means if printed, and thus could be invested with legal import.

### **Par. 3 - Penalties**

291.

Article 47 §1 of the Code of Taxation Principles (Tax Code) provides administrative penalties - lump sum fines - graduated by the seriousness of the offence.

Offences concerning invoices are punished by criminal penalties provided in Act 1951/1986.

A more recent statute - Act 1805/1988 amending certain criminal provisions and updating the procedure regarding certificates of good character and conduct - adds two new provisions (articles 370B and 370C) to article 370A of the Penal Code.

Article 370B provides that anyone who copies or transmits to third parties computer data or programmes regarded as confidential national, scientific or business data or programmes in the public or private domain, is liable to imprisonment. If the confidential data are of extreme economic importance, he may be committed to prison for up to one year.

Article 370C provides that unauthorized use or copying of computer programmes may be punished by up to 6 months' imprisonment and a fine of from 100,000 to 2 million drachmas.

This is the first reference to electronic data processing on the Greek statute book and plugs a number of loopholes in the Penal Code. It represents a major step forward for Greece.

## **Section 5.- Constraints arising from the law of evidence**

### **Par. 1 - Evidence under Greek law**

292.

#### **1. Legal provisions**

The rules of evidence in Greek law are essentially contained in the Code of Civil Procedure.

The articles of that code dealing with proof are as follows:

- \* Art. 339: means of proof
- \* Art. 8, 347, 469 §2, 650§2, 671§1, 759§3: discretionary evidence
- \* Art. 347: conclusive evidence (beyond all doubt for the court)
- Art. 690 §1: semi-conclusive evidence (the court is convinced although some doubt remains)
- \* Art. 559: direct evidence (directly establishing a fact)
- \* Art. 336 §3: (circumstantial evidence (indirectly tending to establish a fact))
- \* Art. 341 §2: proof positive (established by the party on whom the onus falls)
- \* Art. 345: contradictory evidence
- \* Art. 342 §1: evidence ordered by the court
- \* Art. 237 §1, 238, 270, 640, 649 §1, 670, 690 §1, 759 §4, 933 §4: perpetuation of evidence
- \* Art. 348, 349, 350, 351: perpetuated evidence whose disclosure is ordered by the court.

293.

## 2. Subject of evidence

Under article 335 of the Code of Civil Procedure, only facts (actual occurrences) capable of influencing the outcome of the proceedings can be proved.

By way of exception to the general rule, article 337 prescribes the cases in which proof of rules of law may be required: the court may take judicial notice of foreign law, but may also order it to be proved where in fact the court has no notice of it.

Article 340 of the Code of Civil Procedure confers absolute discretion on the court to assess and admit the evidence submitted to it.

294.

## 3. Means of proof

Article 339 lists the means of proof as admission, inspection of the scene or thing in question, expert reports, written documents, examination of the parties, witnesses, oaths of the parties, and judicial presumptions.

295.

### **a) Admissions**

There are various classes of admission:

- \* judicial admissions (admissions in court - art. 552 §1)
- \* extra-judicial admissions (admissions out of court - art. 352 §2)
- \* simple admissions
- \* complex admissions (art. 353)
- \* formal admissions
- \* informal admissions (art. 261)
- \* fictive admissions (art. 271 §3)
- \* rebutted admissions

Articles 99 and 354 permit retraction of admissions in certain circumstances.

296.

**b) Inspection of the scene or object**

either:

in personam: by the judge in person (art. 358)  
by officials deputed for the purpose (art. 358)  
combined with expert reports and examination of witnesses  
(art. 356)

297.

**c) Expert reports**

Where an expert report is ordered, the expert tenders his opinion on matters involving specialist or scientific knowledge, or knowledge of trade custom and practice.

Articles 387 and 390 makes the assessment of his opinion a matter of fact for the court.

Any party to proceedings may call technical advisors to challenge or rebut the expert opinion proffered (art. 380 §1, 382 §2).

298.

**d) Written documents**

Article 443 of the Code of Civil Procedure stipulates that a private written document must be signed by its author to be admissible as evidence.

Article 444 of the Code of Civil Procedure defines "private written document" as:

1. Books which traders and businessmen must keep as prescribed by commercial law.
2. Books kept by lawyers, notaries, process servers, physicians, pharmacists and midwives.
3. Photographs, cinematic films, voice recordings and all other forms of mechanical representation.

Signed written documents are regarded as "best (i.e. most cogent) evidence", particularly where perpetualive - i.e., drafted before the dispute arose and consequently untainted by influence at a non-suspect time (i.e. unconnected with the dispute).

The legal system encourages people to employ signed written documents as a means of proof. A series of provisions contains incentives to use written documents; the obligations deriving from a notarized deed, for example, are enforceable per se (art. 904 §2).

Public or private signed written documents in acknowledgement of debt may support an application for issue of a payment order (art. 623), thus avoiding trial, in certain cases.

If suit is nonetheless engaged, signed written documents are regarded as such absolute proof (art. 438) as to largely pre-empt the outcome of the proceedings. They can be rebutted only by proof of forgery.

The tax authorities may use signed written documents intended to serve as evidence to determine additional tax liabilities and, where applicable, to determine the taxable income of an individual.

That is one reason why contracting parties tend to avoid signed written documents wherever possible, despite having the strongest probative force as "best evidence".

299.

#### **e) Examination of the parties**

If the facts cannot be wholly established by other means of proof, the court may examine any or all parties to proceedings (Code of Civil Procedure, art. 415)

300

#### **f) Witnesses**

Note that article 393 of the Code of Civil Procedure restricts the examination of witnesses as a means of proof in certain circumstances:

\* the contents of contracts and collective instruments may not be proved by witnesses where the value of the subject-matter of the contract exceeds 30,000 drachmas;

\* the contents of a written document may not be proved by witnesses even where the subject-matter of the legal instrument is less than 30,000 drachmas;

\* where an agreement is in writing, the testimony of witnesses cannot be adduced to rebut preliminary agreements, collateral agreements drafted concurrently with the main agreement, or subsequent agreements. There are exceptions to this rule, however.

\* where there is prima facie evidence by writing.

\* where there is a physical or moral impediment to obtaining the written document.

\* where the written document has been lost.

\* where, by the very nature of the contract or the particular conditions pursuant to which the contract has been drafted, especially where commercial transactions are concerned, the testimony of witnesses will be admissible as proof (art. 349 §1).

301.

#### **g) oath**

The simple oath must be distinguished from the oath intended as a value judgement.

Oaths continue to be a very important means of proof in Greece due to the deep religious convictions of the nation.

Legal academics, however, have recently begun to advance the view that the oath is a dangerous means of proof and one best avoided (R. Beis, Professor, University of Athens).

Article 430 of the Code of Civil Procedure makes the oath a conclusive means of proof which cannot be rebutted by other evidence.

302.

#### **h) judicial presumptions**

Presumptions have been long defined by article 272 of the 1835 Code of Civil Procedure. "Presumptions" means the conclusions drawn by the law or the court from known facts to determine an unknown fact.

Judicial presumptions are not made irrebuttable by law and hence do not compel the court to draw any inference.

Judicial presumptions include:

- \* private (hand)written but unsigned documents
- \* letters written at a non-suspect time

#### **4. Agreements as to proof**

The question arises as to the admissibility of agreements as to proof. There are conflicting answers to this, and the subject is controversial. One view holds that the Code of Civil Procedure makes no explicit reference to the matter. Nonetheless, it can be considered that article 394 §2 provides that where the law or the parties decide that a written document is necessary for the legal act, the legal instrument may be proved by the testimony of witnesses if the document drafted for the purpose has been accidentally lost.

#### **Par. 2 - Application to electronic media**

304.

Article 443 of the Code of Civil Procedure provides that a written document must be signed by its author to be admissible as evidence in proceedings.

Article 444 of the Code of Civil Procedure defines "private written document signed by its author" as:

1. Books which traders and businessmen must keep as prescribed by commercial law.
2. Books kept by lawyers, notaries, process servers, physicians, pharmacists and midwives.
3. Photographs, cinematic films, voice recordings and all other forms of mechanical representation.

Tape recordings have been held to be mechanical representations and consequently admissible as evidence in court provided the voice is not recorded in such a manner as to be an affront to the dignity of the person concerned.

Theory and case law also regard telexes as admissible forms of evidence.

Two academic lawyers, both Professors at the University of Athens, hold the view that a telex may constitute prima facie evidence by writing in favour of its originator, provided the addressee does not deny having received the telex (Professors Mitsopoulos and Keramcas, opinion of 27/10/82).

**Par. 3 - Evidential weight of a computerized document**

305.

The researchers hold the view that it can be concluded from this that a computer medium, having the form of a mechanical representation, could consequently be considered a written document signed by its author, and hence admissible evidence receivable by the court.

A recent statute (1805/88) expressly provides for the first time in Greek law that a computer memory is considered a written document.

Article 2 of the statute provides that any electronic, magnetic or other means used by a computer or peripheral memory for the recording, collection, production or reproduction of data which cannot be transmitted directly, together with any magnetic, electronic or other equipment in which any information, image, symbol or sound is recorded, whether separately or together, provided such means are intended to furnish or capable of furnishing proof of occurrences of legal import shall be regarded as a written document.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

306.

The Ministries of Finance, the Presidency of the Government, Economic Affairs, and Defence, and the Telecommunications and Business Agency (OTE) are equipped with computer systems.

Personal data on users are stored in the computer network.

**Par. 2 - Auditing of computer and electronic data interchange systems**

307.

The authors of the present report know of no measures relating to computer systems audits.

In general terms, the customs and tax authorities are supervised by the Ministry of Finance, which thus controls access to documents and data.

All disputes between suppliers and users fall within the jurisdiction of the ordinary civil courts.

The Greek telecommunications agency (OTE) is the monopoly supplier of telecommunications for Greece.

The OTE is a public utility.

**Section 7.- Conclusions of the survey of Greek law**

308.

The researchers are of the opinion that the Commission should take action in certain areas to facilitate the transfer of commercial data by EDI. Clearly, the requirement of Greek law for all invoices to be perforated is a problem calling for particular consideration.

The Commission should have particular regard to harmonizing the legislations of the various Member States where differences exist, and should encourage countries whose legislation is still at the embryonic stage or in its infancy to progress and harmonize their laws with those countries whose legislation is more advanced.

## APPENDIX TO THE INVESTIGATION INTO GREEK LAW

309.

### 1. CASE STUDIES

1) The national airline Olympic Airways transmits data by electronic means, but messages must be in writing, signed and officially stamped before being executed. The company is to participate in the "Galileo" programme.

2) The Commercial Bank in Greece has been a member of SWIFT (the worldwide interbank transfer system) since 1980. The system was set up in 1973 by 239 leading European and North American banks, and came into operation in 1977.

SWIFT aims to develop a clearing house system for international payments and interbank transactions between its member banks.

The messages transmitted through the SWIFT system include:

- payment orders,
- sale and purchase of foreign currencies,
- foreign loans - money transfers.

The Commercial Bank of Greece has created a special transfer department to receive all incoming SWIFT messages and consolidate all outgoing messages.

310.

## 2. GOVERNMENT POLICY AND STRATEGY FOR ELECTRONIC DATA PROCESSING IN GREECE

Advances in computer systems and their use worldwide, both by EC Member States and other countries, have led the Greek government to craft a more effective response to international developments.

A. To that end, a national central computing policy, coordination, control, development and application planning unit has been established (O.J. 29/A/21-3-86).

It includes:

- The Governmental Council on Data Processing, whose aim is to evolve a data processing development strategy as part of broader government policy to assure the social, economic and technological development of the country.

The Council is headed by the Prime Minister, and the members comprise the Ministers of the Presidency of the Government, Finance, Economic Affairs, Education, Industry, Research and Technology, Transport and Defence.

- The Technical Board on Data Processing, created by Ministerial Decision (O.J. 29/A/21-3-86 and F 46/6/9000) comprises nine computer scientists.

Its purpose is to provide scientific support to the Governmental Council of Data Processing in the form of advice, opinions and proposals.

- The Data Processing Development Department, whose aim is to assure that the decisions of the Governmental Council on Data Processing are carried out and to submit proposals to the Governmental Council on the needs, objectives and development programmes for computing in the public sector.

This department comes under the aegis of the Presidency of the Government and comprises specialized scientists and data processing professionals.

Established by Presidential Decree No. 40/85, the Data Processing Development Department, became operative in November 1985 (O.J. 15/A/12-2-85).

It comprises 3 divisions and 9 sections and in 1987 had a staff of 24 scientific advisors and 4 administrative advisors.

This Department is concerned with infrastructure and production related to data processing.

It is chiefly concerned with laying down standard procedural rules for introducing computing into the public sector such as to mesh with the other objectives, namely:

- creating a research infrastructure for the acquisition of scientific and technical knowledge

- Greece's contribution to data processing development work with a view to creating the conditions to encourage domestic production and retention of a national hardware and software capital

- optimizing the use of electronic data processing to improve public administration and industry.

The basic instrument for giving concrete shape to this policy is the Three Year Electronic Data Processing Programme, the aim of which is to record the existing public sector potential in hardware, software, information systems and human potential, and to optimize them in order to programme government action in industry, computer research and education.

In the international relations field, the Data Processing Development Department contributes in particular to EEC data processing programmes and takes a close interest in the work and research conducted into data processing by international agencies such as UNESCO and the OECD.

Together, these three institutions comprise the central planning, coordination and control unit for the development and application of electronic data processing in the public sector.

B. The country at present has scant technological infrastructure in EDP.

A framework programme is in the pipeline to improve this situation by supporting the country's industrial, research and technological effort.

The scheme provides for:

- the creation of an independent, government-controlled sector to promote research and development of technological applications,
- the setting up of specialized EDP research institutes in Crete and Patros, and research units at the Polytechnic College and Democritos,
- increased international cooperation, more particularly through the Greek contribution to the EEC's ESPRIT programme,
- research conducted by a variety of bodies (ELKEPA, etc.) and by the Ministry of Industry, Research and Technology into the current status of electronic data processing in Greece,
- advising central government on the positions of end users as well as computer manufacturers.

The existence of a national computing industry is the only way open to the country of setting out unaided towards a form of data processing development in tune with the needs of the nation.

C. Establishing an education, vocational training and human resource development policy is the keystone of a national strategy to introduce, optimize and develop data processing applications.

This policy comprises:

- education planning, vocational training, specialization and work distribution in the public sector,
- planning for the training of specialists, academics and technical education,
- progressive incorporation of computing in secondary school curricula.

**CHAPTER 6: ANALYSIS OF THE LEGAL POSITION IN IRELAND <sup>(1)</sup>**

**Findings of the survey conducted into Irish law by Eugene F. COLLINS & Son, Solicitors, Dublin.**

**Section 1.- Lack of specific regulation in the matter**

311

Irish law contains no regulations dealing with the general issue of electronic data interchange.

312.

However, a major innovation was introduced in taxation matters by the 1986 Finance Act, which allows records to be stored and communicated by any electronic, photographic or other process approved of by the Irish Revenue Commissioners <sup>(2)</sup>.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Eugene F. Collins, Solicitor, from which this chapter draws extensively.

<sup>2</sup> Finance Act 1986, section 113

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

313.

Generally-speaking, Irish law lays down no formal requirements for an invoice.

The validity of an invoice will be in no way affected, therefore, by being sent by electronic means.

**b) invoices**

314.

Irish law does not prescribe any formal requirements with respect to invoices.

Electronic transfer of an invoice therefore does not affect the validity of the latter in any way.

**c) general conditions of sale**

315.

The same applies to general conditions of sale, which can equally well be transmitted by EDI.

316.

The enforceability of general conditions of sale is a question of fact to be determined by the trial judge whose task it is to decide whether it can be reasonably concluded from the circumstances that the person against whom they are raised had had them brought to his notice beforehand and had agreed to be bound by them, if only implicitly by not objecting to them within a reasonable time.

**d) contracts**

317.

With the exception of those contracts referred to in paragraph two, Irish law permits the conclusion of contracts by electronic data interchange.

318.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

319.

In Irish law, contracts concluded by correspondence, fax or telex are normally deemed concluded when the acceptance of the offer is communicated to the offeror.

Thus, the location from whence the letter, telex or fax accepting the offer is posted or sent determines the time and place of conclusion of the contract in Irish law.

That being so, it is irrelevant to make any distinction in Irish law between:

- a) an exchange of messages taking place directly from computer to computer without intermediary; and
- b) when the exchange of messages takes place via a VANS or other intermediary.

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

- a) tax returns and agreements with the tax authorities**

320.

Information submitted by taxpayers to the various tax authorities for the purposes of assessment to tax must be in writing and certified by the party to be bound.

321.

The same rules apply to agreements between a taxpayer and the tax authorities.

- b) instruments relating to the formation, management and supervision of companies, and the subscription, holding and transfer of their shares**

322.

The Memorandum of Association setting out the objects, powers and nominal capital of the company, and the Articles of Association setting out the internal management structure of the company must be printed on paper, bear a revenue stamp to show that appropriate stamp duty has been paid, and signed by the subscribing shareholders in the presence of at least one witness.

A solicitor or person named in the Articles of Association must sign a statutory declaration averring that all of the requirements relating to registration have been complied with. This declaration must be completed in the presence of a Commissioner for Oaths, Peace Commissioner or Notary Public.

323.

If directors of the company are appointed by name in the Articles, they must declare their consent to act as directors.

Such declaration must also be in writing.

324.

If those directors are obliged to hold qualifying shares in the company, they must also sign a written undertaking to take up and pay for those shares.

325.

Notice of shareholders' meetings must be given to members of the company in writing.

326.

The directors of a company are obliged to maintain proper books and records and provide annual accounts. The accounts must bear the original signatures of the officers of the company (at least two directors).

327.

The auditors of the company must report on the directors' accounts, and must sign their report. The Companies (Amendment) Act of 1986 makes stringent requirements as to information to be supplied to the Registrar of Companies. This information must be signed by two directors of the company or the company auditor.

328.

Irish law requires banking companies to supply specific information on their financial and accounting position, and on those responsible for their management, in writing, signed and certified.

329.

In Irish commercial law, stock and share transfers must normally be in writing signed by the registered owner of the shares, unless the Articles of Association dispense with that formality.

330.

Under Irish law, share and stock issues must be made by certificates which are necessarily in writing. These certificates are not documents of title to the shares - merely prima facie evidence of the content of the certificate.

**c) instruments concerning real property**

331.

Instruments transferring property or conveying an interest in land must be in writing.

**d) consumer credit, guarantees and indemnities, acknowledgements of debt**

332.

Consumer protection law requires that instruments creating consumer credit must be in writing.

333.

Contracts of guarantee, indemnity, and pledges must also be in writing.

334.

The same applies to contracts to pay the debts of another.

**e) Contracts not to be performed within a year  
of the date of conclusion**

335.

Contracts not to be performed within a year of the date of their conclusion must be in writing.

**f) instruments embodying an incorporeal right**

336.

Such documents (waybills, bills of exchange,...) must be in writing.

**g) contracts of hire purchase and for the sale of  
goods and supply of services**

337.

Under the Irish Hire Purchase Acts 1946 to 1980, a hire purchase contract which fails to meet the terms set out in Section 3 of the 1946 Act (recorded in writing) will be unenforceable.

338.

The Sale of Goods and Supply of Services Act 1980 provides that: "The Minister may by Order provide in relation to goods or services of a class described in the Order, that a contract shall, where the buyer, hirer or recipient of this service deals as a consumer, be in writing - and any contract of such class which is not in writing shall not be enforceable against the buyer or hirer or recipient of the service."

**Par. 3- Sanctions**

339.

The sanctions are that the transaction will be void ab initio or unenforceable at law.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Belgian law**

**a) obligations under commercial law**

340.

Irish commercial law makes no requirements for the preservation of documents.

Prudence, however, dictates the preservation of records.

**b) obligations under accounting and tax law**

341.

Irish tax and accounting law require taxpayers to keep proper books and records of account showing all sums received and disbursed in the course of the trade or profession.

342.

This obligation implies that the source information is available for inspection by the tax authorities and must, therefore, be preserved.

343.

Records must be kept for 6 years from the date of the transaction to which they relate.

**d) obligations under customs and statistical law**

344.

There seem to be no specific obligations in this field under Irish law.

**Par. 2 - The preservation of records on computer media**

345.

A development occurred with Section 113 of the Finance Act 1986.

Under this section, records may be stored by any electronic process approved of by the Revenue Commissioners.

The term "records" means documents which a person is obliged by any provision of the Acts to keep to issue or to produce for inspection, and any other written or printed material.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

Any legal transaction required to be in writing to be valid must also be signed.

**Par. 2 - The possibility of signing electronically**

346.

Electronic signature would seem to be a possibility under tax law, subject to compliance with certain conditions.

347.

In commercial law, and contract law particularly, no legislation or regulation expressly permits electronic signature.

It would, however, appear that the courts have accepted a signature as valid where a rubber stamp has been used or typed words inserted.

**Par. 3 - Penalties**

348.

Where a signature is required, an unsigned document will be devoid of legal effect.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under Irish law**

349.

The rules of evidence under Irish law are fairly complex, but broadly speaking attach most importance to oral testimony.

Where parties cannot agree as to the import and content of a given document, the author of the document must be summoned to give evidence.

350.

There are but a few exceptions to this general rule.

They include deeds/documents recording the transfer of land/property, stamped documents dating back more than thirty years maintained under the control of an appropriate person, books and records maintained by banks, statutes, judgments,...

351.

These exceptions aside, a statement made by a party who is not before the court or tribunal is inadmissible as evidence in those proceedings.

**Par. 3-            Evidential value of a computer document**

352.

Where a computerized document is admitted as evidence, the probative force to be attached to it is a question of fact for the court.

**Section 6. -            Relations with the customs and tax authorities**

**Par. 1 -            Transmission of data to customs and tax  
                         authorities by electronic data interchange**

353.

As stated earlier, the 1986 Finance Act permits the use of electronic processing.

An application must be made to the Collector General's Office submitting the form in which future returns are to be transmitted. The Collector General must agree with the proposed form and its format.

**Par. 2 -            Auditing of computer and electronic data  
                         interchange systems**

354.

The matter would not seem to be covered by any specific regulations in Ireland.

**CHAPTER 7: ANALYSIS OF THE LEGAL POSITION IN ITALY <sup>(1)</sup>**

**Findings of the survey conducted into Italian law by Mr G. ABBATESCIANNI of the BRUNI-ABBATESCIANNI law practice.**

**Section 1.- Lack of specific regulation in the matter**

355.

