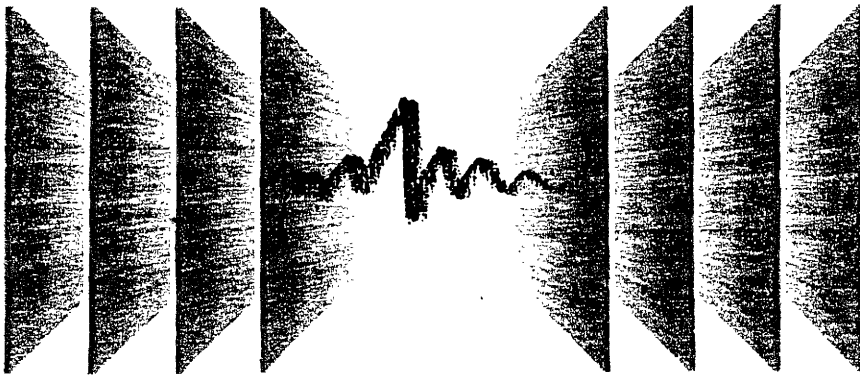


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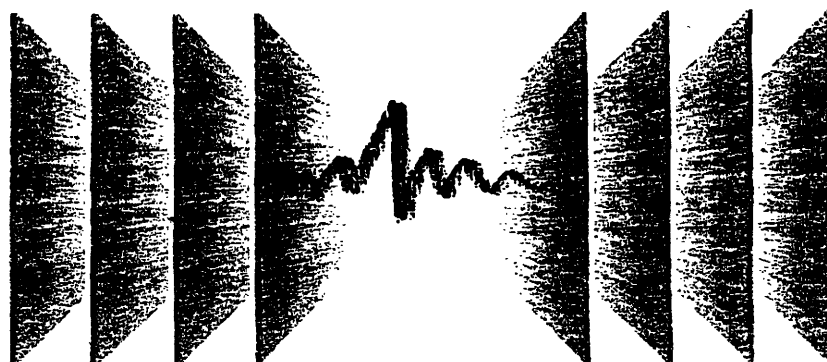
**LEGAL POSITION IN THE
EFTA MEMBER STATES
REGARDING
TRADE ELECTRONIC DATA
INTERCHANGE**



TEDIS

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TEDIS

"Document de référence"

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

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

**DUBARRY, GASTON-DREYFUS,
LEVEQUE, LE DOUARIN
SERVAN-SCHREIBER & VEIL**

LAW OFFICE

Final report (July 1991)

Definitive version (29.10.1991)

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

Report drawn up by the

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Law office

**under the direction of Me Jean-Louis LODOMEZ,
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July 1991

The views put forward in this report are those of its authors and do not necessarily reflect those of the Commission of the European Communities.

This study has been carried out on behalf of the Commission of the European Communities in Brussels by the

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INTRODUCTION

Section 1. Legal framework of the study

1.

This study falls within the framework of objective (g) of the Community's TEDIS I programme.¹

It is accordingly intended "to seek solutions to legal problems that might inhibit the development of trade electronic data interchange and to ensure that restrictive telecommunications regulations do not hamper the development of trade electronic data interchange".²

2.

This study addresses the legal position of electronic data interchange in the six Member States of the European Free Trade Association (EFTA) - Austria, Finland, Iceland, Norway, Sweden and Switzerland. It follows a similar study conducted in 1989 in the twelve Member States of the European Community, the results and conclusions of which were published by the Commission of the European Communities.³

1 The communications network Community programme on trade electronic data interchange systems (TEDIS I), adopted on 5 October 1987 by the Council of the European Communities, on a proposal from the Commission.

2 EC Commission, document COM(86) 662 final.

3 EC Commission, TEDIS, "Legal situation of the Member States with regard to electronic data interchange", September 1989, XIII/D/5/7/90, 200, rue de la Loi, B-1049 Brussels, Belgium, tel. (02) 235.73.30.

Section 2. Electronic data interchange (EDI) in the EFTA countries

3.

Interest in electronic data interchange is as great in the EFTA countries as in the European Communities, if not greater.

Enabling firms to exchange standardized messages instantaneously in lieu of commercial documents on paper, this method of communication has gained a high level of social acceptance in the EFTA countries, particularly in Scandinavia.

4.

The impact of electronic data interchange on a firm's competitiveness⁴ and its business environment must clearly be assessed in the same way in the EEC and EFTA countries.

5.

The same clearly applies to assessing the impact of electronic data interchange on free trade.