The electronic mail office referred to in section 2, paragraph 1, below, aside, Italian law contains no particular regulations dealing with the specific issue of the electronic transmission of commercial data.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

356.

The Italian State administers all traditional communications services - post, telegraphs and telecommunications (see Postal Code) - as a monopoly.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mr G. ABBATESCIANNI, from which this chapter draws extensively

It is a fundamental tenet of civil and tax regulations that all business and accounting documents - and invoices in particular - be kept on paper.

Applicable legislation:

- Civil Code, arts. 2214 - 2220
- DPR 633/1972, arts. 21 (and 39)
- DPR 600/1973, art. 13 et seq.

There is, however, no legal rule prohibiting the transmission of documents by electronic means.

This type of transmission, however, raises serious problems regarding the obligation to preserve documents, proof of content and, indeed, the very existence of the document.

357.

The general rule requiring writing on paper as proof of the existence of a document and the keeping of proper books is subject to one exception in the particular case of the transmission of documents by telegraph, teleprinter and, more recently, electronic mail.

Applicable legislation:

- DM 29.5.88 No. 29
- (Risol. Dir. Gen. Tasse No. 571134/88 of 19.7.88)

Under these new legislative provisions, the Italian postal authorities (PP.TT) are authorized to receive and transmit documents by electronic means.

The message or document transmitted by the originating post office to the destination post office is then handed to the addressee.

Where, on the other hand, both sender and recipient are electronically connected to the post office system, the message first transits through the postal sorting office (electronic mailbox) and is then routed electronically to the recipient.

The particularly significant feature of these recent legislative provisions lies in the possibility of giving the document tangible form by reproducing it in an identical form for the sender and recipient alike.

To guarantee total equivalence, the Italian PTT imposes certain conditions and procedures on users <sup>(2)</sup>:

- allocation of a personal access code (art. 3);
- allocation of an identification number (art. 5);
- the sender must deliver a magnetic medium containing the message(s) to the UCE (Ufficio Corrispondenza Elettronica - Electronic Mail Office) (art. 9);
- for each transmission, a message deposit form must be completed in duplicate (one copy for the postal authorities - art. 10) stating the number, date and time of acceptance;
- the message must be delivered to the addressee by an official of the postal service or stored in the addressee's electronic mailbox (art. 6).

With this system, evidential cogency is obtained by storing the electronic message in the sorting centre memory (and even as a computer printout where the message is delivered to an addressee without a computer terminal).

#### **b) invoices**

358.

As a general principle, invoices may be transmitted by electronic means, but to comply with the accounting and tax requirements enacted in DPR 633/1972, article 21, they must be issued in duplicate and preserved on paper.

#### **c) general conditions of sale**

359.

Article 1341 of the Civil Code makes the enforceability of general conditions of sale dependent on whether the other contracting party knew (or could have known) of them at the time the contract was made.

---

<sup>2</sup> DECRETO 29 maggio 1988 n. 269. Regolamento del servizio pubblico di posta elettronica. Cf annex...

Knowledge (or the possibility of taking cognizance) of general conditions may be established by proof that the conditions were communicated before the contract was made.

The means used to bring those conditions to the other party's attention are of little import.

The electronic means described above may be used, therefore.

Article 1341 C.C., however, provides that certain conditions (described as "oppressive" conditions) must be approved in writing by a contracting party who has not had sight of them beforehand.

These are clauses concerning:

- limitation of liability
- breach of contract
- limitations on exemptions
- suspension of performance
- restrictions on freedom of contract with regard to third parties
- tacit extension
- arbitration clauses
- applicable penalties (according to certain cases)

It is clear then, that the application of such conditions requires at least writing on paper.

360.

Non-oppressive general conditions may be made enforceable simply by reference to a code, subject to compliance with the following three conditions:

- 1) the procedure prescribed by the specific legislation on electronic mail is followed correctly;
- 2) the possibility of future reference to a code must have received prior approval from the contracting party who did not draft the general conditions;
- 3) the general conditions must be printed on paper and made available to the other party.

**d) contracts**

361.

With the exception of those contracts referred to in paragraph two, Italian law permits the conclusion of contracts by electronic data interchange.

362.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

363.

Article 1326 of the Civil Code provides that a contract is made:

- at the moment and in the place where the offeror is made aware of the offeree's acceptance

or

- at the moment and in the place where performance of the contract is commenced (either at the offeror's request, or by reason of the nature of the transaction or custom).

364.

In the cases of messages exchanged directly between computers, the contract is concluded at the time and in the place where the offeror received the offeree's acceptance.



**Par. 3 - Sanctions for failure to transmit documents in due form by electronic means**

368.

Incorrect use of telecommunicative means may be penalized by application of the following general principles of law:

- Penal Code, art. 616 (violation, taking and suppression of correspondence)
- Penal Code, art. 617 (unlawful acquisition of knowledge, interception or prevention of telephone or telegraph communications or conversations)
- Penal Code, art. 624 (theft: theft of access keys by "hackers")
- Penal Code, art. 640 (false pretences - where the hacker, having stolen the user's code, passes himself off as the user).

Administratively, the handful of Italian companies who handle the private electronic mail services operate under government licence.

They may, for example, be eligible to take advantage of the SIP's telecommunications services (SIP - State telephone company), thus coming within the scope of the exclusive right to provide telecommunications services (Telecommunications Code, DPR 29.3.73, No. 156).

Incorrect use of the service would result in revocation of the licence and application of administrative sanctions.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Italian law**

369.

The derogation in respect of Electronic Mail refers only to the transmission of the document.

In principle, preservation of documents is governed by the general provisions:

- Civil Code, art. 2220:
  - preservation of accounting records, invoices, correspondence, telegrams, receipts and issuances;
  - on paper
  - for 10 years

**Par. 2 - The preservation of records on computer media**

370.

Documents may nevertheless be preserved on microfilm subject to prior approval of the procedures by the Italian finance authorities.

DPR 633/72, art. 39 (method of storage - microfilms - Circular 17.1.79 No. 3/360180 - Circular 20.10.83 No. 93/342962).

Act No. 121 of 1 April 1981, however, provides that all records stored in magnetic form (data banks) must be registered with the Ministry of Home Affairs.

A Bill is currently before the Italian Parliament to apply a resolution of the Council of Europe designed to regulate the establishment, operation, inclusion and deletion of data from records stored on magnetic media.

Applicable legislation: Postal Code, DPR 29/3/73 No. 156

**Par. 3 - Penalties for failure to preserve accounting and tax records**

371.

Failure to comply with the prescribed methods of preservation will result in outright refusal to accept the records.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

372.

Commercial documents of a contractual nature contained in written documents (offer, acceptance, contracts, orders, proposals for orders) must be signed, simply to establish proof of origin and to permit identification of their author.

**Par. 2 - The possibility of signing electronically**

373.

The origin of telex transmissions is established, unless rebutted by evidence, by the uniqueness of the sender's code.

In the case of telegrams (Civil Code, art. 2705), the presumption as to origin is raised only where the original of the message deposited at the dispatching office is signed by the sender or where deposited by the sender in person (evidence to the contrary is permitted).

As regards legal instruments, conclusive proof of signature may only be adduced by authentication of the signature by a Notary, Process Server or Municipal Registrar of Births, Marriages and Deaths (Civil Code, arts. 2699 and 2703).

Such authentication confers on the content of the instrument - or the signature appended to it - the validity of a public instrument. Authentication is full and conclusive proof of the origin of statements or the identity of the signature, barring a plea of forgery.

Unauthenticated signature of an instrument is proof (barring proof of forgery) only where the person against whom the document is raised does not controvert its provenance (Civil Code, art. 2702)

374.

The authors of the survey of Italian law are of the opinion that apart from handwritten signatures, the origin of a document (telex or electronic mail) can be authenticated (unless and until proved otherwise) by a code allocated by the public authorities.

Consequently, if an electronic signature is to enjoy legal validity with a reasonable degree of reliability, a system for authenticating the origin of the message must be provided.

Any form of evidence, however, will be admissible to disprove the authenticity of an electronic signature.

If the message is to be attributed to a single author, therefore, software must be used which will encode the message in such a way that any alteration of the message will automatically incur a modification of the code, such that the altered message can no longer be attributed to the original sender.

### **Par. 3 - Penalties**

375.

In civil law, failure to observe the provisions of law regarding signature will mean that the commercial documents concerned cannot be attributed to the hand of the presumptive sender.

Failure to comply with tax and accounting obligations will incur the application of administrative and penal sanctions.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Application to electronic transmission**

376.

Tax legislation allows accounting records to be preserved on computerized media (DM 31.12.81) subject to compliance with the rules prescribed by art. 2712 of the Civil Code regarding mechanical reproduction.

377.

The validity of commercial documents depends on their being issued in due form and correctly drafted.

What is of importance here is less the telecommunicative means by which commercial documents are formed and transferred than the possibility of producing them in tangible form <sup>(3)</sup>.

Documents must comply at all times with the conditions of form prescribed by the law for the category of instruments to which they belong.

**Par. 2 - Evidential weight of a computerized record**

378.

Where the use of a computerized record is permitted by the law, it carries the same probative force as a written document.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

379.

Government authorization for the creation of data communication and videotex networks is still at the planning stage.

380.

As regards the specific conditions in which computer media may be used, the Ministerial Order of 21.12.81 authorizes persons taxable to VAT who use data development centres to furnish their schedules to their VAT returns on computer media.

Such media must:

- comply with the general characteristics for the kind of magnetic media
- 9 tracks
- 800, 1600 or 6250 cpi
- EBCDIC coding, parity bit
- IBM 3740-compatible disks

Other particular conditions prescribed for validity of computer media are identification of the sender, the content of the medium and the medium identification number.

Particular techniques for the recording of accounting records are also provided.

Prevailing legislation makes no provision for use of data processing experts.

**Par. 2 - Auditing of computer and electronic data interchange systems**

381.

Generally-speaking, the State retains the possibility of direct or indirect control via special agencies whatever the type of communication used.

The only instance of direct State regulation of electronic means of communication is that of Electronic Mail. The administrative authorities (postal service), as managers of the service and guarantors of its efficient operation and proper use, have the right to access computer systems (Electronic Mail) at any time.

As to tax audits, the Finance Administration normally audits taxpayers' records.

**Section 7.- Conclusions of the survey of Italian law**

382.

The authors of the survey into Italian law are of the opinion that the European Community could contribute to furthering the development of the exchange of messages by electronic data interchange by evolving a framework project within which each Member State would be required to establish its own system.

Such a framework project could take one of three possible forms:

383.

**EITHER**

Transmission of messages exclusively over a publicly-managed network (e.g. by the Post Office) such as to guarantee the authenticity and uniformity of the messages transmitted.

This type of system would offer maximum legal assurances (the Post Office could always certify the authenticity of a message) but might not be looked on favourably by economic operators.

384.

OR

Director computer-to-computer transmission of messages between private operators, compulsorily followed by the sending of a hardcopy printout of the message.

In the event of discrepancies between the computer-transmitted message and the paper copy, the presumption would be in favour of the computer printout, which would be authentic.

This system offers the advantage of much greater flexibility.

It would, however, incur the risk of more frequent disputes as to the authenticity of messages due to the extreme ease with which it would be possible to access an unprotected data communications network and alter messages transferred through it.

385.

OR

Defining a minimum standard of protection for data communications networks with which national and European networks would have to comply in order to guarantee the legal validity of documents transferred by electronic data interchange.

It would, in fact, seem possible - particularly for electronic signature systems - to attain a satisfactory degree of certainty as to the origin and authenticity of a message.

In such a case, the transfer of messages by electronic means would enjoy the same evidential cogency as a normal transfer of messages in writing on paper.

All the formalities and obligatory requirements for the preservation of documents would remain unchanged.

**CHAPTER 8: ANALYSIS OF THE LEGAL POSITION IN LUXEMBOURG**

**Findings of the research into Luxembourg law conducted by the law practice LODOMEZ & CROUQUET.**

**Section 1.- Specific regulation in the matter**

386.

The research brought to light the existence of legislation which, under certain conditions, authorises:

- the keeping of accounts and most related records in computerized form;
- the production of evidence consisting of computer-stored information.

This new legislation was introduced in the Act of 22 December 1986 together with a Grand Ducal statute of the same date.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

**a) General principles**

387.

In principle there is nothing to prevent the transmission of a document by electronic data interchange.

There are, however, a number of exceptions to this rule.

These will be examined in paragraph 2 of this section.

## **b) Invoices**

388.

Following the example of Belgian law, Luxembourg law imposes no conditions on the form an invoice must take.

Hence, an invoice may be transmitted by electronic means without affecting its validity.

## **c) General conditions of sale**

389.

The foregoing considerations apply equally to general conditions of sale. There is no reason why they should not be transmitted by electronic means.

390.

The enforceability of general conditions against third parties creates a number of problems which differ little whether the transmission is in writing or sent by electronic means.

In each case, it will be necessary to verify whether the conditions had been previously brought to the attention of the person they are being enforced against, and whether that person is deemed to have accepted them.

Acceptance may be either express or implied. A clear and unequivocal response to a simple code would consequently suffice.

## **d) Contracts**

391.

With the exception of the contracts mentioned in paragraph 2 of this section, contracts may be concluded by electronic data interchange under Luxembourg law.

392.

The question then arises, however, as to the time and place a contract concluded by such means will be considered to have been formed.

Failing express provision in the contract, the answer to this question will determine the applicable law and court with jurisdiction to adjudicate in any disputes arising in relation to the contractual relations.

393.

The answer to this question under Luxembourg law lies in taking cognizance of the acceptance.

A contract is formed at the time and place the acceptance of the other party is made known to the offeror.

394.

A distinction must be made here between:

a) messages exchanged directly from computer to computer, without intermediary; and

b) messages exchanged via VANs or other intermediary.

In the case of the latter, the contract will only be legitimately concluded at the time the other party's acceptance is made known to the principal.

**Par. 2- Exceptions to the rule that documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

395.

A number of transactions requiring notarial deeds may not be concluded by electronic data interchange.

Under Luxembourg law these are:

-- conveyances of real property rights which, in order to be enforceable against third parties, require to be executed by signed notarial deed;

(This deed of conveyance is preceded by a contract for sale, which may be made by simple contract, with no particular requirement as to form.)

-- the goodwill of a business may be pledged only by notarized deed or private treaty;

-- public limited companies, private limited companies, and partnerships limited by shares must be incorporated by official document in order to be valid.

**b) hire purchase and instalment credit**

396.

Hire purchase sales and instalment credit, whether personal credit or otherwise, must be made by contract executed in as many original copies as there are contracting parties with distinct interests.

**c) pledges of goodwill**

397.

The goodwill of a business may be pledged only by notarized deed or private treaty.

**d) setting up companies**

398.

Ordinary partnerships, limited liability partnerships and cooperatives must likewise, to be validly formed, be created by special deed, official document or private deed (in the latter case, in compliance with article 1325 of the Civil Code -- as many original copies as contracting parties).

**e) surety bonds**

399.

Suretyship is not presumed under Luxembourg law. It must be expressed and cannot be extended beyond the limits within which it is contracted.

**f) instruments embodying a right**

400.

Negotiable instruments cannot be transmitted by electronic means.

The transfer of the rights embodied in these instruments requires physical delivery of the instrument itself, i.e. transfer of possession of the document to the one to whom the rights are assigned.

401.

Negotiable instruments, moreover, are subject to strict requirements as to form, and the conditions prescribed by statute for their issuance -- including that of signature -- are irreconcilable with transmission by electronic means.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1- The general obligation to preserve under Luxembourg law**

**a) obligations under commercial law**

402.

Commercial law requires no obligation of this kind.

403.

It is, however, recommended that all business records be preserved for a period at least equal to that of the limitation period.

The documents for obligations arising out of trade among merchants or between a merchant and non-merchant are to be kept for ten years, unless provision was made for a shorter retention period <sup>(1)</sup>.

**b) obligations under accounting and tax law**

404.

Businesses in Luxembourg must keep accounts appropriate to the nature and extent of their activities, in accordance with the ordinary rules of double-entry book-keeping <sup>(2)</sup>.

---

<sup>1</sup> Article 189 of the First Volume of the Commercial Code.

<sup>2</sup> Revised art. 8 of the Luxembourgian Commercial Code.

Businesses must also take a full annual inventory of their assets and entitlements of every description, together with their debts, obligations and liabilities of whatever nature. A balance sheet must summarize the accounts at the inventory date (3).

405.

Supporting vouchers, incoming correspondence and copies of outgoing correspondence must be kept in chronological order and methodically filed for ten years following the closure of the business to which they relate (4).

**c) obligations under customs and statistical law**

406.

There seems to be no obligation of this type under Luxembourg law.

**Par. 2- The preservation of records on computer media**

407.

Other than the balance sheet and profit and loss account, all other documents and information required under arts. 8 and 10 of the Commercial Code may be preserved on micrographic or electronic media, provided that the reproductions or recordings correspond to the content of the documents or information being preserved; that they be available on a permanent basis for the duration of the preservation period in a directly readable form; and that they satisfy the aforementioned conditions (5).

---

3 Revised art. 10 of the Luxembourgian Commercial Code.

4 Revised art. 8 and 11 of the Luxembourgian Commercial Code.

5 Revised art. 11 of the Luxembourgian Commercial Code.

408.

The computer-stored information must:

a) be an accurate and durable reproduction or recording of the original document or information forming the basis of the recording;

(The concept of "durable" used here can be applied to any indelible reproduction of the original and any recording which entails an irreversible modification of the input medium.)

b) be recorded in a systematic manner with no omissions;

c) be recorded in concordance with the working instructions which have been preserved for the same amount of time as the reproductions and recordings;

d) be carefully preserved in a systematic way, and protected against any alteration <sup>(6)</sup>.

409.

The computer program manuals, descriptions and instructions must be directly readable and kept meticulously updated by whoever is in charge of maintaining them.

This material is to be preserved in a communicable form for a period equal to that of the recordings to which they refer <sup>(7)</sup>.

410.

If, for whatever reason, the recorded data is transferred from one data carrier to another, the official responsible must be able to demonstrate that the two versions are identical <sup>(8)</sup>.

---

6 Art. 1 of the Grand-Ducal Regulation of 22 December 1986, in accordance with art. 1341 of the Civil Code.

7 Art. 3 of the Grand-Ducal Regulation of 22 December 1986, in accordance with art. 1341 of the Civil Code.

8 Art. 3, par. 2 of the Grand-Ducal Regulation of 22 December 1986.

411.

The computer systems used must provide the necessary security measures to prevent any alteration of the recordings, and allow the stored data to be translated at any time into a directly readable form<sup>(9)</sup>.

412.

The program used must, furthermore, be compatible with regular accounting procedures <sup>(10)</sup>,

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

413.

Whenever an original copy is required in order to validate an instrument, it must be signed.

**Par. 2- The possibility of signing electronically**

414.

A signature must of necessity be handwritten.

**Par. 3- Penalties**

415.

The lack of a signature on an instrument of this kind will invalidate the instrument.

---

<sup>9</sup> Art. 3 part. 3 a) of the Grand-Ducal Regulation of 22 December 1986, in accordance with art. 1341 of the Civil Code.

<sup>10</sup> Revised art. 11 of the Luxembourgian Commercial Code.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1- Evidence under Luxembourg law**

416.

The law of evidence is based on provisions almost identical to those obtaining in Belgian law <sup>(11)</sup>.

417.

The principle here is likewise that of the primacy of documentary evidence, the difference being that the amount stated in art. 1341 is 100,000 Luxembourg francs <sup>(12)</sup>.

Exceptions to this principle are the same as those in Belgian law <sup>(13)</sup>.

**Par. 2- Application to electronic media**

418.

The innovative feature of Luxembourg law lies in art. 1348 of the Civil Code, amended by the Act of 22 December 1986.

419.

There is an exception to the rule in art. 1341 of the Civil Code when either party or the custodian fails to preserve the original documents and instead offers micrographic reproductions and computer-stored recordings made from the originals by whoever was in charge of maintaining them.

---

11 cf, Chapter 2, Section 5, above.

12 Article 1. of the Great-Ducal Decree of 22 December 1986 adopted to implement article 1341 of the Civil Code.

13 cf, Chapter 2, Section 5, above.

**Par. 3- Probative value of an electronic document**

420.

According to the terms of revised art. 1348 of the Luxembourg Civil Code cited above, these reproductions and recordings have the same probative value as the written documents of a private agreement of which they are, unless proved otherwise, presumed to be faithful reproductions or recordings, in the case where the originals have been destroyed on a regular basis and where they comply with the terms set out in the Grand Ducal Regulation of 22 December 1986, in accordance with arts. 1348 of the Civil Code and 11 of the Commercial Code described above <sup>(14)</sup>.

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

421.

Following the example of the larger Member States, the Belgian customs authorities have developed a computerized customs clearance system called SADBEL.

This system is also operative in the Grand Duchy of Luxembourg.

---

14 cf, Section 3, paragraph 2, above.

**Par. 2-            Auditing of computer and electronic data  
interchange systems**

422.

The Grand Ducal Regulation of 22 December 1986, in accordance with art. 1348 of the Civil Code, prescribes a series of measures to be taken in order to allow data recorded on a computer medium to be read during tax and accounting audits in view of producing evidence.

Refer to the foregoing comments on this matter <sup>(15)</sup>.

**Section 7.-            Conclusions of the survey of Luxembourg law**

423.

Luxembourg is the only Community Member State to have kept abreast of evolving technology by adapting its legislation in the legal, commercial, tax and accounting fields.

This new legislation will serve as a reference point in the comparative study now being conducted.

---

15      cf, Section 3, paragraph 1, under b, above.

**CHAPTER 9: ANALYSIS OF THE LEGAL POSITION IN THE NETHERLANDS (1)**

**Findings of the research into Dutch law conducted by Mr R Hermans of the law practice DUTILH, VAN DER HOEVEN & SLAGER**

**Section 1.- Lack of specific regulation in the matter**

424.

Other than the provisions examined in this note, the authors of the survey of Dutch law are unaware of any regulation dealing specifically with the transmission of commercial documents by electronic means.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

**a) General principles**

425.

It can be said that since, as a general rule, Dutch legislation contains no precise requirements as to the form of a document, there is no reason why a document should not be stored on computer media nor be sent by electronic means.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mr Hermans, from which this chapter draws extensively.

The important question, on the other hand, is whether such documents could then still serve as evidence. This question will be dealt with in Section 5, below (cf, Appendix A-1).

Nevertheless, in certain cases, Dutch law requires the existence of a written document or official instrument. It is important to note that, in the cases referred to here, the document or instrument cannot be replaced by computer-stored information.

426.

A legal distinction is to be made between an instrument as a requirement of form and an instrument serving as the sole means of proof. Where the written instrument is a requirement of form, there is no legal transaction where that instrument is not executed. Where, on the other hand, the instrument is merely a mandatory form of proof, the legal transaction will be valid if the parties agree on it.

Art. 183 of the Code of Civil Procedure defines an instrument as a signed written document for the purpose of evidence. Authentic instruments are legal documents drawn up in due form by officials who, by ordinary law or statute, are responsible for recording in this way their observations or actions (see Appendix A-2).

#### **b) Invoices**

427.

Dutch law imposes no requirements as to the form and/or content of an invoice.

As a general rule, an invoice has no other function than to inform the other party that an amount due under a prior oral or written agreement has fallen due.

Moreover, an invoice may be a means of proof (see Section 5 for comments on computer-stored information as evidence).

Hence, the practice in certain kinds of business is to use an invoice as a way of confirming the conclusion of a sales agreement.

428.

In certain cases, an invoice will also list particular terms of payment and/or delivery. As a general rule, these kind of conditions, if mentioned for the first time only on the invoice, are considered inoperative.

The sender may not unilaterally amend the conditions of an agreement once concluded.

### **c) General conditions of sale**

429.

Sending general conditions by electronic means raises no problems other than those connected with the use of this method for documents in general. Nevertheless, the trial judge will decide on the facts of each case whether the terms of enforceability of the general conditions have been met.

430.

The basic principle here is that the general conditions must be stated to apply at the time the agreement is concluded, and not subsequently. If the general conditions are referred to only subsequently, for example, on the invoice, then they cannot be considered applicable. Dutch courts decide such questions on the facts of each case. The rule mentioned above admits a few exceptions.

431.

Case law includes certain instances where conditions first mentioned on an invoice were held applicable on the grounds of the following circumstances:

1. failure to contest an invoice already accepted raises a presumption that the acceptor has agreed to the conditions contained in it.
2. The conditions contained in the invoice are customary for that sector of business.

3. The invoice was sent prior to the conclusion of the sales agreement.
4. The conditions contained in the invoice are customary between the parties, based on previous transactions (and related invoices).
5. A series of transactions have already taken place between the parties, with the buyer each time preserving and paying without dispute the invoices containing the general conditions.

Neither statute nor precedent require the other party to have actually taken cognizance of the general conditions. Consequently, they may be made enforceable by an express provision in a contract, or by a pre-printed reference to them on letterhead stationery and/or order forms and/or advice notes. The author of this report concludes from this that there is nothing to prevent an invoice from being sent by electronic means.

As a rule, general conditions are filed either with the Registrar of a court or a chamber of commerce. In principle, therefore, due reference to their being so filed would suffice to make them applicable.

432.

The question of whether a reference to general conditions is enough to render them effectively applicable falls within the question of the enforceability of agreements in general. It is for the trial judge to determine whether consensus ad idem (i.e. an agreement) exists.

#### **d) Contracts**

433.

With the exception of the contracts mentioned in paragraph 2 of this section, contracts may be concluded by electronic data interchange under Dutch law.

434.

The question then arises, however, as to the time and place a contract concluded by such means will be considered to have been formed.

Failing express provision in the contract, the answer to this question will determine the applicable statute and the court competent to adjudicate any disputes arising out of the contractual relations.

435.

One of the essential conditions for the effective conclusion of a contract is the consensus of wills between the parties at the time the agreement was reached.

Dutch doctrine holds that consensus ad idem is generally deduced from an offer being made by one party and the acceptance of it by the other.

436.

Given that, it can be said that a contract is formed at the time an offer made by one party is accepted by the other.

Dutch law provides no clear guidance on the question of exactly when the consensus can be said to have come into being.

437.

It is generally possible to determine precisely when a contract is formed when the parties reach agreement in one another's presence or over the telephone: the contract is formed the moment the offeree finally accepts the offer.

Other than that, that the parties are entirely free to agree between themselves at what precise point the agreement is deemed to be concluded.

Problems arise in this area only in cases where a certain time has elapsed between the moment of acceptance, however made, and the moment the other party is made aware of the acceptance.

An instance of this is the case where the offeree accepts the offeror's offer by post.

438.

Dutch literature, nonetheless, contains the following theories on the matter:

- a. the expression theory holds that the contract is formed when the offeree writes a letter or telegram to the offeror stating his acceptance of the offer;
- b. the expedition theory holds that the contract is formed when the offeree sends the letter or telegram to the offeror saying he accepts the offer;
- c. the cognizance theory holds that the contract is formed when the offeror is actually made aware of the acceptance of the offer;
- d. the reception theory holds that the contract is formed when the offeror receives the letter or telegram containing the acceptance of his offer.

439.

Most writers on the subject subscribe to an amended version of either the cognizance theory or the reception theory, inasmuch as they feel it would be unjust to accept the consequence of the cognizance theory *stricto sensu*, whereby the offeror can prevent a contract being formed merely by failing to take cognizance of the notice of acceptance, while it is also considered unreasonable to make the conclusion of a contract coincident with receipt of the notice of acceptance when the offeror could not reasonably be in a position to take cognizance of it. (See Blei Weissman, *Contract Law*, vol. II, no. 348).

440.

The foregoing conclusions have led to a number of theories:

- a. Agreement is formed when the offeror takes cognizance of the acceptance or could reasonably have done so.

b. The decisive moment is when the sender of the acceptance can reasonably expect that the offeror has taken cognizance of it.

c. The contract is formed when the acceptance is received, but reception can have only taken place when the offeror could reasonably be expected to have been made aware of the acceptance.

d. The contract is formed when the acceptance reaches the offeror and he either has, or could have, taken cognizance of it.

441.

The above theory is known generally as the "amended reception/cognizance theory" and is considered the predominant theory, albeit sometimes expressed in different ways.

The attitude generally adopted by the Dutch courts is not always clear. It is clear, however, that neither case law nor the literature accept either the expression or expedition theories.

442.

Dutch doctrine and case law may equally well apply the "amended reception/cognizance theory" to acceptances sent by electronic means. The answer to the above question is unaffected by the fact that the communication took place directly between two computers or by means of a VANS (Value-Added Network Service). (Cf, General Appendix B-22, especially Chapter 2, pp 5-7).

443.

This distinction may nonetheless be of importance in determining which party is in the right where problems arise with the communication of messages.

444.

The prevailing principle in Dutch law in this matter is that the risk involved in the means of communication used falls on the user, i.e. he who has chosen that means.

This latter aspect may prove important both in determining the existence of consensus and in determining the content of the agreement, for example, when a message reaches its destination in an altered form.

In the latter case, responsibility for the alteration lies, in principle, with the sender. Nevertheless, logic is also involved here in that, if the addressee understands that the message has been corrupted, he will not be able to rely on the content of the altered message against the sender (cf, General Appendix B-22, especially Chapter 5, pp 14-18, for more details).

445.

The place at which the contract was formed may be important when deciding which is to be the applicable law. An example of this is offered by art. 1382 of the Civil Code, which provides that any ambiguity shall be resolved in accordance with custom and practice in the place where the contract was formed (cf, Appendix B-16).

As regards the place where the contract is formed, the literature generally refers to the theories described above governing the moment of conclusion of contracts of this type.

446.

When the time of the conclusion also determines the place, the application of the dominant theory regarding the moment of conclusion, i.e. the amended reception/cognizance theory, results in the contract being formed at the place where the offeror either becomes aware, or could reasonably have become aware, of the existence of the acceptance.

Nonetheless, the underlying principle here is that a contract concluded by telephone is held to have been formed in two different places. Precedent also follows this principle.

**Par. 2- Exceptions to the rule that commercial documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

447.

A number of instruments required to be in authentic form clearly cannot be concluded by electronic data interchange.

Under Dutch law these are:

448. Bills of Lading

In Dutch law, a bill of lading is a signed and dated document by which a carrier acknowledges having received certain goods, promising to ship them to a specified destination and deliver them under certain conditions to the consignee, i.e. the lawful holder of the document (art. 506 of the Commercial Code).

449.

Art. 507 of the Commercial Code specifies that the bill of lading must be made out in two negotiable copies.

The goods are delivered by delivery of the document. The bill of lading therefore serves as documentary proof of title (cf, Appendix A-3).

450. Credit

Art. 27 of the Act on consumer credit financing, which applies to the granting of credit of amounts not in excess of HFL 40,000, states that a credit agreement must be contracted by notarial or publicly executed instrument or private deed in order to be enforceable (cf, Appendix A-4).

451. Hire purchase (leasing) Agreements

Art. 1576j of the Civil Code stipulates that a leasing agreement must be contracted by means of notarial deed or private agreement. In the absence of a deed complying with the conditions fixed by law, the contract is not enforceable as a leasing agreement, but the purchase/sale is deemed to have been concluded as a hire purchase, subject to the stipulation that title in the goods sold is not to vest in the buyer by simple transfer (cf, Appendix A-5).

452. Insurance

Art. 252 of the Commercial Code states that insurance policies are only binding on the insurer if made in writing (cf, Appendix A-6).

453. Conveyances of real property

Real property and the appurtenant rights in rem must be transferred by a notarized deed of conveyance. The instrument of transfer must be registered in the public registers kept for the purpose. Transfers are enforceable against third parties and between the contracting parties only when the instrument of transfer is registered (Civil Code, arts. 671 and 671a) (cf, Appendix A-7).

454. Intellectual property rights

Under art. 28 of the Dutch patent Act, an application for a patent or to transfer a patent must be made by authentic instrument (cf, Appendix A-8).

Art. 13 of the Benelux Act on designs and patterns provides that the transfer inter vivos of rights to a design or pattern will be null and void if not made in writing. An authentic instrument is thus required for assignment inter vivos (cf, Appendix A-10).

455.

The above remarks concerning patent law also apply to nurserymen and horticulturists (art. 48 of the Seeds and Plants Act) (cf, Appendix A-12).

Art. 11A of the Benelux Act on brand names and trademarks provides that the transfer of a brand name or trademark *inter vivos* is null and void unless made in writing. An authentic instrument is thus required for an assignment *inter vivos* (cf, Appendix A-12).

456.

The position regarding business names is confused. Insofar as a business name is linked to a right in personam, it is an intangible asset and therefore must be assigned by an instrument in accordance with art. 668 of the Civil Code. If, on the other hand, the business name is not deemed linked to a right in personam, it may be freely transferred by any means, including by tacit agreement.

457.           Transfer of intangible personal property

Art. 668 of the Civil Code provides that the transfer of registered securities and other intangible property must be made by notarial deed or private contract. Moreover, the same article specifies that bearer shares and bills payable to bearer may be transferred by simple delivery, while bills payable to order must be transferred by delivery and endorsement of the document (cf, Appendix A-13).

458.           Arbitration

Under art. 1888 of the Civil Code, an arbitration agreement must be concluded in writing.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1 - The general obligation to preserve under Dutchlaw**

**a) obligations under commercial law**

459.

Below are listed the most pertinent legal provisions concerning the obligation to preserve commercial documents:

- Article 6 of the Commercial Code:

*indent 1: Any person managing a business shall keep a record of its financial position and all matters concerning that business, as circumstances may require, such that at any given moment that record provides a full account of the business' rights and obligations.*

*indent 2 : He shall, during the first half of every year, prepare a balance sheet in accordance with the requirements of his company, and sign it in his own hand.*

*indent 3 : He shall keep for a period of ten years the books and documents in which he has kept the record indicated in indent 1, together with the balance sheets, incoming correspondence and telegrams, and copies of outgoing correspondence and telegrams.*

Article 14, vol. 2, of the Civil Code:

*indent 1: the senior management of a body corporate shall keep a record of its financial position such that at any given moment that record provides a full account of its rights and obligations.*

*indent 2: Without prejudice to the provisions of the following titles of this volume, management shall, within the six months following the end of the financial year, prepare up a balance sheet and statement of the body corporate's assets and liabilities.*

*indent 3: The management shall keep the records described in the foregoing indents for a period of ten years.*

Article 68 of the Commercial Code:

*A broker shall keep a record of every transaction he makes and shall cause a copy of such record duly authenticated by him to be sent forthwith to each of the parties.*

Article 86 of the Commercial Code:

indent 1: *A carrier is anyone whose business activity consists of having goods and merchandise transported by road, rail, river or sea.*

indent 2: *He shall keep distinct, daily records of the nature and quantity of the goods and merchandise to be carried together with their value, where applicable.*

Article 24, vol. 2, of the Civil Code:

indent 1: *Following liquidation, the books and records of a dissolved body corporate will remain on file for thirty years with the person so designated either in the Articles of Association or, failing that, by the person appointed by the general meeting.*

indent 2: *Where no such custodian is appointed, any competent court within the legal district in which the liquidated company had its official address may order the appointment of such a custodian.*

**b) obligations under tax law**

460.

Arts. 45-58 of the general customs and excise Act (cf, Appendix A-14):

- Art. 46 of the above-mentioned statute provides in particular that, except as otherwise provided, all declarations and returns must be made in writing and in the Dutch language. Furthermore, except as otherwise provided, these must be signed by the person making the declaration or delivering the document, or by someone acting under a written power of attorney.

- Art. 54 of the general Act on State taxation:

Whosoever, pursuant to arts. 47, 48 or 49, is required to produce, when so asked, books and other records relating to the carrying on of his business or self-employed activity, shall preserve them for a period of ten years ((cf, Appendix A-15).

- Art. 47 stipulates that a person shall produce to the inspector such information as he may require which may be of importance in determining that person's tax liability, and shall also, where so required, make all books and records available for inspection (cf, Appendix A-16).

- Art. 48 re-enacts the foregoing provisions for deduction at source of income tax for company personnel.

- Art. 49 provides that anyone who operates a business or is engaged in self-employed activity within the Kingdom shall, when so required, produce to the tax inspector for inspection all books and records relative to the said company or activity which may contain information of interest in determining the tax liability of third parties. All organizations of business partners, members of professional practices, associations of businesses or business defence associations are subject to similar provisions.

#### **Par. 2-           The preservation of records on computer media**

461.

The general principle is that the statutory provisions described above impose on the persons concerned a duty to preserve original records; that make no legal provision for the preservation of copies on microfilm or computer media in place of the original documents. In another respect, the principle is that a businessman should be free to keep his accounts in any way he sees fit. In the case of commercial transactions conducted by electronic means, he will have fulfilled his obligation by preserving the original computer media (cf, Appendix A-1, p 81).

462.

In the Netherlands, the national tax administration has made provision, under art. 54 of the general Act on State taxation, for the possibility of preserving the original documents for only two years, as opposed to the statutory obligation of ten, after which they can be replaced by microfilm copies. This provision is contained in the directive of the State Secretary of Finance, dated 26 August 1981 (cf, Appendix A-18).

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

463.

On this matter the authors of the report refer back to the comments relative to Section 2, par. 2, above (more specifically, points 447-458). From this it emerges that a signature is always required in the following cases:

- bills of lading (1)
- credit (2)
- leasing agreements (3)
- conveyances of real property (5)
- transfer of intellectual property rights (6)
- transfers of intangible personal property (7)

The rule generally cited in the literature is that in these cases the law does not authorize an electronic signature.

Moreover, both art. 46 of the general customs and excise Act and art. 8 of the general statute on State taxation specify that as a general rule all statements must be written and signed by the person making them.

465.

Attention is directed here to a judgement of the Den Bosch court of 10 September 1980 (Official Gazette, 1981, 522). The Court was of the opinion that the provision of art. 27 of the consumer credit act which requires credit grant agreements to be recorded either by authentic instrument or private contract does not necessarily mean that those agreements must be recorded in one single written document. In the case in point, this requirement was satisfied by the expression "application for cash credit" included by the opposing party, and the written response of the lender (cf, Appendix A-19).

**Par. 2-           The possibility of signing electronically**

466.

Dutch legislation makes no specific requirements as to electronic signature. According to the literature, a signature must satisfy the dual requirements of identification and expression of will. The extent to which a signature made electronically can serve as evidence in the matter is left to the discretion of the trial judge.

467.

Objections generally raised against electronic signatures usually relate to the question of forgery. Similar problems also exist, however, with regard to handwritten signatures.

As will be seen below in the examination of the law of evidence, a private contract, in which a signature is formally contested by the party against whom it may be enforceable as conclusive evidence, has no probative force until the identity of the person whose signature is lacking has been proven. If the person against whom the contract is enforced is not the signatory, a statement by him disavowing the authenticity of the signature will suffice. It is not unfeasible that, in the case of a handwritten signature, authenticity could be proved by a graphologist. In the case of an electronic signature, that would generally be impossible.

468.

As a rule, endeavours are made to resolve these problems through contracts concluded on the occasion of electronic data interchange. As will be seen below, Dutch law allows parties to agree on what shall constitute conclusive proof.

As regards the literature on the subject, see also:

(Appendix A-20)

(Appendix A-21)

(Appendix A-22)

(Appendix A-23)

**Par. 3- Penalties**

469.

Under Dutch law an invoice may be sent by electronic means inasmuch as the law sets no restrictions on the particular form and/or content it may have. The question of penalties is therefore not pertinent here.

In instances where Dutch law requires a signed written document, it seems that computer-stored information will not be an acceptable substitute.

The following penalties are prescribed in cases where, despite legal provisions to the contrary, computer-stored information replaces a signed written instrument:

470.           1. Bills of lading

The holder of an "electronic bill of lading" (not legally enforceable) does not forfeit his rights over the goods, but cannot prove his title to them. The basis for the legal relationship between the carrier and the consignee is, in this case, determined solely by the third-party clause included in the shipping agreement. The consignor intervenes with the carrier for the benefit of the consignee.

If a bill of lading is issued under a shipping agreement, the consignee's title derives from it (the transfer of title resulting from the bill of lading).

471.

The bill of lading not only provides proof of the contract concluded between the carrier and the consignor but also guarantees the authenticity of the evidence. The consignee acquires no title in the actual relationship but in that defined by the bill of lading. The bill of lading defines the substance of the contract. This general rule holds true for any negotiable instrument to order or bearer. A negotiable instrument to order or bearer evidences the underlying legal relationship. Physical transfer of a trade bill operates as assignment of the right. The debtor cannot exercise the same means of defence against third-party holders of trade bills (subrogated creditors) as he could against the buyer (first creditor) on the basis of the underlying legal relationship.

It is for this purpose - embodiment of an abstract right - that trade bills are made out. Moreover, if a third or fourth holder of a negotiable instrument was to be bound by the initial legal relationship witnessed by the instrument, it would lose its economic attraction, and it is precisely in its stable value that the attraction of the negotiable instrument lies.

472.

In the absence of a legally binding bill of lading, there is thus no physical embodiment of the shipping contract on which it is based. The holder of an "electronic bill of lading" cannot infer from it any rights as to the conditions of carriage, factual details of the cargo or any other information the bill of lading usually provides. An electronic bill of lading is not a document of title (title to the goods making up the cargo). Consequently the cargo is not negotiable in transit by transfer of the bill of lading.

The carrier is under a duty to deliver the cargo and the consignee has the right to have it delivered on the basis of the third-party clause contained in the contract, and not on the basis of a right in rem (cf, Appendix A-24).

473.           Additional comments

In the transport sector, it is customary for sea transport to be governed by the same rules as road, rail and air transport, only here the bill of lading is replaced by a sea way-bill (transferable electronically in the absence of any legal prescription on the matter).

The Chase Manhattan Bank has developed a solution to the problem of documentary credit in its Chase Trade Exchange system. The information contained in the bill of lading is transferred by electronic means, printed out on letter-head stationery and sent to the consignor (carrier). The Chase Trade Exchange department is empowered to sign bills of lading on behalf of the carrier. The computer thus produces an original, legally-valid bill of lading (cf, Appendix A-25).

474.           2. Credit

The consumer credit finance Act requires the existence of a notarial deed or private contract for validity (cf, Appendix A-26).

Art. 37 of the above-mentioned statute specifies that, in the event of a void credit agreement under which the borrower may have already repaid to the lender a sum exceeding the amount originally accorded, the borrower is entitled to demand immediate reimbursement of the amount over-paid.

Where he has paid less than that amount, however, the lender may call for reimbursement of the outstanding balance, subject to the proviso that the court may fix a time limit within which the debtor must meet his obligations regarding reimbursement.

475.                   3. Leasing agreements

Under art. 1576j of the Civil Code, leasing agreements made by electronic means in the absence of a legally required notarial deed are to be treated as hire purchase agreements (cf, Appendix A-27).

476.

Art. 255 of the Commercial Code stipulates that insurance contracts are not subject to requirements as to form. Art. 258 of the Commercial Code specifies that an insurance contract is enforceable against the insurer only when in writing. The policy is complete and conclusive evidence against the insurer.

Nonetheless, the policy does not constitute the sole means of proof. The existence of an insurance contract may equally be demonstrated by means of a letter of confirmation, temporary cover note or any written documents not an authentic instrument, such as the insurer's accounting records. The court may admit these written documents as prima facie evidence, and these may be corroborated by any other means of proof, notably testimony, presumptions, or additional sworn statements.

477.

Art. 258, indent 2, stipulates that during the period between the conclusion of the insurance contract and the issuance of the policy, the existence of any particular clauses or conditions can be established by any possible means (cf, Appendix A-28).

Consequently, if no policy is issued, then where a contract is concluded by electronic means, the insured is free to prove the existence of the principal terms of the contract by producing any other written document, which the court may admit as prima facie evidence, while particular clauses or conditions may be established by any means.

478.

For the remainder, art. 258 applies only to evidence provided by the insured. The insurer can prove the existence of an insurance contract by all means at his disposal. Acceptance of the policy, and failure to contest it within a reasonable period, constitute a presumption in favour of the insurer (cf, Appendix A-29).

479.           5. Conveyances of real property

In the absence of the legally required notarial conveyance deed, the property of a real estate cannot be assigned nor received, in accordance with articles 671 and 671 a of the Civil Code. (cf annex A-7)

480.           6. Intellectual property rights

Patent applications and assignments must be made by notarial deed, in accordance with art. 28 of the Dutch patents Act.