The arguments put forward in this respect by the Commission of the European Communities in its White Paper on "completing the European internal market"⁵ are clearly also valid for the free trade area instituted by the EFTA countries and for completion of the proposed "European economic area".

Indeed, ease of information flows between traders and the Member States of the Community is an essential condition for the free movement of goods and services and for the development of corporate cooperation at European level.

4 On the advantages of electronic data interchange for firms, see the study referred to in note 3, pages 2 and 3.

5 EC Commission, COM(85) 310 final, 14.6.1985.

Section 3. Obstacles to the development of electronic data interchange in the EFTA countries

6.

Electronic data interchange already has many economic applications in the EFTA member countries, in the fields of commerce and transport (placing and confirming orders; dispatch, transport and receipt of goods; provision of services; invoicing of goods and services provided) and finance (stock exchange listings; electronic fund transfer; banking or payment operations).

Indeed, EDI is booming in the EFTA countries, particularly in Scandinavia.

7.

However, as in the Community, most current experiments still only serve users belonging to a specific group or sector who communicate directly with each other or via so-called "value added networks" (VANs).

The risks involved in electronic data interchange in such closed environments are generally managed under "interchange agreements", i.e. by contract.

8.

In the EFTA countries, as in the EEC countries, the generalized use of EDI outside closed circuits faces problems of computer language, standards, compatibility of hardware and software, and quality of the telecommunications networks used.

There are also legal problems.

9.

The main legal difficulties stem from the special status attaching to written documents in the legal culture of most States, and in particular the obligation to draw up, issue, send, receive or keep paper documents, whether or not signed, either to confer validity or negotiability on the document itself, or to comply with accounting and/or tax requirements, or for use as evidence.

10.

The use of electronic data interchange can also give rise to legal problems relating to the determination of the time and place of conclusion of contracts, on which may depend both the law applicable to the resulting contractual relations and the jurisdiction competent to settle disputes.

This problem is even more acute where connections are not established directly from one terminal to another but via a VAN.⁶

11.

Use of electronic data interchange also faces problems of security and confidentiality.

Technical errors (faults in the hardware, software or transmission system), external errors (breakdown and/or distortion of the message transmitted due to poor ambient conditions), human errors (incorrect original data, keying error or incorrect use of programs) or fraudulent or unauthorized amendment, destruction or appropriation of the computer message are all dangers against which technical and legal precautions must be taken.

⁶ See point 6 above.

12.

The laws recently adopted by several States to protect the data and/or privacy of individuals are clearly liable to hamper electronic data interchange where its use undermines the legitimate interests which such laws are intended to protect or, in international relations, where they authorize its use only if the state to which the correspondent belongs has legislation offering "equivalent protection".

13.

From the above it can be seen that the use of electronic data interchange also raises problems of liability.

Section 4. Aims and scope of this study

14.

Many legal obstacles are thus liable to hamper the development of electronic data interchange in Europe.

15.

Since the sponsors of this study opted to have separate studies carried out of each group of difficulties, this study will henceforth be limited to problems raised by the statutory obligation to draw up, issue, send, receive or keep paper documents, whether or not they must be signed.

16.

Problems concerning the conclusion of contracts, problems linked to security and confidentiality requirements and problems of liability will therefore be explored only where there is a close link with the statutory obligation to draw up, issue, send, receive or keep paper documents, whether or not signed.

17.

It was nevertheless agreed with the sponsors that the study should verify to what extent rules on data protection or protection of privacy under preparation or in force in certain EFTA member countries are liable to hamper the use of electronic data interchange.

18.

It was also agreed that the study and analysis should be limited to commercial relations between private firms or similar entities.

Tax and customs aspects have accordingly been considered only to the extent that they could require the commercial documents habitually exchanged between such firms to be in writing.

At the request of the sponsors, it was nevertheless agreed that the study should also examine the extent to which the messages which must be provided to tax and customs administrations can already be provided via electronic data interchange or in computerized form and the extent to which the tax and customs authorities of the Member States concerned have access to computer systems and electronic records for audit purposes.

Section 5. Report Structure and Methodology

19.

The procedure adopted by the authors of this study is the same as that adopted by the authors of the earlier study on the legal position in the Member States of the EEC.⁷

7 See point 2 above.

20.

The first step was to identify any legal obstacles in the national laws of each EFTA Member State liable to hamper increased use, i.e. use outside the framework of "interchange agreements", of trade electronic data interchange.

The next step was to draw up, as necessary and taking advantage of any experiments under way, a list of priorities for legislative action to overcome or circumvent such obstacles and to encourage greater use of EDI.

21.

The results of this study are accordingly also presented in two parts.