Electronic assignment is invalid but can doubtless be viewed as the grant of a licence. The granting of a patent licence is not subject to any conditions as to form. Art. 33, indent 2, of the patents Act stipulates that, for a licence to be enforceable against third parties, it must first be registered with the Patent Office (cf, Appendices A-30 and A-31).

481.

The seeds and plants Act also requires assignment to be evidenced by notarial deed. Licences are not bound by conditions as to form and may thus be transferred by electronic means, although under art. 46, par. 3, they must still be registered in the cultivars registry in order to be enforced against third parties (cf, Appendices B-1 and B-2).

482.

The assignment of copyright must also take place by means of notarial deed. The licence is not subject to any conditions as to form (cf, Appendices A-9 and B-4).

483.

The same applies to drawings and patterns under article 13, indent 3 of the Benelux Act on drawings and patterns (cf, Appendices A-10 and B-4).

484.

Art. 11A of the Benelux trademark law stipulates that a trademark must be duly granted in writing. In contrast to the areas of law previously considered, the assignment of a trademark by electronic means cannot be considered to be a licence. If the holder of a trademark or licence, acting out of ignorance, still continues to use it, that would strictly speaking be an infringement of copyright law (cf, Appendices A-12 and B-5).

485.           7. Transfer of intangibles

The foregoing remarks concerning the bill of lading apply equally to the transfer of intangibles. In converting a chose in action into a bearer negotiable instrument or one to order, the issuer/creditor creates conclusive evidence against himself. Once the instrument is negotiated, the underlying legal relationship is materially embodied. This does not happen with assignment by electronic means. A third party holder in due course of a commercial paper by electronic means has no guarantee that the debtor will honour his obligations regarding payment since, as with any holder of an electronic bill of lading, he may find all the exceptions attendant on the underlying legal relationship raised against him (cf, Appendices A-13 and A-24, particularly pp 11-20).

486.

The sanctions applicable in the event of failure to comply with the above-mentioned statutory provisions concerning preservation of documents are: 487.

- Art. 6 of the Commercial Code and art. 14, vol. 2, of the Civil Code:

When the third Act on misuse came into effect, arts. 138 and 248, vol. 2, of the Civil Code were amended as follows:

Failure to comply with the obligations arising under arts. 14 and 394, vol. 2, of the Civil Code raises a presumption of "manifest mismanagement", considered to be the main reason for bankruptcy. Consequently, the directors may be deemed jointly and severally liable for concealment of bankruptcy. The same holds true for a B.V. (besloten vennootschap, private limited company), the sleeping partners of a V.O.F. (vennootschap onder firma, general partnership) or a C.V. (commanditaire vennootschap, limited partnership) (cf, Appendix B-6).

488.

The record of all transactions which a broker is required to keep under art. 68 of the Commercial Code is admissible as evidence.

The penalty for failure to keep such records consists in the obligation to prove the transaction by some other means (cf, Appendix B-7, notably pp 66-68).

489.

- Art. 11, indent 2, of the general Act on State taxation stipulates that a tax inspector may make an empirical tax assessment. In particular, he is entitled to do so if the taxpayer refuses to produce to him the information necessary to assess his tax liability which he is required to do by law (Supreme Court of Appeal ruling of 27 June 1953, BNB (Beslissingen Nederlandse Belastingrechtspraak - Dutch taxation law reports), 1953/195 (cf, Appendix B-8).

490.

Art. 47 of the general customs and excise Act provides that the return and all other documents must be signed. Art. 49a, indent 2, of the general customs and excise Act juncto art. 172, indent 3, of the customs and excise decree both specify the conditions in which a written application will be inadmissible. A written application is inadmissible unless made on the prescribed form and signed, or if lacking the details or accompanying documents required by existing provisions.

Art. 172, indent 4, of the decree provides that whenever the declaration fails to meet certain prescribed conditions, other than those set forth in indent 3, the official has discretion not to accept it (cf, Appendix B-9).

491.

- Art. 50 of the general customs and excise Act juncto art. 80, of the decree provides that writing is required for a declaration to be valid, and sets out the requirements with which the writing must comply. The document must also satisfy the requirement that it be signed, so that here, too, a document sent by electronic means is not valid.

Nonetheless, the view would appear to be taken in practice that the statutory provisions need amending. Two Dutch experimental programmes (SAGITTA/CARGONAUT), regarding customs declarations made by electronic means, have been set up for this purpose, and an amendment to the general customs and excise Act has been proposed with a view to permitting such declarations to be made. This will be considered in greater detail in Section 6.

492.

As regards the penalties prescribed for failure to sign the commercial documents described above (bill of lading, credit arrangements, leasing agreements, conveyances of real property, assignment of intellectual property rights and transfer of intangible property), we would simply refer readers to the detailed examination of the penalties associated with those documents where the provision requiring the existence of a written document is not complied with. In effect, the consequences are the same.

## **Section 5.- Constraints arising from the law of evidence**

### **Par. 1- Evidence under Dutch law**

493.

Under Dutch law, all forms of evidence are admissible unless otherwise provided by statute, notably in the case of an insurance policy.

In the absence of statutory provisions, the court has absolute discretion to assess the value of evidence, except where the law or an agreement of the parties provide otherwise.

494.

An authentic instrument is conclusive proof enforceable against all parties of the declarations made by the public official regarding the observations and actions performed by him within the scope of his powers.

495.

Both an authentic instrument and a private agreement constitute conclusive proof of the accuracy of the statement made concerning matters referred to in the instrument by one of the parties concerning evidence adduceable between the parties for the needs of the opposing party, unless such statement has a legal effect beyond that which may be freely determined by the parties themselves.

496.

This provision does not, however, apply to acknowledgement of debts by private deed insofar as the obligations referred to therein relate to the payment of a sum of money, unless the acknowledgement of indebtedness was written entirely by the debtor's own hand or unless he had included in the instrument words of approval stating the amount involved in words. This provision does not apply, however, to liabilities incurred by the debtor in the exercise of his profession or the carrying-on of his business.

**Par. 2-            Application to electronic media**

497.

It must be concluded, therefore, that computer media as such are to be treated as non-conclusive evidence, the probative force of which will depend entirely on the circumstances. In the absence of any provision of law, the parties are entitled to determine contractually what irrebuttable evidence shall be and how the burden of proof regarding the computer media is to be allocated. Clearly, such agreements are limited by the good faith of the parties.

498.

In the light of the foregoing, it is clear that computer media will never be regarded as having equal evidentiary weight with a written instrument. Computer media, like an unsigned written document, will be merely presumptive evidence.

499.

The view of the courts on this matter, can be seen from the 1987 decision of the Supreme Court of Appeal (CC 16 October 1987, Rechtspraak van de Week 1987, 186, cf, Appendix B-10), in which the Court clearly affirms that, in assessing the evidential value of magnetic recordings, account must be taken of the fact that the data stored on them can be easily manipulated.

500.

As regards the regulations which reveal a degree of recognition of electronic recordings, please refer to the Instruction of the State Secretary of Finance of 26 August 1981, providing that original copies held on microfilm need now be preserved for a period of two years only (cf, Appendix A-18).

501.

For the literature on this subject, see:

(Appendix A-20)  
(Appendix A-22)  
(Appendix A-11)  
(Appendix A-12)  
(Appendix A-13)  
(Appendix A-14)  
(Appendix A-15)

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

502.

The survey into Dutch law revealed no agreements or arrangements made with the tax authorities regarding tax returns made by electronic means.

503.

As regards the procedures for customs import declarations, an experimental project named SAGITTA has been under way for some time.

504.

As a temporary measure, the companies taking part in this experimental scheme are authorized to make the declarations for imported goods by electronic means (cf, Appendices B-17, B-18 and B-19).

505.

The SAGITTA 1990 project is currently in preparation. The aim is to enable all operations concerning the import, export, storage and transport of goods to be carried out by electronic means.

506.

A similar project - known as CARGONAUT - currently in progress at Schiphol Airport is concerned with cargo communications systems and is designed to improve message exchange and the control of cargo handling for all parties involved (cf, Appendix B-15).

507.

SAGITTA and CARGONAUT will be linked at the beginning of 1989 (cf, Appendix B-20).

508.

An amendment to the general customs and excise Act is currently being drafted to make provision for the transmission of declarations by electronic means (cf, Appendix B-15).

One of the objectives of the SAGITTA scheme is to furnish data for the Central Bureau of Statistics (CBS), Central Import and Export Service (CDIV) and Interprofessional Group on Electronic Data (cf, Appendix B-17, especially pp 543-548).

510.

On 13 November 1985, the Minister of Justice set up a commission to deal with the problems relating to "computer crime". The commission was chaired by Professor H. Franken and thus came to be known as the Franken Commission.511.

The commission was set the following task:

- a. to define the problem areas of criminal law, both substantive and adjectival, concerning the storage, handling and exchange of data, with the help of specially designed equipment; and on the basis of that definition:
- b. to give its opinion as to the advisability of including, or making improved provision for, certain activities within the scope of application of Dutch criminal law by statutory amendments;
- c. indicate which new types of criminal jurisdiction and powers should be created;
- d. recommend which areas of law should be amended.

The commission's findings were presented in April 1987.

The commission also considered the need to introduce regulations applicable to bodies corporate providing protection for electronic data interchange.

512.

The commission recommended that the directors of companies should include in their annual reports a statement, approved by the auditors, concerning the reliability and continuity of their automated data processing activities.

513.

As regards access by the tax authorities to a company's computer systems, the articles of the tax legislation referred to earlier concerning the duty to preserve may usefully be consulted. These articles confer on the tax authorities the right of access in a variety of circumstances. The conclusion is that, where accounts are kept electronically, the tax authorities will have the right of access to the system used for this purpose.<sup>514</sup>

As regards debt recovery proceedings under customs legislation, note that Dutch law contains specific administrative procedures set forth in the general customs and excise Act. Recovery does not take place through the civil courts, therefore.

515.

Fraud is dealt with under art. 225 of the Penal Code (cf, Appendix B-22).

516.

The Franken Commission set up for this purpose considered whether this article might also be extended to electronic evidence. In this regard, the commission included the following remarks in its report:

"...forgery is an area characterized by the particular protection provided by criminal law for written documents intended to serve as proof of a fact. Precedent shows this protection to extend to all written documents customarily invested by society with a certain importance as a method of proving facts. This interpretation accommodates developments in what is ascribed as having probative force by society.

The precondition of that, however, is the existence of an established and generally recognized custom that certain written documents have evidentiary value. Hence, driving licences are universally accepted as a proof of identity. In any event, the written documents concerned must by nature be intended to serve as evidence for the purposes of law.

517.

At the present time, many "written documents" ascribed this evidentiary function exist in "electronic" form. Such, for example, are the administrative records of companies and institutions from which are derived rights and obligations, notably as regards taxation, or data on indebtedness stored on bank computers. It is impossible to give a precise definition of which "electronic documents" are to be considered as "written documents", within the meaning of art. 225 of the Penal Code, since the definition of what is generally accepted is constantly in flux. The fact that art. 225 allows such a degree of latitude in the interpretation of what can serve as evidence is therefore to be welcomed.

518.

The term "written document" undoubtedly poses a problem: should it be taken to include under computer media on, or in, which data has been electronically or optically stored?

Some uncertainty exists on this point. From the fact that, in certain circumstances, code entries and punch cards used to make out wage slips fall within the category of written documents as defined by art. 225 of the Penal Code, it can be deduced that the data concerned need not necessarily be directly readable, but that indirectly readable data (i.e. after processing) may also be regarded as written documents. Failing any court decisions on the matter, the boundaries of interpretation remain unclear.

519.

It may be admitted, though, that the link with readability by the human eye will continue to be important although indirect readability will remain a *sine qua non*. This condition would exclude certain types of data ("technical recordings", for example).

520.

Finally, there is the question of "permanence": must the computer media and the information stored there be imbued with a degree of permanence in order to classify as "written documents"? The commission considered that the determining factor lies in whether there was an intention to reproduce the data in or on the data carrier with any degree of permanence - in other words, whether the aim is to preserve and store those data (including, of course, for the purposes of evidence where they are assigned that quality). Whether or not the nature of the recording renders it susceptible to simple and rapid modification is not a determining factor.<sup>521</sup>

The commission concluded that art. 225 of the Penal Code and its associated case law continue to offer adequate scope (unlike, incidentally, the situation in the Federal Republic of Germany, where adaptation is a matter of pressing need). Only were the limitations of art. 225 of the Penal Code to prove too constrained in practice would there be a need to consider an amendment, for example, by adding to both the first and second indents the wording "or any other means" after "written document".

#### **Section 7.- Conclusions of the survey of Dutch law**

522.

It is no easy matter, on the basis of the foregoing, to draw conclusions as to the need to revise prevailing Dutch legislation to cope with electronic data interchange in business.

523.

Be that as it may, a case might be made out for adapting those provisions dealing with the duty to preserve, as well as those concerning declarations.

524.

Moreover, a need to make changes in those provisions of the Commercial Code concerning documents used in connection with the carriage of goods, such as bills of lading, to accommodate the use of an electronic bill of lading alongside conventional forms may be envisaged.

525.           **Complementary literature**

(cf, Appendix B-23)

(cf, Appendix B-24).

## **CHAPTER 10: ANALYSIS OF THE LEGAL POSITION IN PORTUGAL (1)**

**Findings of the research into Portuguese law conducted by Mr A Aguiar Branco of the law practice, AGUIAR BRANCO ASOCIADOS.**

### **Section 1.- Lack of specific regulation in the matter**

526.

Other than those included in the seemingly universally-accepted general provisions of the Civil Code, the only legislative measures recognizing the legitimacy and enforceability of computer records are the following:

1. Art. 22, indent C), of the Uniform Customs and Practice for documentary credits, specifies that, unless otherwise specified in the credit, banks will accept as originals all documents produced:

- by reprographic systems
- by automated or computerized systems
- as carbon copies marked as originals.

2. Art. 3 of Statutory Order 352/86 of 21 October 1986, on maritime commercial law, specifies that contracts for the transport of goods by sea must be made in writing, either in the form of a letter, telegram, telex, fax or other like form produced by modern technology.

The preamble to the Statutory Order states that the new methods of formally embodying contractual agreements resulting from the use of computing and data communications will henceforth be taken into account.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mr A AGUIAR BRANCO, from which this chapter draws extensively.

In fact, information systems have become so sophisticated that it would be hard to conceive their not providing an efficient response to the needs of shipping and international trade, whether for recording the bill of lading details, concluding transport contracts or for the successive endorsements which must be added to a bill of lading.

The use of electronic data processing in no way affects the reliability of declarations nor increases the risk of fraud. Particularly since arts. 4 and 5 of the Statutory Order cover the vulnerability of the system by prescribing a series of requirements for bills of lading and mates' receipts.

The authors of the survey of Portuguese law are of the opinion that specific, coherent legislation giving legal recognition to computerized information is required.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits, etc.) by electronic means.**

**a) invoices**

527.

Although the normal practice is to send invoices by post, there is nothing to prevent them from being transmitted by electronic means, which would in fact offer the advantage of greater speed.

The general provisions of the Civil Code require the delivery of items to be accompanied by the delivery of documents, such as receipts, tax documents, etc.

Likewise, art. 476 of the Commercial Code specifies that "the seller may not refuse to furnish the buyer with an invoice for the price or that part of the price received for the items sold." This transaction, however, has no requirements as to form.528.

528.

Doctrine and case law, however, are divided on the consequences of a failure to include an abstract of account in forward sales and purchases (cf, BMJ, p 490):

Some opinions hold that the obligations contingent on an abstract of account may be proved independently of the abstract itself, the absence of an extract serving only to make the contract unenforceable, leaving the vendor free to prove his rights by any means recognized by law.

Others hold that the lack of an abstract of account would either render the contract void or make it a nullity ab initio, leaving the vendor to apply for a court declaration that the contract was no agreement at all and order the restitution of the goods already delivered or their equivalent value (Baptista Lopes, Sales and Purchase Agreements, p 416).

#### **b) order forms and general conditions of sale**

529.

Order forms and general conditions of sale may be transferred by electronic means.

The transfer may even take place by simple reference to a predetermined code making general conditions previously communicated in writing or telecommunicatively applicable.

#### **c) contracts**

530.

With the exception of the contracts mentioned in paragraph 2 of this section, contracts may be concluded by electronic data interchange under Portuguese law.

531.

The question then arises, however, as to the time and place a contract concluded by such means will be considered to have been formed.

Failing express provision in the contract, the answer to this question will determine the applicable law and court with jurisdiction to adjudicate in any disputes arising in relation to the contractual relations.

532.

The general rule is that an invitation to contract with a partner takes effect only when that party comes into possession or takes cognizance of it.

Where communication is waived, the contract is formed on a suitable manifestation of intent.

The effect of art. 244 of the Civil Code is that, as regards the time of formation of a contract, Portuguese law has opted for the reception theory, although moderated by the cognizance theory (i.e. the hybrid theory).

Hence, the contract is formed when a reply containing the acceptance is made known to the offeror, such that in normal circumstances he could have become aware of it in the normal course of his usual business practices and means of communication, he has taken cognizance of it. The aim here is to avoid fraud on the part of the addressee.

From the time the addressee receives the offer or takes cognizance of it, the offer becomes irrevocable (cf, art. 230 of the Civil Code).

Any acceptance introducing new terms, limitations or otherwise qualified is a rejection of the offer. However, if the change is precise enough, the qualified acceptance may amount to a counter-offer (cf, art. 233 of the Civil Code).

A bare proposal addressed to unascertained persons as a rule operates only as an invitation to treat (e.g. mailing out a price list). No offer admitting of acceptance has yet been made; the vendor is reserving the right of acceptance to himself. The situation will be completely different, however, if the person making the announcement either clearly indicates, or it is evident from the circumstances, that he considers the contract made by a statement of agreement made by anyone (e.g. displaying goods in a shop window at a certain price).

An offer to do business must be sufficiently precise and one from which it can be reasonably inferred that the maker intends to be bound and that he is aware of offering to enter an obligation ex contractu.

Acceptance operates to conclude the contract. To do so, however, in it must meet two conditions:

- a) it must reflect total and unequivocal agreement
- b) it must take the form required for the contract.

Immediately the acceptance takes effect, the contract is considered to be formed in the place where it was accepted, even if it is in a foreign country (cf, Ac. STJ of 24 November 1984).

Art. 471 of the Commercial Code provides that a contract for the sale of goods by sample, or which the buyer has not seen, or which cannot be ascertained by weight or measurement will be formed only when the buyer has examined the goods and has not complained within one week.

Finally, art. 227 of the Civil Code stipulates that the parties shall act in good faith, not only during negotiations but also in forming the contract, subject to compensating the loss arising from infringement of the other party's contractual interests.

**Par. 2- Exceptions to the rule that commercial documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

533.

Transactions which need to be operated by authentic instrument clearly cannot be concluded by electronic data interchange.

**b) instruments embodying an incorporeal right**

534.

Likewise, certain commercial documents cannot be transferred by electronic means. This is so for all documents required by commercial regulations to accompany the delivery of goods.

535.

Such is the case for way-bills which art. 369 of the Commercial Code requires to be signed and dated and contain the information prescribed by art. 370.

Way-bills have the same value in law as private written and signed documents which under the general provisions enjoy full probative force as regards any declaration attributable to the author, without prejudice to allegations and proof of forgery of the document (cf, art. 376, no. 1, of the Civil Code).

This is confirmed and amplified by art. 373 of the Commercial Code, which states that:

*"All matters concerning transport shall be determined by the way-bill, the only admissible exceptions being falsification or involuntary mistake in wording."*

If there is no way-bill or if any of the requirements prescribed by art. 370 of the Commercial Code are missing, all disputes concerning transport will be resolved by business custom and practice, or failing that, by the general principles of law.

Art. 375 of the Commercial Code adds that any special terms or conditions not appearing on the way-bill will be unenforceable against the consignee.

536.

As regards documentary credit, it seems that this, too, cannot be transferred by electronic means, given that the vendor obtains payment for the goods from the bank only upon presentation of the documents representing them, after the bank has examined them to ascertain that they appear on the face to be in accordance with the terms. Banks accept no liability as to the authenticity or legal effectiveness of such documents, however.

The supplementary provisions of the Uniform Customs and Practice for Documentary Credits of the International Chamber of Commerce apply here (cf, arts. 3; 15; 17; 22, par. C); and 23).

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par.1- The general obligation to preserve under Portuguese law**

**a) obligations under commercial law**

537.

All traders are required to keep clear and precise records of all commercial and civil transactions relating to business property capable of affecting his financial position (art. 29 of the Commercial Code).

To this end, art. 31 of the Commercial Code requires the keeping of balance sheet books, journal, sundries ledgers and filed copies of correspondence.

Art. 40 of the Commercial Code provides that:

"anyone engaged in business shall file all incoming correspondence and telegrams, payment and stock records for a period of ten years."

**b) obligations under tax law**

538.

Corporation tax law requires all Group A taxpayers to maintain and preserve accounting records to enable taxable income to be determined and audited (cf, art. 51 of the Code). Audits are conducted by examination of the books of account. The obligation to preserve these records for tax purposes does not usually exceed five years (cf, art. 134 of the Industrial Contribution Code).

Art. 41 of the Commercial Code establishes the confidentiality of business records, with exceptions required for the purposes of tax inspection to ensure compliance with commercial obligations or to verify the company's economic activity in general.

Records are examined in accordance with the terms of art. 43 of the Commercial Code.

The fact that the court has power to order an examination of records regardless of the interests of the trader concerned has aroused some controversy, however (cf, Ac. STJ of 14 November 1958, as opposed to Ac. STJ of 12 July 1949).

**Par. 2- Penalties for the non-respect of obligations under accounting and tax law to preserve documents**

539.

Although case law generally upholds the application of arts. 10 and 14 of Statutory Order 27/153 of 30 October 1936, imposing fines of 5,000 to 100,000 escudos for falsification or destruction of records, also considered a criminal offence under arts. 451 and 421, no. 4, of the Criminal Code, falsification or destruction of records by public limited companies incurs a criminal penalty only where the officer's actions are prejudicial to the interests of third parties protected by the criminal law (Professor Eduardo Correja).

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1- The obligation to sign documents**

540.

All commercial documents accompanying goods must be dated and signed. Signature is the act by which the author of a document acknowledges the contents as his. Unlike the date, it is an essential element of private documents, except where the law expressly provides otherwise (e.g. bills, drafts and cheques).

Anyone wishing to enforce the date of an instrument against a third party must provide evidence in accordance with the general principles of law; a date given on a document is enforceable between the parties.

A signature must be handwritten and may be either that of the author himself or someone authorized by him.

1. An authorized signature is one made by another person, at the request, or under a power or the liability of the person wishing to assume responsibility for the document but incapable or prevented from signing himself (cf, art. 373, no. 1, of the Civil Code). The authority must either be agreed or confirmed before a notary, after the document has been read aloud to the principal (cf, art. 373, no. 4, of the Civil Code).

It has probative force for legalized private documents (cf, arts. 375 and 376 of the Civil Code). If the signature is acknowledged by appearance, both the document and signature are considered valid, unless the acknowledgement is contested and proved a forgery. If acknowledgement is made by approximation, it is at the discretion of the court.

Once it is established that the contents of the document originate from the person to whom it is attributed, any statements in it are conclusive evidence against the author insofar as they are contrary to his interests, without prejudice to allegations and proof of falsification.

2. If the subscriber is unable to read or prevented from doing so, his signature is binding only when made or confirmed before a notary, after the document has been read aloud to him (cf, art. 373, no. 3, of the Civil Code).

The remarks made above concerning legalized documents apply equally here (cf, arts. 375 and 376 of the Civil Code).

**Par. 2-           The possibility of signing electronically**

541.

Portuguese law makes no reference to electronic signatures. The only reference is in art. 373, no. 2, of the Civil Code to mechanically reproduced signatures on securities issued in large numbers or in other circumstances sanctioned by custom and practice. Seemingly, the article has stamps and similar devices in view.

The authors of the survey consider that any other form of identification than a handwritten signature must meet specific criteria enabling the true author of a document to be identified with certainty beyond all possible doubt and minimal risk of falsification.

**Section 5.-           Constraints arising from the law of evidence**

**Par. 1-           Evidence under Portuguese law**

542.

The function of evidence is to create in the mind of the adjudicator a firm belief (subjective certainty) in the reality of a fact (cf, art. 341 of the Civil Code). To this end, it is necessary to adduce evidence of all facts relevant to the judgment of a case.

Hence, art. 342 of the Civil Code requires anyone asserting a right to prove the facts constituting it.

The opposing party has no need to prove that such facts have not been established. He needs to prove only those facts preventing, altering or vitiating the right adduced.

Each party must prove the facts which comprises the premises of the rule favourable to him.

Portuguese law is based on a hybrid procedural system: the judge, acting *proprio motu*, takes all necessary steps to ascertain the truth (investigative principle) of facts alleged by the parties (judgmental principle). The burden of proof thus passes to the party against whom the court is contesting the existence of a fact which, each time it is brought into question during the course of the suit, the court feels has not yet been proved.

The onus of proof will shift to either party, according to the procedural role they are occupying at the time, and it will be enough for the opposing party to rebut the evidence in order to cast doubt on the existence of a fact or event (cf, art. 346 of the Civil Code). Only full legal proof requires rebuttal (cf, art. 347 of the Civil Code).

The burden of proof shifts when there is a legal presumption, an agreement between the parties on their rights, or when the criminal act of one party has made it impossible for the other party to establish the facts (cf, art. 344 of the Civil Code).

Under art. 345 of the Civil Code, private agreements excluding legal means of proof or admitting means of proof other than those permitted by law are void.

543.

The means of proof specifically admitted under Portuguese law are presumption, admission, documentary evidence, expert witnesses, examination and sworn testimony.

Evidence may be either legal or discretionary, according to whether it is to be weighed by its compliance with statutory criteria or whether it is for the sole discretion of the court.

#### I. Circumstantial evidence

544.

Defined by art. 349 of the Civil Code, this form of evidence is of major practical importance when facts cannot be proved by direct evidence, i.e. not verifiable directly by the senses.

Presumption does not remove the onus of proof.

However, the party on whom the burden falls, rather than proving a presumed fact, must demonstrate the reality of the fact or event upon which the presumption is based (cf, art. 350, no. 1, of the Civil Code). Presumptions may be either legal or judicial; the former may be invoked only in the case of evidence to the contrary (cf, art. 350, no. 2, of the Civil Code), and the latter only in cases which admit testimony (cf, art. 351 of the Civil Code).

## II. Admission

545.

An admission is a statement by one party admitting the reality of a fact prejudicial to his interests (cf, art. 352 of the Civil Code).

Admissions may be either judicial or extra-judicial (cf, art. 355 of the Civil Code).

1) A written judicial admission has full probative force against the person making it and can be disproved only by evidence to the contrary.

2) An extra-judicial admission contained in an authentic instrument or private document have the probative force of that instrument.

3) Where testimony is allowed, the court has unfettered discretion to weigh unwritten judicial admissions, extra-judicial admissions made to third parties or contained in a testament or extra-judicial admissions not contained in documents.

An admission is non-severable (cf, art. 360 of the Civil Code) and may be affected if not freely made will or by a defect in consent (cf, art. 359 of the Civil Code).

## III. Documentary evidence

546.

Art. 362 of the Civil Code defines "document" as any material object created by man which is capable of representing a fact, event, thing or person.

In a narrow sense, however, a document is merely a written expression of a statement of intent or cognizance. Art. 363 of the Civil Code envisages three types of written document:

1) Authentic documents are those made in accordance with legal formalities by public authorities acting within the limits of their powers or by a notary or other public official acting within the scope of his duties.

2) Authenticated documents are those which, albeit private in origin, carry words of authentication affixed by a notary. These words must include a declaration made by the parties in the notary's presence attesting that they have read the document, are aware of its contents and that it expresses their will.

3) All other documents are considered private.

547.

Once their author has executed them, and his signature is authenticated by a notary (cf, art. 370 of the Civil Code), authentic instruments are proof in themselves of their provenance and authenticity.

Proof of authenticity consequently depends on how the document appears on the face (*acta probent se ipsa* principle). Such formal probative force can be rebutted only in cases of falsification and where evidence is adduced to the contrary, save where the falsification is evident on the face of the document.

Formal probative force, i.e. whether the document actually originates from the purported author or not, must be distinguished from material probative force, i.e. to what measure the transactions and facts mentioned in the instrument correspond to reality.

Authentic documents are conclusive proof of the facts attested to by the public official (cf, art. 371 of the Civil Code). The party seeking to rebut them must prove them false by evidence to the contrary.

Such documents are thus conclusive proof of the substantive fact of such facts and statements, but not their honesty, truth, or the lack of any other defect or abnormality.<sup>548</sup>

An authenticated document has the conclusive evidentiary weight of an authenticated instrument (cf, art. 377 of the Civil Code) in guaranteeing the truth of the contents by virtue of the office of public trust held by the notary.

549.

The authorship of private documents, even when written and signed by the person to whom they are attributed, must be proved.

a) The authenticity of documents written and signed by the person to whom they are attributed can be established only by the implied or expressed acknowledgement of the party himself or by recognition by the court (cf, art. 374, no. 1, of the Civil Code).

Where a document is refuted, the burden of proof lies on the person adducing it who must prove by all means open to him that it is a constituent element of the right being invoked.

b) As regards documents which are simply signed, once the identity of the signatory has been proven as prescribed above, a presumption is raised that the subscriber of the document approves its contents and assumes the authorship of it, unless the instrument was signed in blank, purloined or abusively completed (cf, art. 378 of the Civil Code).

c) Finally, there are legalized documents, i.e. private documents the identity of whose author has been certified by a notary.

Acknowledgement takes place in two ways: by appearance or by approximation.

In the case of acknowledgement by appearance, both document and signature are considered authentic by virtue of the office of public trust held by the notary, unless proved otherwise (cf, art. 375, nos. 1 and 2, of the Civil Code).

Proof by approximation, in contrast, is equated to a simple expert opinion and consequently a question of fact for the court (cf, art. 375, no. 3, of the Civil Code). A presumption as to the authenticity of the signature does exist, but may be rebutted by any means of evidence. As regards the substantive probative force of private documents, proof of the identity of the author and signatory (or the signatory alone) is conclusive proof that the signatory has made all the statements contained in the document, without prejudice to any allegations and proof of forgery (cf, art. 376, no. 1, of the Civil Code).

d) The probative force of written but unsigned documents, once their authenticity has been proven in accordance with art. 374 of the Civil Code, is within the discretion of the court, since it is understood that a person who has written but not signed a document wishes to deny his authorship of it (cf, art. 366 of the Civil Code).

Exception exist, however, in the case of documents which, although not customarily signed are assigned probative force by the law. Such is the case with registers and other record books (cf, art. 380 of the Civil Code), and memoranda (cf, art. 381 of the Civil Code).

Telegrams have the same evidentiary value as written and signed (or merely signed) originals (cf, art. 379 of the Civil Code).

#### IV. Expert witnesses, examination and sworn testimony

550.

Evidence produced by means of expert witnesses (cf, arts. 388 and 389 of the Civil Code), examination (cf, arts. 390 and 391 of the Civil Code) and sworn testimony (cf, arts. 392 and 396 of the Civil Code) is at the discretion of the court, with no hierarchy of probative force other than the extent to which they convince the judge of the existence of the facts.

Certain limits are set on oral testimony: it is not admissible when a statement must be made in writing, when the fact has been conclusively proved or when it conflicts with the contents of documents (cf, arts. 393 and 394 of the Civil Code).

#### **Par. 2- Application to electronic media**

551.

The Council of Europe's Opinion 81/20 of 11 December 1981 addressed to the Member States advised them to treat microfilms of documents pertaining to commercial transactions as equivalent to originals, unless proved otherwise. This Opinion also concerned computer-stored information, but only where provided for by national law.

Clearly if, following adoption of the Opinion, Portuguese law were to make use of this faculty, then computer-stored information would acquire conclusive probative force of the facts to which it related.

552.

Considering the present state of technology on written unsigned documents, however, and referring to arts. 380 of the Civil Code and 44 of the Commercial Code, we would then have merely sufficient legal proof, as opposed to conclusive proof, the consequence of which would be to obviate any question of falsification.

Note that the wording of the Opinion supports the distinction between the rules of proof: it is presumed that a reproduction is a faithful replica of the original document, but the presumption of fidelity of the computer recordings is transferred to the content of the information contained in it.

In fact, art. 368 of the Civil Code establishes that photographic or cinematographic reproductions, phonographic recordings and, more generally, all other mechanical reproductions of facts, or things are complete proof of what they portray, unless their accuracy is contested by the party against whom the documents are adduced.

To this must be added simple or specialized photocopies, together with microfilms and microfiches which, although complete proof of the content of originals, are no substitute for them as regards compliance with legal formalities.

The presentation of a document embodies within it, expressly or implicitly, an affirmation of its exactness and constitutes satisfactory proof; once the opposing party has lost the right to refute it, that affirmation becomes irrebuttable.

It would suffice for the party against whom the document is adduced to rebut its exactness in order for it to lose its value as complete proof. Its evidentiary weight would then remain at the discretion of the court.<sup>553</sup>

As regards private instruments, the trend is likewise to assign to microfilms and microfiches relating to commercial transactions the same probative force as that of the original written documents.

Here, however, the problem of falsification arises, because with no public official involved or subsequent authentication, such documents remain private. Consequently, there is no presumption that they are certified true copies, their compliance having to be established by the person seeking to rely on the document by proving that the legal requirements governing the technical methods employed to reproduce the document and preserve the microfilm or microfiche have been complied with, leaving the opposing party has only the option then to prove felonious alteration of the microfilm.

Computer data carriers, as unsigned private documents, as a general rule remain at the discretion of the court.

Portuguese law does confer legal probative force on certain written documents which are not customarily signed, however.

1. Such is the case with books and other written instruments in which a person usually keeps a record of payments received (cf, art. 380 of the Civil Code); the same applies notes written by a creditor on documents in his possession or that of the debtor (cf, art. 381 of the Civil Code), as well as books of account (cf, art. 44 of the Commercial Code).

Once the identity of a document's author is established, the document is evidence against him. Portuguese law does, however, admit the introduction of evidence to the contrary or non-confirming evidence by allowing the author to disprove his authorship by all available means.

2. Business books have probatory force against a businessman if not properly kept and in his favour when they are properly kept and adduced in evidence against a business whose books are not in order (cf, arts. 44, nos. 1, 2, 4 and § unique of the Commercial Code).

Commercial law expressly sanctions evidence in rebuttal: Art. 44 of the Commercial Code applies only when both parties to the proceedings are businessmen. If only one of them is a businessman, however, the probative value of the commercial records, in the opinion of Dr Abilio Neto, is that of a simple private document, and according to Professor Fernando Olavo, that of account books or other written records.

It is easy to see why, then, when dealing with unsigned documents, both civil and commercial law refer to "evidence against the author" with reference solely to proof of the fact recorded but not to the record *per se*, when the consequence of a simple doubt in the mind of the court would be to regard the fact of the statement as not proven.

A computer data carrier will have the probative force of a signed written instrument where it is a true copy of the original (as with a fax) or where the authenticity of the signature can be determined in accordance with art. 374 of the Civil Code.

Its probative force is independent of any recourse to expert witnesses, although this may be used to prove the inexactness of the instrument (cf, art. 380 of the Civil Code *in fine*).

The production and acceptance of evidence usually operates by submitting and joining the document to the proceedings. Usually, the document will be produced during the oral pleadings in which the facts which the document is alleged to prove are stated (cf, art. 523, no. 1, CPC). Documents may be joined at any time up to the close of the oral proceedings at first instance, subject to a fine.

**Section 6.- Relations with the customs and tax authorities**

**Par. 1- Transmission of data to customs and tax authorities by electronic data interchange**

554.

The survey of Portuguese revealed no special authorization or agreement concerning the electronic transfer of commercial data in dealings with the tax or customs authorities.

**Section 7.- Conclusions of the survey of Portuguese law**

555.

In conclusion, the authors of the survey of Portuguese law are of the opinion that the Commission should act to facilitate the development of electronic data interchange in the commercial sector.

They would like to see prevailing legislation in the various Member States harmonized, to permit commercial agreements to be concluded, and the documents relative to the execution exchanged, by electronic means.

The authors of the survey nonetheless stress the need to be attentive to minimum conditions of security and reliability permitting individual parties to be correctly identified and to provide proof of the corresponding facts. To that end, the special conditions and procedure to be followed for interchange need to be determined such as to avoid fraud or falsification to the greatest extent possible.

In this respect, particular attention should undoubtedly be paid to the role of facsimile transmission as a system permitting the intents of the parties to be reproduced along with their respective handwritten signatures, while at the same time fully meeting the imperative of speed in business transactions.

**CHAPTER 11: ANALYSIS OF THE LEGAL POSITION IN THE UNITED KINGDOM (1)**

**Findings of the survey conducted into English law by Mr Jonathan Haydn-Williams of TAYLOR JOYNSON GARRETT, Solicitors.**

**Section 1.- Lack of specific regulation in the matter**

556..

The survey revealed no particular regulations dealing with the specific issue of the electronic transmission of commercial data.

English law, however, does contain certain provisions governing the transmission of documents by computer.

557.

Hence, section 5 of the Civil Evidence Act 1968 (repealing the Evidence Act 1938) specifically provides that documents produced by computers may be admissible as evidence.

558.

Similarly, the Finance Act 1985, section 10, expressly confers on tax inspectors a right of access to hardware, and software and documents produced using them.

559.

Many other provisions, moreover, have been drafted or construed so broadly as to include documents and data transmitted by electronic means.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mr Haydn-Williams, from which this chapter draws extensively.

In relation to fraud, therefore, the Telecommunications Act 1984 provides that a person engaged in the running of a public telecommunications system who, otherwise than in the course of his duty, intentionally discloses to any person the content of any message which has been intercepted in the course of its transmission by that system, will be guilty of an offence (2).

Exceptions to this rule exist if the disclosure relates to the prevention or detection of crime.

Disclosure is also warranted if for the purposes of criminal proceedings, if it is made pursuant to a warrant issued by the Secretary of State under section 2 of the Interception of Communications Act 1985, or if it is made in the interests of national security or pursuant to the order of a Court.

Similarly, the Interception of Communications Act 1985 Section 1 provides that it shall be an offence for a person to intentionally intercept a communication in the course of its transmission by post or by means of a public telecommunications system.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1. - The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

560.

The general rule in English law is that no writing or other formality is necessary to conclude a binding contract under English law.

However, there are a number of instances where statute law requires certain formalities such as a written contract and/or a signature.

---

<sup>2</sup> cf Section 45

561.

These exceptions to the general rule are often highly detailed and follow no general pattern or principle.

**b) invoices**

562.

There seems to be no obstacle in English law to an invoice being sent by telecommunicative means.

**c) general conditions of sale**

563.

No specific problems arise when general conditions of sale are transmitted other than those that would arise in the formation of any contract.

The basic rule enunciated by the authors of the survey is: to be bound by general conditions of sale, a party to a contract must have agreed to the incorporation of those conditions into the contract.

"Incorporation" can be either:

- by express reference to the general conditions in the contract for sale; or- by setting out the text of the general conditions in full in the contract.

When no formalities are necessary to conclude the contract in question, the reference may even be oral, such as in a telephone conversation in which one party agrees to sell the other party a quantity of grain on the Vendor's standard conditions of sale.

The problem with such agreements is that parties may misunderstand one another and differ over what was agreed; both would then have problems proving that their view was the correct one.

One party may have made a written note at the time of the conversation. If proceedings ensue, he will be entitled to see any similar note written by the other party.

Many banks and brokers in England who effect transactions over the telephone routinely tape all conversations for the purpose of proof in the event of dispute.

Stories abound of firms buying expensive taping equipment and recouping the cost virtually overnight by being able to justify their position in a dispute which without the tape they would not have been able to do.

564.

A general rule of English contract law is that a person who accepts an offer made in a written document by signing and delivering that document is bound by all its terms, whether he had read them or not.

Thus, if one party receives the other party's general conditions of sale by fax or telex, subsequently incorporating them by reference in a contract which he fails to read, on signing that contract by way of acceptance he is bound by the contract and the general conditions as though he had read them (exceptionally, he may be able to escape from some or all of the terms contained in the document if, for instance, his signature was conditional, or if the contents of the document were misrepresented to him).

#### **d) contracts**

565.

With the exception of the contracts referred to in section three of this chapter, contracts may be concluded in English law by electronic data interchange.

566.

This, however, raises the question of the time and place at which a contract so concluded will be considered as formed.

Failing any express contractual provisions, the answer to this question may determine the applicable law and the court within whose jurisdiction any existing or future disputes arising out of the contractual relation will lie.

In most instances, a binding contract is concluded under English law when one party accepts a clear offer from another party.

If both parties are at the same place when the acceptance is made, that is where the contract is concluded.

If the parties are in different locations, there are rules governing when a contract is concluded, which would also seem to govern where the contract is concluded.

If acceptance is made by post or telegram, the contract is concluded when the letter is posted or when the text of the telegram is given to the postal authority by the sender.

Accordingly if, for example, someone in England made an offer to someone in Germany who accepted the offer by posting a letter in Germany, then under English law the contract would be made in Germany.

The English courts generally tend to regard contracts as made at the place where the offeror hears of or receives notification of the acceptance of his offer.

The English rapporteur, however, considers that this special rule applicable to acceptances made by post or telegram would not apply to computer-generated acceptances. Such an acceptance would rather be regarded as received when and where the message was received by the recipient's computer equipment.

There would not appear to be any reported decision on the matter, however, and the matter would probably fall to be decided by the courts in the usual way.

**Par. 2 - Exceptions to the rule that documents  
are transmissible by electronic means**

567.

Instruments requiring some kind of formality as a condition of validity clearly cannot be concluded by electronic data interchange.

Such instruments include:

1. leases of land for more than three years, which must be under seal.

If it is not, the document can pass only a limited title, by which the rapporteur presumably means that the contract will be valid as between the parties but not enforceable as against third parties or by the courts;

2. the same applies to contracts with no consideration;

3. the material terms of a contract for the sale or other disposition of land or interest in land must be recorded in writing in a memorandum or note which must be signed.

If this is not done, the contract is usually unenforceable (the authors of the report emphasize that this does not mean void ab initio; they also add that part performance by one party to the contract may permit enforcement by the court).

4. The Consumer Credit Act 1974 regulates the supply of credit to individuals (up to £15,000). The form and content of contracts covered by the Act are specified in great detail (up to the size of the lettering and colour of paper).

Failure to comply with these formalities usually means that the contract cannot be enforced against the individual consumer (although it can against the creditor).

5. An assignment of a "chose in action" (incorporeal personal property, such as a debt), is, according to the authors of the report, generally more effective and certainly easier to enforce if it is in writing and signed by the assignor.

Unsigned or oral assignments can, subject to exceptions, be enforced, but with more difficulty.

The assignment of certain kinds of choses in action is regulated by special statutes. The rapporteur cites patents, copyrights, bills of lading and life insurance policies.

568.

These examples lead to the conclusion that failure to comply with formalities leads to varied consequences, more serious in some cases than others.

The reason for some of the formalities mentioned is to prevent fraud. They are also imposed to protect those in weaker bargaining positions (e.g. individual consumers, protected by the Consumer Credit Act 1974, above).

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under Spanish law**

**a) obligations under commercial law**

569.

Limitation periods are governed by the Limitation Act 1980.

This provides that a breach of contract is actionable for six years from the date of breach.

Provided there is sufficient evidence of the contract being made and of its terms, this rule applies whether the contract was oral or in writing.

Deeds (i.e., documents under seal) are actionable for twelve years from the date of breach.

Documents should therefore be preserved until the expiration of these periods.

**b) obligations under tax law**

570.

The Value Added Tax Act 1983 <sup>(3)</sup> provides that the VAT Commissioners may require that records be preserved for a period which may not exceed 6 years.

---

<sup>3</sup> Schedule 7, Section 38, article 7

**c) obligations under customs and statistical law**

571.

Traders must preserve customs and excise records for a period not exceeding 6 years.

**d) obligations under social law**

572.

There would appear to be no particular requirements for preservation of personnel and welfare records under English law.

**Par. 2 - The preservation of records on computer media**

573.

The Value Added Tax 1983 expressly authorizes the recording of information for value added tax purposes on computer.

574.

Likewise the customs and excise authorities: the Finance Act 1985 provides that this obligation is satisfied where the computerized data are stored on magnetic disk or magnetic tape and:

- a) the data carrier is easily convertible into a readable form; and
- b) is made available to the customs and excise inspectors on request.