The first part provides a vertical analysis of the legal systems of each of the six EFTA Member States.

In the second part we have attempted to outline the types of constraints and identify common and specific problems and hence, in conclusion, to formulate proposals for legislative action.

22.

Such proposals will, of course, take account of solutions adopted or in the process of adoption at international level and of integration experiments under way.

Action taken at this level will accordingly be analysed only when it comes to formulating recommendations.

PART ONE

"VERTICAL" ANALYSIS

CHAPTER 1: ANALYSIS OF THE LEGAL POSITION IN AUSTRIA⁸

Results of the study of Austrian law by Mr Christoph PETSCH, of the PETSCH, FROSCH & PETSCH law office.

Section 1. Absence of specific rules in this field

23.

The study of Austrian law was unable to discover any specific legislation on trade electronic data interchange.

24.

However, an electronic mail system known as "Bildschirmtext" (BTX), run by the Austrian postal and telecommunications administration, enables firms to transmit and receive data electronically.

The legal difficulties tend to be resolved by the user accepting the general conditions for use of the BTX system.

These conditions include specific rules governing access to the network, use of the network, the liability of the user and the service provider as regards the content of the message, and the liability of the technical operator as regards transmission and delivery of the message.

⁸ To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Christoph PETSCH, which they followed very closely.

**Section 2. Scope for the electronic transmission of commercial documents
 between firms**

**Par. 1. Electronic transmissibility of all kinds of commercial documents
 (orders, transport documents, documentary credits, etc.)**

(a) Principles

25.

Subject to the exceptions set out in paragraph 2, trade electronic data interchange can be used for all kinds of commercial documents.

The Austrian Civil Code and Commercial Code impose no formal conditions for commercial documents, apart from a few exceptions which will be examined below.

Article 863 of the Austrian Civil Code states that a tacit expression of will is valid, provided there is no doubt as to the circumstances in which it was expressed.⁹

26.

Electronic data interchange must nevertheless comply with the provisions of the Federal Law on the Protection of the Personal Data of Individuals.¹⁰

27.

Article 1 of the above Law provides that each individual has the right to the secrecy of his personal data in so far as he has an interest worthy of protection, particularly with regard to respect for his private life and his family. This provision has the value of a constitutional rule.

9 § 863 ABGB [Arten der Willenserklärungen; Gewohnheiten, Gebräuche] "(1) Man kann seinen Willen nicht nur ausdrücklich durch Worte und allgemein angenommene Zeichen; sondern auch stillschweigend durch solche Handlungen erklären, welche mit Überlegung aller Umstände keinen vernünftigen Grund, daran zu zweifeln, übrig lassen."

10 Datenschutzgesetz, 18 October 1978.

28.

The transmission of personal data concerning the identity or the private life of a person must accordingly receive prior authorization from the Commission for the Protection of Personal Data.

Such authorizations are issued by the Commission on presentation by the operator of the documents or data to be transmitted.

Chapter 6 of the above-mentioned Law (§ 48 et seq.) lays down penal and administrative penalties for infringements of these provisions.

29.

The Federal Law on the Protection of the Personal Data of Individuals obviously does not affect the transmission of commercial documents containing no personal data.

30.

The interchange of commercial documents containing personal data is, however, possible without such prior authorization in the following cases:

- (a) where the data interchange takes place pursuant to legal provisions or public international law;
- (b) where the data interchange takes place pursuant to a written request from the person concerned;
- (c) where the data have already been legally published in Austria, pursuant to the Decree of 11 June 1987 on the processing and standardized transmission of personal data.

31.

The interchange of commercial documents containing personal data is also possible without prior authorization where the data are to be sent to a country with rules on the protection of personal data equivalent to the Austrian rules.¹¹

11 § 32(1) of the Federal Law on the protection of personal data.

The countries considered to provide equivalent protection are listed in a decree¹²: the list currently includes the Federal Republic of Germany, Denmark, France, Luxembourg, Norway and Sweden.

32.

Thus the Austrian Federal Law on the Protection of the Personal Data of Individuals can, in certain circumstances, constitute a real obstacle to electronic data interchange.

(b) Invoices

33.

There are no specific rules concerning the transmission of invoices.

Invoices are not subject to any formal conditions. They can accordingly be transmitted electronically.

(c) General conditions of sale

34.

There is no obstacle to the electronic transmissibility of general conditions, provided it can be established that they are legally binding.

(d) Contracts

35.

There is nothing in Austrian law to prevent contracts being concluded by means of electronic data interchange.

36.

However, the time and place of conclusion of a contract concluded in this way remain to be determined.