"Computer" is defined by reference back to the Civil Evidence Act 1968<sup>(4)</sup>.

---

4 See below, section 5

**Par. 3 - Penalties for failure to preserve tax and accounting documents**

575.

Failure to preserve such records for the time prescribed by the authorities may incur fines except where valid reasons exist

(lawful excuse, other criminal or civil sanctions relative to the same documents) <sup>(5)</sup>.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

576.

Signature is of little importance in English law, and in most cases consists simply of writing one's name in the most legible manner possible.

577.

Certain contracts, however, must be in writing in order to be enforceable.

Hence, a negotiable instrument such as a bill of exchange, cheque or promissory note must be signed to be enforceable.

Likewise contracts of suretyship or guarantee must be signed by the surety or guarantor to be enforceable against him.

Certain types of deed must be signed and sealed, and executed on special types of paper.

---

<sup>5</sup> See, for example, Finance Act 1985, section 10, subsection 10 (4), referring to section 75 of the Criminal Justice Act 1982 for penalties.

578.

Evidentially, signature per se is not a condition of admissibility. The document simply needs to be accompanied by sufficient proof of its authenticity ("genuineness of authorship"), except for

documents whose authenticity is presumed *juris tantum* from their form.

The authors consider that in many cases a stamped or lithographed signature would suffice.

The authenticity of a signature may, nonetheless, need to be proved, *inter alia* by oral testimony, the circumstances in which the document was signed, the age of the document (generally, thirty years, or less under certain statutes), by keeping in appropriate custody and regularity on the face of the document.

### **Par. 2 - The possibility of signing electronically**

579.

In the current state of English law, no provision exists in this respect. Electronic signature should pose no problems in the majority of cases, however, provided the origin of the document can be sufficiently proved from other elements or circumstances.

### **Par. 3 - Penalties**

580.

The rules on signature are not strict, however, and an unsigned contract will not be void *ab initio*.

Failure to observe certain formalities may lead to part or the whole of a contract being unenforceable, voidable or void *ab initio*.

Everything depends, however, on the particular contract and the particular formalities in issue.

## **Section 5.- Constraints arising from the law of evidence**

### **Par. 1 - The rules of evidence under English law**

581.

The English law of evidence is a wide and complex subject. Traditionally, the jury remains the keystone of the judicial system and court procedure remains essentially oral.

The essential role of the common law judge is to prevent the fundamentally influenceable jury falling into error.

To this end, the judge has wide discretionary powers enabling him to set aside elements capable of exerting too decisive an influence and hence prejudicial to either party.

Moreover, English courts (unlike the courts of some other European jurisdictions) have historically regarded the best evidence as that given orally by a witness present in court.

The authors of the present report illustrate this with an example: if a dispute arose as to whether a party's banker had received payment from the other party, the best evidence would be given by the banker himself or one of his employees, telling the court on oath that he had received payment.

The oral procedure is thus based on the hearing of witnesses who are subjected to direct questioning by the party calling them, then to cross-examination by the opposing party.

Witnesses may generally only testify from personal knowledge.

582.

The English law of evidence is governed by two fundamental principles: the Hearsay Rule and the Best Evidence Rule.

583.

The rule against hearsay provides that oral testimony - the main form of proof in English law - is admissible only where it emanates from a person with personal knowledge of what he is asserting, for he is the only person who can be usefully cross-examined.

Applied to written documents, the rule signifies that a document will not be admissible unless its author is present to give evidence of its content before the court.

584.

The "Best Evidence Rule", also called the "Original Documents Rule", states that in principle a document may be proved only by production of the original.

An exception to this rule is where the document is lost or destroyed, except in cases of fraud.

It has been held that secondary evidence of a document may be given by carbon copies, photocopies and handwritten copies. For these purposes, a signed copy of a document will be treated as a duplicate original.

Similarly, the Banker's Books Evidence Act 1879 permits a copy of the relevant entry in the books of the bank to be produced to the court instead of the document.

In this context "books" includes any form of data recording medium used by the bank in the normal course of its business, regardless of whether the information is stored thereon in writing, on microfilm, magnetic tape or any other form of magnetic or electronic recording (6.)

Statements reported in other types of document are also admissible without affidavit from the witness provided notice to this effect is given before the hearing commences.

---

<sup>6</sup> See section 9: Interpretation of "bank", "banker" and "bankers' book"

## Par. 2 - Application to electronic media

585.

As we have seen, the effect of the hearsay rule is that a document will be admissible only whether its author can be called to give evidence as to its content.

For a computer-generated document, the witnesses as to content would be the author of the document, the encoder and the computer, successively.

By the very nature of things, however, a computer is not susceptible to courtroom cross-examination as required by English trial procedure.

This rule, together with that requiring production of the original document, were thus major obstacles to the admissibility as evidence of documents transmitted by EDI.

586.

In an endeavour to adapt the English law of evidence to the exigencies of the modern world, the Evidence Act 1938 was repealed by the Civil Evidence Act 1968.

The effect of section 2 is to abolish the rule against first-hand hearsay, both oral and documentary and to place a much wider construction on the meaning of a document.

"Document" now includes:

- any map, plan, graph or drawing
- any photograph, including negatives, and microfilms
- any disc, tape or other device in which data are embodied so as to be capable of being reproduced therefrom <sup>(7)</sup>.

A party wishing to introduce hearsay evidence at a trial must serve notice of his intention to do so on the other party to enable that party to call the maker of the hearsay statement as a witness.

---

<sup>7</sup> See Civil Evidence Act 1968, s. 10-

587.

Section 4 deals specifically with records.

It provides that documents will be admissible as first-hand hearsay evidence where they form part of a record compiled by a person acting under a duty from information

- which was supplied by a person (whether acting under a duty or not) who had, or may reasonably be supposed to have had, personal knowledge of the matters dealt with in that information; or

- which, if not supplied by that person to the compiler of the record directly, was supplied to him by the compiler of the record indirectly through one or more intermediaries, each acting under a duty.

588.

Finally, s. 5 of the Civil Evidence Act 1968 applies specifically to computers and covers the cases where the abovementioned provisions do not apply because the computer-generated document does not originate in a document of which an individual has direct personal knowledge (such as transactions effected by automated teller machine).

In such circumstances, a document produced by a computer will be admissible as hearsay evidence if the following conditions are satisfied:

- the document was produced by the computer during a period over which the computer was used regularly to store or process information for the purposes of any activities regularly carried on over that period;

- that over that period there was regularly supplied to the computer in the ordinary course of those activities information of the kind contained;

- that throughout the material part of that period the computer was operating properly, or if not, that any respect in which it was not operating properly or was out of operation was not such as to affect the production of the document or the accuracy of its contents; and

- that the information contained in the statement reproduces or is derived from information supplied to the computer in the ordinary course of those activities.

Section 5 defines "computer" as any device for storing and processing information.

For the purposes of the Act, "computers" includes:

- a combination of computers;
- different computers operating in succession;
- different combinations of computers operating in succession. Additionally, s. 5 of the Civil Evidence Act states that evidence of a statement by virtue of the section may be given by a certificate identifying the document, describing the manner in which it was produced and giving such particulars of any of the foregoing conditions as may be appropriate.

589.

Similarly, the Criminal Evidence Act 1965 defines "document" to include any device by means of which information is recorded or stored.

The statute is clearly intended to encompass electronic data processing. Only the person supplying the information originally is required to have personal knowledge of it. The number of persons through whose hands the information passed before being recorded in the device is of little import.

590.

Note also that as regards the admissibility in evidence of computer-generated documents in matters of value added tax, the Value Added Tax Act 1983 expressly refers to sections 5 and 6 of the Civil Evidence Act 1968 for civil proceedings, and Sections 68 to 70 of the Criminal Evidence Act 1984 for criminal proceedings.

591.

There are, therefore, no impediments to the admissibility of computer-generated documents as evidence.

### **Par. 3 - Evidential weight of a computerized document**

592.

It is for the court to assess probative value having regard to all appropriate circumstances. There is no hierarchy of means of proof in English law.

### **Par. 4 - Concluding considerations on proof**

593.

The rules of evidence in English law seem relatively flexible.

There is no major impediment in English law to the development of electronic interchange of trade data.

## **Section 6. - Relations with the customs and tax authorities**

### **Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

594.

The Value Added Tax Act 1983 expressly provides that computer produced invoices are acceptable for the VAT Commissioners' purposes <sup>(8)</sup>.

Information furnished and documents produced by electronic means for the collection and enforcement of value added tax will be valid only where the person liable to tax has:

- first informed the inspector in writing at least one month before the document is furnished or produced;
- comply with the conditions fixed by the inspector.

The Inland Revenue and Customs and Excise authorities use preprinted official forms on which returns must be made.

Both bodies will, however, accept computer-produced returns provided prior authority has been obtained.

Similarly, a facsimile tax return is acceptable, but must be similar in format and contain the same information as the official form.

The taxpayer's details must be clearly distinguishable from the background text.

### **Par. 2 -Auditing of computer and electronic data interchange systems**

595.

The Customs and Excise Commissioners have wide powers of search for information.

They are authorized to exchange information with the Inland Revenue and similar authorities in European Community Member Countries.

Pursuant to the Value Added Tax Act 1983, Schedule 7, the Commissioners have power to demand access to and take copies of "documents".

"Document" includes any disc, tape, soundtrack or other device in which sounds or data (not being visual images) are embodied and any film (including microfilm), negative, tape or other device on which visual images are embodied so as to be capable of being reproduced therefrom.

596.

Pursuant to the same Schedule, an authorized person may apply to a justice of the peace for a "production order".

This allows him to obtain access to recorded information, take copies of it, make extracts from it, and remove or take away any part of it he deems necessary.

In relation to computers, he may have a visible and legible print-out in a form which can be removed <sup>(9)</sup>.

597.

Similarly, pursuant to s. 10 of the Finance Act 1985, where an authorized person has a right of access to any document he is also

entitled, at any reasonable time, to have access to any computer, associated apparatus or material (including software) used in connection with such a document.

This power extends to inspecting a computer, apparatus or material and checking its operation. In this regard, removal of documents under Schedule 7 can be made at a reasonable time and for a reasonable period where the authorized person considers this necessary.

The preamble <sup>(10)</sup> indicates that the above provisions were enacted for the express purpose of making good shortcomings in previous regulations. Prior to the enactment of the statute in question, the authority of customs and excise officers did not extend to the different media to which any contemporary government department must have access in the event of disputes over the levy of a tax or duty.

## **Section 7.- Conclusions of the survey of English law**

598.

The rapporteur considers that if restrictions on the movement of goods and services between countries within the European Communities are to be completely removed, the laws of the Member States must permit the uninterrupted free flow of commercial data between business entities in the EC and facilitate rapid and efficient business communications.

Moreover, as the electronic transfer of commercial data finds increasing favour with businessmen, national laws must develop to meet the demand.

---

<sup>9</sup> See Value Added Tax Act, s. 10 A (4)597.

<sup>10</sup> See Halsbury's Statutes Service: Issue 5,13 Customs 7

He also emphasizes that one important aspect of any legal development in the field of electronic data transfer may be to safeguard the confidentiality or privacy of information transferred, subject to proportionate measures to guard against use of transfer facilities for criminal purposes.

In conclusion, he considers that guidance or direction from the EC is likely to be helpful in encouraging the harmonization or approximation of the relevant national laws of Member States.

His opinion is that this may be particularly appropriate in this new field of activity where national laws may not yet have developed or fully developed to cover the areas of need and of potential dispute.

**CHAPTER 12: ANALYSIS OF THE LEGAL POSITION IN FRANCE<sup>(1)</sup>**

**Findings of the research into French law conducted by the law practice Dubarry, Gaston-Dreyfus, Lévêque, Le Douarin, Servan-Schreiber, Veil & Partners.**

**Section 1.- Lack of specific regulation in the matter**

599.

There is no particular legislation in France specifically concerned with the electronic interchange of commercial data.

**Section 2.- The scope for interchanging commercial documents by electronic means between economic operators.**

**Par. 1.- The transmissibility of commercial documents of all kinds (order forms, transport documents, documentary credits,...) by electronic means.**

**a) General principles**

600.

In principle, there is no reason why contracts should not be concluded by means of electronic data interchange.

---

<sup>1</sup> In an endeavour to preserve a consistent approach to the study as a whole, this chapter has been drafted by the authors of the study themselves on the basis of a preliminary report drawn up by Mr Pierre SERVAN-SCHREIBER.

**b) invoices**

601.

Subject to what will be said in sections 3 and 5 of this report, an invoice may be transmitted by electronic means in French law.

**c) General Conditions of Sale**

602.

General conditions may be sent by telecommunicative means under French law.

In such cases, however, the delicate question of proof of acceptance of those general conditions by the other party will arise. This, however, is a question of fact to be decided by the court on the circumstances of each case.

**d) contracts**

603.

There would seem to be no impediment in French law to contracts being concluded by electronic data interchange.

604.

The question then arises, however, as to the time and place a contract concluded by such means will be considered to have been formed.

There are two broad streams of thought on this matter in French jurisprudence and case law:

- the issue theory, which deems the contract made immediately the offer is accepted.

- the reception theory, which contends that the contract is formed only when the offeror is actually informed of acceptance. A dominant trend of thought states that the issue theory determines where the contract is made, while the reception rule applies to the moment at which the contract is formed.

**Par. 2 - Exceptions to the rule that documents are transmissible by electronic means**

**a) documents required to be authentic instruments**

605.

In French law, as in other national legal systems, the validity of certain documents is subject to requirements of form. By and large, these are the same contractual documents as mentioned in the Belgian report.

**b) instruments embodying an incorporeal right**

606.

**- Documentary credits**

French law requires banks to make payment only on physical production of certain documents.

Where a certain type of document is required, therefore, a computerized version will be inadmissible unless - and only unless - the principal has instructed the bank to pay on receipt of such a document.

In any event, the requirement for paper documents in documentary credit transactions seems unlikely to disappear for the time being.

607.

**- Bills of Lading**

Article 18 of the Act of 18 June 1966 concerning charter-parties and shipping contracts provides that the carrier or his agent shall produce a bill of lading at the request of the shipper. In the great majority of cases, this document will be proof of the existence of the shipping contract and the terms and conditions of its performance.

Furthermore, the rights to the goods are embodied in the document which constitutes the bill of lading: computerization of B/Ls thus raised the delicate problem of transmission of those rights.

608.

Endeavours have recently been made to find valid solutions to the problem - in the instance, the issue of computerized documents replacing the bill of lading.

Compagnie Générale Maritime (CGM) now offers shippers delivering goods to it for shipping the facility of using a document described as a "Data Freight Receipt" (DFR).

Use of this document dispenses with the need to produce a duly indorsed bill of lading at the port of destination, thus avoiding the potential delivery delays which might result from not having one.

This modern data transfer procedure thus allows goods covered by a DFR to be delivered at their destination once the consignee indicated by the shipper has been identified.

609.

Practically-speaking, the procedure is as follows:

- a DFR form is completed, containing all the information normally found in a bill of lading, signed by the shipping company on taking receipt of the goods and handed to the consignor, who has no need to send it to the consignee;
- the information contained in the DFR is sent by the shipping company to the port of destination over its own data communications system;

- the computer at the port of destination prints out an identical DFR document and an advice of arrival is forwarded to the consignee even before the ship arrives at its port of destination; - the consignee is thus able to take delivery of the goods immediately the ship arrives on presentation of the advice of arrival without waiting at the wharf.

The DFR and a bill of lading differ in one respect only: the bill of lading bears the word "original" and contains a box for the shipper's signature.

610.

The question remains open, however, as to the court's likely reaction when a carrier seeks to rely on the provisions of a DFR and the shipper contends that the document does not bear his signature.

No such case has yet come before the courts, but it seems likely to be deemed an inadmissible means of proof unless it identifies the shipper with incontrovertible certainty.

**Section 3.- Constraints arising out of tax, accounting and other obligations to preserve documents.**

**Par. 1 - The general obligation to preserve under French law**

**a) obligations under accounting law**

611.

The French Commercial Code, article 16, indent 2 <sup>(2)</sup> provides:

*"accounting records and supporting vouchers shall be preserved for ten years. Accounting records relating to the recording of transactions and the inventory shall be made out and kept without spaces or alterations of any description, in the manner prescribed by Order of the Conseil d'Etat" (Supreme Administrative Court).*

## **b) obligations under tax law**

612.

Article L82 of the Book of Tax Procedure provides that "books, registers, documents and accounting records which the tax authorities may require to be produced must be preserved for six years from the date of the last transaction entered in the books or registers" (...).

613.

The General Income Tax Code, Schedule 2, article 223-1° provides that the tax on which companies may operate deductions is that stated on the purchase invoices issued in their name by suppliers, specifying that no deduction may be made unless the company is in possession of such invoices.

### **Par. 2 - The preservation of records on computer media**

614.

In accounting matters, a Decree of 29 November 1983 <sup>(3)</sup> introduced an exception to the ordinary law rule concerning the requirement for a physical journal and balance sheet book with numbered, initialled pages, by permitting the use of written computerized documents, provided they were identified, numbered and dated immediately when prepared by means constituting the best possible evidence.

The law therefore sanctions the use of printed computerized documents, but not an entirely computerized system kept on no other medium than the computer's memory. Magnetic media and optical storage fall outside its scope, therefore.

Consequently, traders may keep computerized accounts, provided they are printed out subsequently.

This therefore represents an intermediate stage between traditional accounting, and fully computerized accounting.

---

<sup>3</sup> Commercial Code, article 2, indent 3.

615.

In April 1976, moreover, the National Accounting Board adopted a recommendation "applicable to the keeping of accounts on computers", subsequently adopted by the inland revenue authorities.

Article 3 of the recommendation states that:

*"All data must be attested by supporting vouchers in the form of a written document. Where data are handled by a process leaving no traces, they must also be evidenced directly in writing".*

Purchase invoices and all supporting vouchers must therefore be preserved in their original form. The essential requirement is that a written record should remain.

616.

Certain computer-generated documents may be used for filing and records, however, including computer output microfilm linked to a reliable coding system.

617.

The New Chart of Accounts <sup>(4)</sup> also provides that data processed by a method which otherwise leaves no record must also be evidenced by a comprehensible written document.

618.

In conclusion, computerized accounting systems - and thus computerized invoices - are legally admissible if, and only if, there is also writing in the form of a paper document produced by a printer from computer output.

This therefore represents an intermediate stage between traditional accounting, and fully computerized accounting.

---

<sup>4</sup> Order of 27 April 1982.619.

619.

Note finally that the National Audit Board have also considered the problem of computerized accounting systems in two regulations <sup>(5)</sup> establishing a series of accounting standards designed to assure the reliability and transparency of computerized accounting systems.

620.

Can invoices required by article 223-1 of the Income Tax Code be transferred by data communications?

The issuing of invoices is dealt with in article 289-1 of the same Code, which refers to an "*invoice or document serving thereas*".

The courts have construed that as meaning any document delivered to a customer bearing the prescribed information, regardless of whether the document be described as an account, delivery slip, commission note, cash voucher or other.

The problem of wholly computerized invoices has not yet come before the administrative courts and tribunals. It seems likely, however, in the light of what was said with regard to accounting, that the authorities would accept such invoices for the purpose of VAT deductions only where they were printed out in a hard copy form.

**Section 4.- Constraints arising from the obligation to sign documents.**

**Par. 1 - The obligation to sign documents**

621.

In all situations where French law requires writing, the written document must be signed. The two requirements are mutually inseparable.

---

<sup>5</sup> Recommendations No. 38 of 22 January 1976 and No. 73 of 7 July 1983.

**Par. 2 - The possibility of signing electronically**

622.

French law nowhere defines what is meant by a "signature".

The current trend in this area is fairly accommodating, and tends to accept an electronic stamp as no less reliable than a handwritten signature. It is, however, difficult in this respect to equate an electronic stamp with a handwritten signature (albeit the trend could be towards greater acceptance of a wider range of processes). Validity of an electronic stamp depends on its being the expression of an individual's personality and his acceptance of the content of the instrument. This has allowed new methods of authentication to emerge: passwords, barcodes, secret codes, access keys, etc.

A computer printout, moreover, may be assimilated to writing and hence signed like any other document.

Finally, an electronic signature might validly be an agreed method of proving the identity and consent of the signatory. Hence, the composition of an identification code and the following of a specified procedure would be treated as identifying and expressing the will of the creator of the document so identified.

**Section 5.- Constraints arising from the law of evidence**

**Par. 1 - Evidence under French law**

623.

Proof does not bear on the legal rule itself but on the event (legal act or fact) entailing the application of the rule <sup>(6)</sup>.

624.

The general rule, stated in article 1315 of the Civil Code, is that the burden of proof is on the person seeking to rely on it, who may not necessarily be the plaintiff in the action.

---

<sup>6</sup> New Code of Civil Procedure, articles 9 and 2.

There are statutory exceptions to this general rule, however, dispensing parties from having to establish every fact giving rise to the application of the legal rule they are relying on.

These exemptions may be express, as under article 2268 of the Civil Code (presumption of good faith), or be the implicit consequence of a statutory regulation. In either case, they are presumptions <sup>(7)</sup>.

625.

French civil law operates a dual system of evidence:

- proof of legal instruments is strict proof, i.e. the court is bound by certain so-called "decisive" forms of evidence (writing, admissions, decisive oaths)

- proof of juristic facts, on the other hand, is discretionary, and the so-called "circumstantial" forms of evidence (testimony, presumption from the facts, judicial oath) is acceptable.

626.

Article 1341 of the Civil Code prescribes the conditions to which proof of all legal instruments (unilateral and synallagmatic) is subject:

*"All matters in excess of a sum or value fixed by Decree shall be dealt with by deed executed by notary or under private seal and no testimony shall be admissible against or in addition to the content of such instrument nor as to what may be alleged to have preceded, been contemporaneous with or followed it, particularly where relating to a lesser sum or value".*

(The amount fixed by Decree is currently FF 5,000).

627.

Commercial legal instruments may be proved by any means.

---

<sup>7</sup> See below, same section.

## **§1. Decisive means of proof**

### **1°. Documentary evidence**

#### **A. Deeds.**

628.

#### **Authentic instruments**

Article 1317 of the Civil Code defines an authentic instrument as one drawn up by a public official (notary, counsel, process server, court registrar) entitled to execute legal documents in the place where the instrument was drafted in accordance with the prescribed formalities.

The origin of an authentic instrument may be contested only by a plea of forgery.

The statements contained in the instrument falling within the scope of the powers of the public official have probatory force until disproved as forgeries. By contrast, those made by private individuals have no probatory force until conclusively proved.

629.

#### **Copies of authentic instruments**

Article 1334 of the Civil Code provides that, where the original deed is still in existence, copies are evidence only of what is contained in the deed, production of which may still be required. This rule of prudence constitutes no obstruction where the original is still in existence.

Where the original cannot be produced, however, two distinct situations may obtain:

Where the deed has been destroyed by of act of God or accident, article 1348.4° of the Civil Code sanctions any means of proof. Where, however, loss of the original deed is attributable to another cause, the evidential value of the copy is determined by statute according to the manner of its reproduction.

Given the very real risk of fraud inherent in photocopies, the court must retain absolute discretion in assessing their cogency.

630.

Microfilms are prima facie evidence in writing.

631.

Certified true documents are afforded equal cogency with originals, except where the signature is disputed.

632.

### **Private deeds**

The general rule is that only one condition needs to be fulfilled for a written instrument containing a legal act to be recognized as a private deed: the handwritten signature of the parties.

Articles 1325 and 1326 of the French Civil Code, however, imposes particular conditions for two classes of instrument:

- written instruments evidencing synallagmatic contracts must be in as many originals as parties with distinct interests and the number of originals executed must be stated on each original (the so-called "duplicate" formality). A written instrument invalid as a private deed may still constitute prima facie evidence in writing.

- written instruments evidencing unilateral undertakings with regard to sums of money or a subject-matter to be counted, weighed or measured, must be signed by the promisor and mention the amount of the obligation in words and figures, written in his own hand.

A private deed has no evidential value unless and until admitted by the subscriber or verified by handwriting analysis. After such admission or verification, it will be proof of its contents until disproved as a forgery. It is proof of the agreement evidenced by it only until evidence to the contrary is adduced by all means open to the parties (article 1341 Civil Code) or by third parties.

It is evidence between the parties as to its date of execution, until disproved. It is proof of its date against third parties only when that date has been rendered certain by one of the events exhaustively listed in article 1328 of the Civil Code (registration, death of either party, engrossment in an authentic instrument).

633.

### **Copies of private deeds**

Certain copies meeting the conditions prescribed by article 1348.2° of the French Civil Code dispense with the need to produce the original of private deeds.

### **B. Other written instruments**

634.

### **Ordinary letters**

A signed ordinary letter merely referring to the legal instrument to be drawn up can only constitute prima facie evidence in writing.

By contrast, if it meets all the requirements of a private deed, it will constitute a private deed giving proof positive of a legal instrument.

The general rule is that ordinary letters do not constitute proof of a legal instrument. The French Civil Code, however, makes certain unsigned written instruments conclusive evidence: hence, a merchant's business books are evidence against him (article 1330 Civil Code); domestic registers and papers are proof against their authors in certain cases prescribed in article 1331 of the Civil Code.

### **2° Non-documentary evidence**

635.

### **Admissions**

An admission (article 1356 Civil Code) is an acknowledgement by one party of a fact likely to produce adverse legal consequences for him. A distinction is drawn between admissions made out of court (extra-judicial - informal) and admissions made during the course of proceedings (judicial - formal).

#### **- Judicial admissions**

These are proof against the person making them and bind the court. They are non-severable and irrevocable.

- Extra-judicial admissions

These are informal and have less probative force than judicial or formal admissions; consequently the court is not bound by them. Such admissions or confessions may be proved by any means where the fact sworn to is provable by discretionary evidence, or by decisive evidence in other instances.

636.

**Decisive oath**

These bind the court. A party to proceedings who has no evidence to prove his claim may require the other party to take the oath during proceedings. If the opposing party tenders the oath, that party succeeds. Refusal to tender the oath acts as an admission of the merits of the other party's case.

**§2. Indirect means of proof**

637.

**Testimony**

Testimony (arts. 1347 and 1348 Civil Code) comprises statements made by a person under oath during proceedings as to what he saw or heard relevant to the issue, i.e. matters capable of having influenced his decision. This method of proof may be admitted to corroborate what is known as prima facie evidence in writing (i.e., a written instrument not made to evidence a legal act or which, if made for such purpose, is void for lack of form).

638.

**Presumptions of fact**

Such presumptions are a matter for the discretion of the court, which is not compelled to apply them but may admit them on the same grounds as testimony.

639.

### **Judicial oath**

This is administered by the court to one of the parties. It is never bound by them.

The court may only administer such an oath to corroborate prima facie evidence or to fix the magnitude of a penalty which has already been decided.

### **Par. 2 - Application to electronic media**

640.

Electronic data processing processes and restructures information, thus making any restitution at the moment an element of proof is sought necessarily a copy in the strict sense of term.

The question as to whether it is a probative copy within the meaning of the Civil Code is dealt with by article 1334, which provides that "where the original instrument is still in existence, copies are probative only of the content of that instrument, production of which may be required at any time". Their legal cogency is thus extremely uncertain.

By contrast, the authentic, durable copy referred to in article 1348, indent 2, is of far greater evidential weight. An article 1348 copy thus replaces the original, and the conditions in which it is made endow it with a degree of reliability virtually equivalent to the original. Computer-generated documents may be handled in such a way as to cease meeting the "faithfulness" criterion prescribed by article 1348.

At the present time, only one single process for the reproduction of electronic data would seem to offer the requisite quality assurances - the Computer Output Microfilm (COM) system which the French standards authority AFNOR accepts as a true and faithful copy. The distinguishing feature of COM is that the microfilm is not a reproduction of a physical document, but translates into a visible, intelligible form the information contained on a computerized data carrier.

**Par. 4- Final considerations on evidence**

641.

The French law of evidence accommodates computer and telecommunicative transfer of commercial data. If it does not go further in affording complete probative force to computer-stored commercial data, that is because the state of the art in electronic data processing offers no incontrovertible guarantees of reliability.

642.

Article 1341 of the Civil Code is subject to a series of qualifications and exceptions, including the impossibility of constituting a written instrument and the existence of prima facie evidence in writing.

643.

Further, as we have seen, the system of proof is not a matter of public policy, and the parties may consequently make other arrangements.

644.

Finally, the area of commercial law as a whole is subject to discretionary proof, such that the strictly hierarchical system of documentary evidence has only a very minor impact on the various transactions which can be effected by telecommunicative means.

**Section 6. - Relations with the customs and tax authorities**

**Par. 1 - Transmission of data to customs and tax authorities by electronic data interchange**

645.

Article 223-1 of Schedule II to the French General Income Tax Code provides that persons taxable to VAT may exercise their right to deduct only if they are in possession of an invoice issued by their supplier stating the amount of tax applied to the goods in question.

To date, no completely computerized invoice transferred by electronic data interchange has been accepted as deductible.

646.

The French customs authorities have established a computerized system for the handling of international cargo which separates the processing of goods from that of the accompanying documents.

This system, initially restricted to air cargo was brought into more general use with the introduction of the system for the handling of international freight by computer (SOFI) by the Order of 28 December 1977 <sup>(8)</sup>.

The system allows a declarant to make his customs declaration in the form of a coded message from his computer terminal to the SOFI system. After checking, the declarant sends a validation message and is advised by SOFI that his declaration has been accepted and hence registered within the meaning of article 99-1 of the Customs Code.

This initial declaration is later corroborated by a supplementary declaration.

There are nonetheless formal requirements which have not yet disappeared from customs law; hence, goods may not be collected until a declaration has been filed and may also be contingent on checking of the items submitted.

---

<sup>8</sup> Amended by the Order of 17 January 1979.

A draft resolution currently before the Customs Cooperation Council aims to facilitate to the utmost the use of computerized transmission of customs declarations to the authorities by electronic or other automatic means (such as on magnetic tape, floppy disks, modems) and the admissibility of such data in legal proceedings.

**Par. 2 - Auditing of computer and electronic data interchange systems**

647.

Computerized accounting systems also present problems with regard to tax inspection, due to the problems involved in accessing the information contained in them.

Article 54 of the French General Income Tax Code provides that where accounts are kept on a computerized system, documents pertaining to the analysis, programming and running of programmes may also be inspected.

Finally the General Income Tax Code, article 38 d A-D Schedule III, prescribes that the times and dates of inspections must be so arranged as to be compatible both with the normal working of the company's computer system and the authorities' exercise of its right of inspection.

648.

The French tax authority requires computerized bookkeeping to be transparent (evidenced by supporting vouchers).

Such, at least, is the import of the memorandum issued on 10 November 1976 based on National Accounting Board standards to enable computerized accounts to be audited and their reliability assured.

This memorandum provides, inter alia, that the business manager and chief accounting officer must make the necessary provisions to assure transparency by:- compiling a file of documents;

- keeping files;
- preserving changes to programs;
- making hardware available to auditors and
- facilitating the audit tests.

649.

Article L81 of the Book of Tax Procedures, as amended by the 1983 Finance Act, allows the tax authorities to call for disclosure of the company's records regardless of their nature - which therefore includes those stored on magnetic media.

**Section 7.- Conclusions of the survey of French law**

650.

French law is slowly if hesitantly adapting to the transfer of commercial data by computerized and telecommunicative means.

In most cases, the changes are being wrought through recommendations rather than mandatory legislation.

Over and above these national actions, there is a perceptible need to move towards international regulation leading to harmonization of legal systems.

**CHAPTER 13: A NORTH AMERICAN EXAMPLE: THE CONSUMER CREDIT PROTECTION ACT**

651.

The authors of the survey feel it may be of interest to mention, as an example of a scheme already in operation, the Consumer Credit Protection Act, better known as the Electronic Funds Transfer Act, passed by the U.S. Congress.

The full text can be found in Appendix 54.

652.

This legislation was the first of its kind to be enacted.

It contains a number of interesting provisions meant to protect the user of an EDI network, such as defining the conditions of enforceability governing these operations in general, the limited responsibility of the user, and so forth.

653.

Its most significant feature largely lies in the way in which it shifts the burden of proof from the user onto the network operator.

It is basically for the network to prove that an electronic transfer of funds made erroneously was actually authorized by the user, with the user having no obligation to prove the contrary.

If the transfer was indeed not authorized, it still remains for the network to prove that the law's (particularly restrictive) conditions governing the user's responsibilities have been met.

654.

At the same time, the act sets forth several relatively flexible evidentiary requirements:

- the user has a definite right to produce any written evidence pertaining to any transaction made by him;
- any document meeting legal requirements which is transmitted to the user over the network in the course of a transaction may be admitted as evidence.

This, however, does not constitute prima facie evidence that the transaction was carried out correctly.

273-274

## **Part Two**

### **"Horizontal" analysis**

## Chapter 1: The regulatory position in the twelve Member States

655.

In this area, as in many others, advances in technology have considerably outpaced developments in the law.

Few Member States have already evinced the intention to adapt their legislation to the now firmly-established use of computers in business.

Even fewer, a fortiori, are the Member States who have sought to adapt their regulations to the increased use by businessmen of the computing application represented by electronic data interchange.

656.

Indeed, the survey conducted by the authors of the present study among the twelve Community Member States revealed only one single regulation specifically and expressly concerned with electronic data interchange.

We refer to the Italian regulation <sup>(1)</sup> organizing a public E-mail service, prescribing the conditions in which documents transferred electronically via this public service will have probative force.

---

<sup>1</sup> cf, supra: Part One, Chapter 7: Findings of the survey conducted into Italian law, Section 1.

657.

Other regulations reported in the survey deal with electronic data interchange only indirectly.

They aim either:

- to prescribe the conditions in which a computerized record will be admitted as evidence for the purposes of law and be endowed with the same evidentiary value as the originals of which they are presumed to be the faithful reproduction or record <sup>(2)</sup>, or

- to facilitate the keeping of accounts on a wholly computerized data carrier and to prescribe the conditions subject to which the documents or information on which those accounts are based may be stored solely on a computer medium <sup>(3)</sup>, or

- to enable tax returns and customs declarations to be made by data communications or using computerized media <sup>(4)</sup>.

658.

Outside of the areas covered by these regulations, and of necessity where no such regulations exist, the matter is generally governed by the ordinary law of the land as interpreted - often liberally - and updated by the Courts and Tribunals and by the sometimes codified Practices of national government departments <sup>(5)</sup>.

---

<sup>2</sup> cf, supra: Part One, Chapter 8: Findings of the survey conducted in Luxembourg, Section 1 and Chapter 11: Findings of the survey conducted in the United Kingdom, Section 1;

<sup>3</sup> cf, supra: Part One, Chapter 1: Findings of the survey conducted in the F.R.G., Section 1; Chapter 6: Findings of the survey conducted in Ireland, Section 1; Chapter 8: Findings of the survey conducted in Luxembourg, Section 1; and Chapter 12: Findings of the survey conducted in France.

<sup>4</sup> cf, supra: Part One, Chapter 6: Findings of the survey conducted in Ireland; and Chapter 11: Findings of the survey conducted in the United Kingdom, Section 1;

<sup>5</sup> see, for example, the leeway allowed by certain tax authorities over a number of years in certain Member States with no specific regulations over the question of completely computerized accounting systems.

**Chapter 2:                    Legal obstacles to the development of electronic data interchange - Typology of constraints**

659.

Setting aside the issues of data security and confidentiality referred to in the introductory chapter to this study, which were expressly excluded from the terms of reference set for it, the principal legal impediments to development of electronic data interchange result from:

- a)        the obligation (where imposed) to make out, produce, send or preserve signed paper documents (Section 1);
- b)        the evanescence of information sent by electronic data interchange and the consequent difficulty of adducing proof of what has been transmitted (Section 2);
- c)        finally, the difficulty of determining the moment and place at which the transaction effected by electronic data interchange takes place (Section 3).

**Section 1: Potential constraint No. 1: the obligation to make out, produce, send or preserve signed paper documents.**

660.

There are many reasons for such an obligation, not all encountered to a uniform extent in the different Community Member States.

661.

While any generalization and classification are subject to exceptions, it can be said that writing is generally required:

- wherever it is a condition of validity of the legal transaction of which the writing is the vehicle and failure to comply with the requirement either avoids the act or deprives it of all effect in law;

- whenever writing is necessary as valid proof of a legal transaction or fact.

662.

In this section, we shall consider only the former of these two obstacles, namely that deriving from the requirement of writing as a condition of validity of a legal transaction.

The role of writing in the law of evidence will be considered in greater depth in section 2 of this chapter.

663.

The requirement of writing as a condition of validity of a legal transaction clearly represents an absolute a priori impediment to the development of EDI. Electronic data interchange cannot be used to accomplish legal transactions for as long as this remains a requirement.

664.

The survey conducted in the twelve Member States of the European Community did, however, confirm our working hypothesis that national laws governing transactions in goods and services and the movement of persons - among the Community's paramount concerns - were, in the final analysis, relatively little hidebound by formalism.

The need for a paper document and/or a paper document bearing a handwritten signature or authentication between businessmen likely to be directly concerned by the development of electronic data interchange seems to be the exception rather than the rule.

665.

All evidentiary problems aside (they will be considered in the following section of this chapter), no formalities are stipulated in any Member State for the making and sending of invoices, order forms, general conditions of sale, or even for concluding the majority of routine transactions.

666.

Where general conditions of sale are concerned, the principal problem - that of their enforceability - would seem to have been solved in the same manner in the national legislations of all Member States: the question of whether it can reasonably be inferred from the circumstances that the party against whom they are being enforced had the opportunity to take cognizance of them beforehand and can be presumed to have waived his right to object to all or any of them is a question of fact for the judge alone.

667.

In Italian law, however, certain conditions of sale (described as "oppressive" conditions) must have been expressly accepted in writing by the contracting party against whom they are being enforced <sup>(6)</sup>.

---

6 Article 1341, Italian Civil Code

The following clauses are considered as "oppressive", for example:

- clauses limiting the vendor's liability
- clauses entitling a party to terminate a contract unilaterally
- clauses restricting a party's right to object to exemptions
- clauses restricting freedom to contract with third parties
- clauses permitting tacit extension of the contract
- arbitration clauses
- clauses excluding the jurisdiction of the courts and tribunals.

668.

The survey also revealed other exceptions to the formalist tendency of the various legal systems referred to above, however.

These exceptions are listed in section 2, paragraph 2 of each of the first twelve chapters in Part One of this study.

669.

The exceptions in question vary between Member States.

Writing is not required for the same type of transaction in all countries.

Even where it is, the purpose for which writing is required is not necessarily the same in all cases. Hence, writing for the accomplishment of a particular type of legal transaction may be required "ad probationem" (for evidential purposes only) in certain Member States, and "ad solemnitatem" (as a condition of validity) in others.

670.

Using an initial, what might be described as teleological, classification criterion, it could be said that writing is required "ad solemnitatem":

- a) whenever a legal transaction is required to be enforceable against third parties; the desired effect is then also generally achieved by a supplementary operation of authentication and/or registration of the written instrument so constituted;

- b) wherever an incorporeal right is embodied in an instrument and the transfer of that right is dependent on physical delivery of the instrument itself;
- c) for all acts in solemn form (instruments of process, etc...);
- d) in circumstances where the legislative intent is to protect a category of citizens considered inherently at a disadvantage.

671.

Continuing our endeavours to systematize our findings, but here in accordance with a different criterion - which this time might be described as sectoral - we found that writing "ad solemnitatem" was required to accomplish operations in the following areas:

- a) the sale, and certain types of hiring, of buildings <sup>(7)</sup>;
- b) certain types of sale to private consumers <sup>(8)</sup>;
- c) transport <sup>(9)</sup>;
- d) credit <sup>(10)</sup>
- e) certain methods of payment <sup>(11)</sup>;
- f) sureties <sup>(12)</sup>;
- g) management and supervision of companies <sup>(13)</sup>;
- h) the settlement of disputes <sup>(14)</sup>;
- i) the transfer of certain incorporeal rights <sup>(15)</sup>.

672.

Two further exceptions should be added:

---

7 sales of buildings require an authenticated and/or registered written instrument; in certain Member States, a lease for more than a certain term of years must be registered

8 e.g.: instalment sales, sales concluded in the purchaser's home

9 titles of transport and documents accompanying goods must always be in writing

10 particularly consumer credit

11 like bills of exchange, cheques,...

12 surety is never presumed: it must always be express

13 ownership of company property and significant acts of management are often required to be in writing

14 arbitration agreements and/or arbitration clauses must be in writing in a number of Member States

15 debts can only be transferred in writing: in the netherlands, transfers of intellectual property rights must have been agreed in writing.672.

- under Irish law, a contract which is not to be performed within the year must be in writing;
- under Spanish law, an agreement made in a foreign country where writing is required must be made in writing to be enforceable in Spain, even where Spanish law would not require the same type of transaction to be executed in writing.

673.

As regards real property, it should be noted that writing "ad solemnitatem" is generally required only to make the transfer of title in the property enforceable against third parties, and that the transfer is valid between the parties even where not evidenced in writing.

**Section 2: Potential constraint No. 2: obstacles arising out of the requirements of proof**

674.

The undeniable advantage of electronic data interchange, like that of data communications, is that it helps expedite legal transactions.

The drawback is evanescence: words appear and disappear, making it difficult to perpetuate a record of what has been exchanged <sup>(16)</sup>.

675.

The law of evidence in the Community Member States has been influenced by both considerations.

676.

Sadly, what has resulted has not been a consistent, Community-wide development.

While exceptions may be found to any generalization, it would appear that a valid distinction can be drawn between the Anglo-Irish law of evidence and so-called "continental" forms of proof.

---

<sup>16</sup> B. Amory and Y. Poulet, *Le droit de la preuve face à l'informatique et à la télématique: approche de droit comparé*, in *Droit de l'informatique*, Story-Scientia, Librairie Générale de Droit et de Jurisprudence, 1985, No. 5, p. 15.

## **Paragraph 1 -The development of the "continental" law of evidence**

### **A - Positioning of the problem**

677.

In continental law, the development of electronic data interchange is impeded by the paramountcy of writing and the generally uncertain evidentiary value attached to "copies".

Now the recording of data on computer media and the transcription of the magnetic pulses on computer-generated documents undeniably produce nothing more than "copies".

678.

The requirement for a signed original in "continental" law generally has either or both of two objectives in view:

- furnishing the parties with evidence admissible in court;
- furnishing evidence for accounting and/or tax purposes.

679.

In either case, it is generally accompanied by the requirement to preserve the proof thus constituted for the limitation period relative to the legal proceedings in which the evidence may be adduced, or for the period during which the administrative, tax or other authorities are entitled to call for its production.

680.

The extent of the duty to preserve proof, and the time for which it must be conserved, vary considerably between fields of law and Community Member States.

## **B - procedural law**

681.

Happily, even statutes enshrining the principle that a transaction will be unenforceable in proceedings unless evidence in writing permit of numerous exceptions.

682.

Hence, writing is generally unnecessary where the transaction relates to small sums of money.

Most transactions conducted via ATMs or POS terminals, together with inquiries of data banks, may therefore be proved by any means.

683.

The obligation of writing is also generally considered a civil law obligation not applicable in commercial matters where no methods of proof are prescribed and the court consequently has discretion to admit such evidence as it deems fit.

The requirement for writing is thus felt less acutely in business data communications than in consumer information services. The former often involves direct relations between businessmen, while the latter, in the majority of cases, involves relations between traders and non-traders. The latter are thus considered "hybrid" transactions, the method of proof to be used depending on the capacity and status of the defendant.

684.

The principle that transactions must be evidenced in writing is also generally viewed as a non-essential requirement.

It may therefore be excluded, for example, by an agreement on proof stating that all legal transactions operated over the network may be evidenced by any means available under law.685.

685.

In the legal systems of certain Member States, the requirement for writing "ad probationem" may be waived if the party alleging a fact has been unable to secure documentary evidence of the obligation contracted towards him, or where prima facie evidence in writing exists.

Note in this regard that the impossibility of constituting written evidence has generally been used in the case law and doctrine of Member States where the requirement of written evidence still obtains and where specific regulations are lacking, as the only way of adapting the law of evidence to the increased use of computing and data communications by businessmen.

Furthermore, those Member States who have passed specific regulations in general have done no more than ratify the de facto developments of case law <sup>(17)</sup>, <sup>(18)</sup>.

686.

The Grand Duchy of Luxembourg, however, has widened the scope of the exception:

*"... where either party or the custodian has failed to preserve the original documents and instead offers micrographic reproductions and computer-stored recordings made from the originals by the person in whose custody they were.*

*Such reproductions and recordings shall have the same probative value as the privately executed instruments of which they are, unless proved otherwise, presumed to be faithful reproductions or recordings, where the originals have been destroyed according to a properly followed management procedure and where they comply with the provisions of a Grand Ducal Regulation."<sup>(19)</sup>*

---

17 Cf, Act of 12 July 1980

18 Cf, Act of 22 December 1988 on evidence of legal transactions

19 New Article 1348 of the Luxembourg Civil Code as amended by the Act of 22 December 1986 on evidence of legal transactions.687.

687.

The conclusions to be drawn from the preceding considerations are that:

a) in Member States like Luxembourg where specific legislation has been passed to admit computer records as proof in legal proceedings and to confer on such records the same probative force as the document of which it is presumed to be the reproduction, the law of evidence has ceased to be an obstacle to the development of electronic data interchange;

b) in other Community Member States with no specific regulation, where the requirement of a written instrument for the purposes of proof is not regarded as an essential requirement, private sector experiments with electronic data interchange have been and are in a position to develop further through the use of agreements which may take the form of a general rule applicable to all the legal transactions operated over the network and containing a clause relative to proof;

c) finally, the analysis of the so-called "continental" laws of evidence suggests that the very principle of a signed written document (instrumentum) required as evidence of a legal transaction is subject to so many exceptions as to make it ultimately applicable to very few data communication transactions.

688.

The requirement of writing "ad probationem" would therefore pose problems in continental law only in isolated cases such as credit (particularly consumer credit) and insurance (a policy not made in writing is generally unenforceable against the insurer).

### **C - In accounting and tax law**

689.

However, the study of the obligation to keep and preserve documents for accounting and/or tax purposes leads to entirely different conclusions.690.

690.

Admittedly, certain Member States have either demonstrated administrative tolerance <sup>(20)</sup> in this area or so amended their legislation to allow accounts to be kept and the supporting vouchers for those accounts to be preserved wholly on computer, or for submitting tax returns on computer media <sup>(21)</sup>, or admitting either or both under specific agreements with the administrative authorities <sup>(22)</sup>.

691.

In States where such is not the case, however, the perpetuation of the obligation to keep written accounts, or at least the continuing absolute obligation to preserve accounting records on paper, clearly operates as a barrier to the development of electronic data interchange.

Hence, in Danish law, for example: the lack of formal requirements allows invoices to be transferred by electronic means; however, the information of which it is presumed to be the proof can be taken into consideration for accounting and/or tax purposes only if the original or a certified true copy on paper is preserved in the accounting records. This last, exclusively accounting, requirement is thus prejudicial to the transmissibility of invoices by electronic means.

692.

Note in conclusion that in the majority of legislative systems where practice allows documents to be preserved on microfiche or computer media, the originals must generally be conserved for a certain period, and computer-stored documents must be able to be rendered "readable" at any time by linking the computer up to a printer producing a paper print-out.

---

20 such, for instance, is the position in Belgium

21 Cf, for example, new Article 11 of the Luxembourg Commercial Code as amended by the Act of 22 December 1986 on evidence of legal transactions, and articles 238, 239 and 257 of the German Commercial Code.

22 such, for instance, is the case with Italy.

**Paragraph 2 -The development of the Anglo-Irish law of evidence**

**A -Positioning of the problem in procedural law**

693.

Although particularly complex, the Anglo-Irish law of evidence is governed by two basic principles: the Hearsay Rule and the Best Evidence Rule.

694.

The Hearsay Rule provides that a document is inadmissible as evidence unless its author is available to give oral evidence of its content to the court or tribunal.

695.

The Best Evidence rule states that, in principle, only the original of a document will be admissible as evidence.

But the print-out produced by a computer linked to a printer is no more than a transcription of the information stored in the computer. Doctrine and case law would thus consider it as no more than a "copy".

696.

Both rules therefore constitute major obstacles to the development of electronic data interchange.

## **B -Development of the law of evidence in legal proceedings**

697.

Happily, a 1968 statute in the United Kingdom - the Civil Evidence Act - introduced not only new provisions to attenuate the effects of the Hearsay Rule, but also provisions specifically concerned with computer-generated documents.

While these provisions unquestionably represent a major step forward, they have attracted fierce criticism, directed chiefly at the definitions they contain and the conditions of admissibility they prescribe.

698.

By contrast, Irish law has undergone no such development. Failing any agreement between the parties on the import and content of a particular document - including a computer-stored one - oral evidence will still be required of the person who prepared it, except in a few isolated instances.

## **C - In accounting and tax matters**

699.

In both Ireland and the United Kingdom, specific regulations have been enacted to permit the computerization of accounting records.

700.

However, this possibility still remains subject to the prior agreement of a Revenue Commissioner in Ireland.

701.

In both Irish and English law, the possibility remains subject to strict conditions imposed by the Tax Commissioners aimed at assuring the reliability of the computer-generated information and its inspection and auditing by the authorities.

**Section 3: Potential constraint No. 3: the difficulty of determining the moment and place at which the transaction effected by electronic data interchange takes place**

702.

The issue on which solutions have varied most between Community Member States and between areas of law is unquestionably that of determination of the time and place at which transactions effected by electronic data interchange are made.

What is more, the solution is generally the product of case law and doctrine within each Member State.

The problem is compounded by the fact that the two do not always concur in the views expressed.

703.

However, the approach adopted within each Member State is broadly the same.

A contract or other transaction can be concluded by electronic means wherever writing "ad solemnitatem" is not required.

The moment and place at which the transaction is completed will then be determined by reference to rules applicable to the formation of contracts by parties not in one another's presence.

704.

The theories applied here are:

- the expedition theory, which holds that the contract is formed at the time and place when the offeree sends his acceptance of the offer to the offeror;
- the reception theory: the contract is concluded when and where the offeree receives acceptance of the offer;
- the information or acceptance-information theory: the contract is formed when and where the acceptance of the offer actually comes to the offeror's notice.

705.

An examination of the various national reports would not seem to indicate that a distinction needs to be drawn between messages exchanged directly from computer to computer, and messages exchanged via a VANS or other intermediary.

Broadly-speaking, it all depends on the nature of that intermediary's intervention.

Hence, in German law, where the reception theory obtains: if the intermediary is no more than a messenger (Boten) the contract is deemed concluded when and where the real offeree receives the acceptance.

293-294

**PART THREE**

**CONCLUSIONS OF THE STUDY**

I.

706.

As the Commission of the European Communities' White Paper on Completing the Internal Market <sup>(1)</sup> repeatedly makes clear, the unimpeded flow of information between economic operators and Community Member States is a sine qua non of freedom of movement for goods and services and the growth of cooperation between businesses across Europe.

707.

Despite the unquestioned burgeoning of interest among economic operators in electronic data interchange, this is an area where Europe still lags comparatively far behind.

This gap is partly explicable by unresolved problems of a technical and/or computer science, not to say sociological-developmental, order.

Another part of the reason lies in as yet unsurmounted legal obstacles.

708.

The task assigned to the authors of this study was to look in general terms for solutions to the legal problems likely to hold back the development of electronic data interchange of business information.

The first requisite in carrying out this task was to compile an inventory of obstacles remaining in force throughout the twelve Member States, notwithstanding any adaptation of those laws to technological advance and international law, going on to construct a typology of these restrictions.

---

<sup>1</sup> COM (85) 310 final of 14.06.1985.

## II.

709.

The rationale employed to this end by the authors of this study was to use their knowledge and experience of the national laws of the Community Member States to compile a sort of hypothetical inventory of legal obstacles which it was assumed a priori might impede the development of electronic data interchange.

A systematic stocktaking of all the legal obstacles actually remaining in force within the legal systems of all twelve Member States would, in the authors' opinions, have been an overly protracted approach to take.

The theoretical inventory was then used as a basis for a questionnaire circulated to national subject specialists. The answers to the questionnaire furnished us with the means to check, correct, and above all refine and clarify our typology.

## III.

710.

This process once completed, it emerged that the legal obstacles to the development of electronic data interchange chiefly result from:

- a) the obligation imposed in certain, often different, areas of law in each of the Community Member States, to make out, issue, send or preserve documents on signed paper media;
- b) the transience of information transmitted by electronic data interchange and the consequent difficulty of producing evidence of the transaction;
- c) finally, the difficulty of determining the moment and place at which the transaction effected by electronic data interchange was concluded.

#### IV.

711.

The obligation to furnish a written document appears an insurmountable hurdle when made a condition of validity of the legal act to be accomplished and when failure to comply with this requirement as to form will (as in every case) either result in the act itself being rendered void or wholly unenforceable in law.

712.

The survey did, however, substantiate the authors' initial premise, namely that, in the final analysis, the laws of the various Community Member States were relatively little concerned with formal requirements.

The need for a deed under private seal, authenticated deed, or registered written instrument in dealings between economic operators likely to be concerned by the development of electronic data interchange and in areas pertinent to the attainment of the objectives stated in the White Paper referred to above would seem to be the exception rather than the rule.

713.

While they may, statistically-speaking, constitute the exception rather than the rule, it is a fact that requirements do remain for certain matters to be enshrined in writing *ad solemnitatem* and, what is more, in a variety of ways in each of the twelve Member States' legal systems.

714.

From their initial effort at systematization, the authors of the study discerned that a written document was required in the municipal law of the Member States:

a) whenever a legal transaction between parties needs to be enforceable as against third parties;

- b) whenever a right is incorporated in a document conferring title and the transmission of that right involves the physical transfer of the document of title itself;
- c) for the due execution of all acts solemn instruments or formal acts (legal process,...);
- d) whenever the legislative intent is to protect a particular category of persons of "limited" capacity.

715.

Further systematization likewise showed the authors of the study that:

- a) the areas in which writing was required ad solemnitatem (to validate the act or prevent it being void - Tr.) are generally not the sort of transactions in which the average economic operator, at least, is habitually involved in or have but little impact on the attainment of Community objectives;

such in particular is the case with written documents required for the purposes described under indents a), c) and d) of the preceding paragraph;

- b) in areas where writing ad solemnitatem is required solely in order to render the agreement enforceable against third parties, an agreement valid solely between the contracting parties can generally be made by electronic data interchange, it merely remaining for the parties to have their computer output subsequently authenticated or registered in order to render their agreement enforceable as against third parties.

The authors consider this combination of facts warrants their not treating the solution of the problems deriving from the requirement of writing ad solemnitatem as a priority need.

716.

In three areas, however, the continuing need for a duly executed written record constitutes a major impediment: transport, means of payment and settlement of disputes.

717.

The chief obstacle in the transport field arises out of the embodiment of the rights and obligations of the sender and recipient of the goods, and the carrier, in a written memorandum (bill of lading, waybill,...) and the need for physical delivery of this document to assure the transfer of the rights and obligations embodied in it.

The resulting disadvantages make it essential that the "electronic bill of lading" first used in Europe - if our information is correct - by the Compagnie Générale Maritime in France under agreements with its users and/or concerted practices, be developed or brought into general use.

To the best of our knowledge, neither these agreements and/or concerted practices yet appear to have been tested before the courts.

The fact remains, however, that the necessary adaptation of the rules governing title documents to electronic data interchange merits being the subject of regulation at European level.

718.

As regards means of payment, three forms of payment in particular suffer the drawbacks of the need for a written paper document: cheques, bills of exchange and documentary credits.

Cheques, indeed, are falling increasingly out of favour with banks and users themselves, who prefer electronic or magnetic means of payment.

The bill of exchange has particular drawbacks for traders which might consequently warrant the introduction of an "electronic bill of exchange". Since these are private instruments, the adoption at Community or international level of new regulations adapted to advances in technology would seem called for.

Finally, documentary credits make extensive use of the technique of local correspondents and inter-bank communications. Therefore, priority action at Community level would not seem warranted.

Finally, on a more general level, banking practice in electronic funds transfer has developed to such an extent, notably through the action of the SWIFT network, that, except as regards bills of exchange, we see no need to envision priority action in the field of methods of payment.

719.

In the area of settlement of disputes, the authors considered three points warranted particular attention: the choice of applicable law, choice of jurisdiction and the arbitration clause.

All three are dealt with in Conventions adopted at Community or European level.

720.

The choice of applicable law in fact no longer poses a problem with regard to the need for writing since the adoption of the Community Convention on the Law Applicable to Contractual Obligations concluded in Rome on 19 June 1980, the scope of which has been extended to the new Community Member States.

Article 3, paragraph 1, of the Convention provides that:

*"A contract shall be governed by the law chosen by the parties. The choice must be expressed or demonstrated with reasonable certainty by the terms of the contract or the circumstances of the case. By their choice the parties can select the law applicable to the whole or a part only of the contract."*

721.

Choice of jurisdiction clauses pose problems only in relations with non-traders.

Article 17 of the Community Convention on Jurisdiction and the Enforcement of Judgements in Civil and Commercial Matters concluded in Brussels on 27 September 1968, the scope of which has subsequently been extended to the new Community Member States provides that:

*"Where the parties, at least one of whom is domiciled in the territory of a Contracting State, agree that any differences between them arising out of a given legal relation shall be referred to a court or courts of a Contracting State, that court or the courts of that State shall have sole jurisdiction. The agreement assigning jurisdiction must be concluded in writing, or verbally and evidenced in writing or, in international trade, in a form acceptable to custom and practice in that trade with which the parties are or are deemed to be acquainted (...)."*

Private agreements which may take the form of a general rule applicable to transactions transmitted over a network may embody custom and practice in a trade.

By contrast, writing is always necessary if a jurisdiction clause is to be relied on against a non-merchant.

Note also that exclusive jurisdiction rules applicable to non-merchants have been enacted, notably in article 13 of the aforementioned Brussels Convention.

We do not, therefore, feel that priority action need be contemplated in this area.

722.

On the question of arbitration, article I, 2 of the European Convention on International Commercial Arbitration concluded in Geneva on 21 April 1961 defines the arbitration agreement as:

*"either an arbitration clause included in a contract, or a contract or special agreement signed by the parties or contained in an exchange of letters, telegrams or communications by teleprinter and, in relations between countries to the arbitration agreement whose laws do not require the arbitration agreement to be in writing, any agreement concluded in forms permitted by those laws."*

Hence, in 1972 Belgium included in its Code of Civil Proceedings an article 1677 providing that:

*"Any arbitration agreement shall be in writing and signed by the parties or in other documents binding the parties and evidencing their clear intent to refer to arbitration".*

Not all Member States, however, have introduced such a facility.

The increasing frequency with which economic operators resort to arbitration might, therefore, warrant priority attention, provided it is thought that the practices of communication agreements or parallel agreements containing general conditions applicable to the contractual relation concluded by E.D.I. and containing an arbitration clause do not in themselves suffice.

## V.

723.

The authors had also considered the evidential requirements of the various national legal systems as a possible hypothetical obstacle to the development of electronic data interchange.

724.

The survey of the legal systems of the twelve Member States followed by an initial systematization revealed the need to distinguish between:

- the requirements as to judicial evidence and the requirements for the keeping and perpetuation of accounting and tax documents, on the one hand; and
- the English-style common law and so-called "continental" legal systems, on the other.

725.

An examination of the different "continental" rules on evidence leads the authors of the study to recommend that no priority action be taken in this area at the present time.

The requirement for writing is unquestionably the rule, but is subject to so many exceptions that, in the final analysis, the principle rarely applies to data communications and electronic data interchange.

726.

In the common law system, judicial evidence, predominantly the hearing of witnesses, an admittedly highly contentious rule has been adopted in the United Kingdom allowing computer media as evidence in certain circumstances.

No such development, unfortunately, has occurred in Irish law.

727.

The obligations imposed with regard to the keeping and perpetuation of accounting and/or tax records are so full of loopholes and so widely divergent that we consider priority action even going beyond the simple TEDIS programme absolutely must be envisaged here.

Indeed, what is the point of being able to transmit invoices electronically if writing remains a mandatory requirement in the destination Member State on the grounds that the expenditure to which it relates must be evidenced by a written paper document in order to be deductible?

728.

This action could include provisions regarding evidence. The requirements as to reliability or credibility of data transmitted by electronic means are, in point of fact, a priori the same for the admissibility of judicial evidence as for the admissibility of a document for accounting and/or tax auditing purposes.

## VI.

729.

Such regulation must take account of the advances and locked-in achievements of technology, the effects of which have in recent years been to make computerized records as safe as, if not safer than, paper ones.

730.

To fulfil a function comparable to writing, a computerized record must be capable of being a stable and durable medium - to satisfy the need for perpetuation - and reliable and unalterable to satisfy the need for security.

The information available to us would seem to indicate that, from the technical view, computer media meeting these twin criteria already exist.

Safekeeping of information by duly empowered independent third parties offering the appropriate guarantees is another avenue to be explored. Indeed, experiments with "electronic registered mail" and "electronic notaries" are developing.

731.

But merely having a stable, durable, reliable and unalterable (non-erasable and non-rewriteable) computer medium is not enough.

We need to be able to identify the author of a message and guarantee that the message transmitted in fact originates from him. That is the purpose of signatures.

Identification is not a problem as regards computer security.

A number of authentication techniques <sup>(2)</sup> also fulfil certain functions of the handwritten signature.

---

<sup>2</sup> Cf, for instance, access codes and passwords; physical characteristic recognition: fingerprints, voice and retina recognition;

So-called "digital signatures" using methods of encryption (such as the so-called public key algorithms) which so transform the data transmitted that final output text is contingent simultaneously on original input text (i.e., data) and the key (i.e., the signature) could fulfil the essential functions of the orthographic signature.

732.

The suggested regulation by harmonization of certain evidential and accounting obligations should therefore take account of the legal implications of these techniques.

733.

Any such regulation should require Member States to adapt their law of evidence and their accounting and tax laws such as to qualify a document transmitted solely by EDI and stored solely on computer media in such - uniform - conditions as the Directive may prescribe as the most cogent proof ("best evidence").

These conditions should, in particular, pertain to:

- the integrity of the message transmitted and stored (identification of its author, actual addressee, date and content of the message actually transmitted);
- the durability of the message, its recording and storage (incompressibility of the message taken as a whole comprising the identification of its author and actual addressee, date and content of the message; compliance with program execution instructions, readability and saving of program documentation and instructions),
- the possibility of obtaining the recorded data in a reliable (unalterability of the message when reproduced on its readout medium; compliance with program execution instructions, readability and saving of program documentation and instructions) and directly readable form.

## VII.

734.

The third and final type of possible constraint catalogued by the authors of the study for survey purposes lies in the difficulty of determining the exact moment and place at which a transaction effected by EDI is concluded.

735.

The approach adopted by case law and legal theory in determining the place and time is universally the same: the transaction is presumed concluded in absentia.

Profound differences are, however, discernible between the ways in which the various Community Member States implement the principle of this solution. Some Member States opt for origination, others for receipt, while yet others require receipt and information.

736.

These discrepancies would clearly pose no problems if messages were sent and transmitted instantaneously without recourse to an intermediary.

Unfortunately, messages are most frequently sent over networks and through intermediaries.

737.

Consequently, action would seem to be called for in this area.

This is not to say that solutions do not exist in national laws. But their disparities could hamper the development of EDI. They should therefore be harmonized at Community level.

In the meantime, communications agreements and general provisions between the users of the same network determining the time and place at which a transaction is concluded will offer a way round problems.

## VIII.

738.

The foregoing considerations lead us to conclude that:

a) legislative provisions governing authentication of messages by the use of a sort of "electronic notary" or the designation of duly-authorized intermediaries fulfill a need;

not particularly with the aim of getting around the obstacle deriving from the continued obligation to validate acts in certain areas by writing (*ad solemnitatem*), since provisions of that nature would be worthwhile only where accompanied by simultaneous harmonization of all prevailing authentication requirements in all municipal laws; such harmonization would encounter the obstacles of age-old traditions and impediments in reality more cultural than legal; nor would it, *per se*, go any further towards meeting a real Community need;

where such provisions would be of more interest, on the other hand, would be from the view point of more widespread use of "electronic registered mail";

b) priority action seems most called for in the areas of transport and means of payment, where it would be worth trying to generalize practices such as "electronic bills of lading" and "electronic bills of exchange" as removing an obstacle related to the embodiment of rights and obligations in a written document and the need to transfer the rights and obligations embodied in it by physical delivery of that document;

c) Community-level regulations should also be adopted to extend the general admissibility of documents transmitted by electronic and/or computerized systems as evidence in a court of law as well as records admissible for accounting and/or tax auditing purposes;

such regulations should prescribe the conditions such documents would need to fulfill to be treated as "best evidence".

739.

Consequently, to fulfill this function adequately, any regulation adopted must impose the following rules:

a) shift the onus of proof in relations with the general public;

the burden of proving the reliability and security of electronic data interchange systems over which transactions are concluded should lie on the system managers;

the result of this would be to lead system managers themselves, rather than users, to prove the credibility of the means of proof they themselves have to adduce;

b) the admissibility of means of proof:

computer records should be declared admissible in court proceedings and for tax and accounting purposes;

c) such documents should be treated as "best evidence" if, generally-speaking, the following conditions are fulfilled:

- the computer systems must:

1. incorporate the necessary security features to prevent alteration of records;
2. incorporate the necessary security features to identify the sender and addressee of the message transferred;
3. ideally, include ways of checking the authenticity of the message and that it has been transferred in full form;

4. allow the recorded information to be retrieved at any time in directly-readable form;

- the program documentation, file descriptions and program instructions must be directly-readable and kept carefully updated, which should be the responsibility of the person into whose safekeeping they are given; they must also be stored in an accessible and communicable form for the same length of time as the records to which they relate;

- the addressee of the message must give an acknowledgement of receipt, either expressly or through an automatic technical process; lack of an acknowledgement of receipt would deprive the document sent of its evidential value;

- a full, up-to-date log of business data should be kept listing all transfers sent and received, unamended and with no possibility of alteration; this log should be kept for a length of time to be fixed.

## IX.

740.

In the final analysis, is writing so much more reliable than computer media?

Is not the security supposedly conferred by writing ultimately not overstated?

Given mankind's marked propensity to naturally and systematically develop preconceptions about all new technologies and their applications, are we not entitled to wonder whether the chief impediment is not ultimately more a psychological barrier than a strictly legal obstacle?

Commission of the  
European Communities

200, Rue de la Loi  
B-1049 Brussels  
Belgium

 (02) 235 11 11

**TEDIS**  (02) 235 73 30