12 Verordnung des Bundeskanzlers, 18.12.1980.

37.

Under Article 861 of the Austrian Civil Code, a contract is concluded by the meeting of two corresponding expressions of will: offer and acceptance.

38.

A contract concluded by electronic data interchange must be considered to be a contract concluded between absent parties. This is how the Austrian Court of Appeal described a contract concluded by telex.

39.

In application of these principles, the offer becomes valid when it reaches the addressee and the latter reads it under normal circumstances.

Thus the offer can be revoked until such time as the addressee has read it.

In the absence of an express deadline, an offer made between persons present or by telephone must be accepted immediately, whereas an offer made to an absent person must be accepted within a reasonable period.

Such period includes the time taken for the offer to be transmitted to the addressee, a reasonable time for consideration and the time taken to transmit the reply.

Express acceptance is not necessary where, for example, the goods ordered are sent by the addressee of the offer, in which case acceptance is implicit.

40.

The contract is concluded when the offerer receives the acceptance from the acceptor.

41.

However, these rules became less important when the Austrian Law on International Private Law entered into force.

Previously, particularly in the case of international commercial relations, the place of conclusion of the contract determined the national law applicable to disputes.

Henceforth, in the absence of agreement between the parties, the national law applicable is that of the party which performs the characteristic service, i.e. that not consisting in payment.

Thus, when disputes arise, Austrian national law applies only if the party performing a characteristic service is located on Austrian territory.

42.

The BTX system has special rules concerning the conclusion of contracts: in accordance with the wish of the Association for the Protection of Consumers, all contracts concluded via the BTX system must be subject to a cooling-off period, unless the offerer formally excludes such a clause.

The cooling-off period expires, in the case of a contract of sale, if the consumer does not return the goods within a specified period, and likewise, in the case of other contracts, if he allows that period to expire without opposing the contract.

The period in question lasts one week, from the time of delivery of the goods and hand-over of the essential elements of the contract in the case of a contract of sale, and from the hand-over of the essential elements of the contract in the case of other contracts.

**Par. 2 Exceptions to the principle of the electronic transmissibility of
commercial documents**

(a) Principles

43.

Austrian law is not explicit. There are no legal provisions requiring a commercial document to be signed, other than Article 1346 of the Civil Code.

(b) Securities

44.

Article 1346 of the Civil Code requires a declaration of guarantee made by a non-trader, commonly referred to as a "security", to be signed.

In application of this provision, the Court of Appeal considered a declaration of guarantee given by a non-trader by telegram to be null and void.

Pursuant to these principles, a security cannot validly be transmitted electronically.

(c) Instruments embodying a right

45.

The rights obtaining under such instruments can be transmitted only by an agreement of will accompanied by the physical hand-over of the instrument.

(d) Sale of real estate

46.

The sale of real estate cannot be concluded by electronic data interchange. This is because the transfer of real estate must be entered in the Land Register.

(e) Company law

47.

Deeds of partnership cannot be established by electronic data interchange where they must comply with publication requirements.

Ownership of registered and bearer shares cannot be transferred by EDI, because under Austrian law the share certificate must be physically handed over.

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1 General obligation under Austrian law to keep documents

(a) Obligation under accounting law

48.

To protect the consumer, Article 38 of the Austrian Commercial Code obliges traders to keep a true copy of the original of all correspondence sent to or received from a distributor or manufacturer.

49.

The true copy may be kept in computerized form. The only requirement imposed on the trader is that he must be able to transcribe the data kept in computerized form onto paper for control purposes.

50.

Austrian law likewise permits accounts and correspondence to be kept in computerized form, provided a printout can be made available at any time.

A true copy of the original documents must be available on paper at all times until the expiry of the legal period for keeping such documents.

51.

Pursuant to Article 44 of the Commercial Code, traders are obliged to keep their accounts for 7 years from the end of the calendar year in respect of which the last entry was made or during which correspondence was received or sent.

The same rule applies to stock books and balance sheets.

(b) Obligation under tax law

52.

The tax authorities require Austrian nationals to keep accounts in computerized form, on optical disk or on microfilm, provided the documents can be immediately transcribed onto a perfectly readable paper copy for control purposes.

53.

A company's balance sheet must always be transcribed onto paper so that it can be signed by the auditor.

54.

All documents used to calculate taxable income must be kept for 7 years from the end of the calendar year during which the last entry is made in the accounts.¹³

Austrian law permits these documents to be kept in computerized form, provided a hard copy is available at all times.

Par. 2. Scope for keeping documents in computerized form

55.

It follows from the above that Austrian law makes no distinction as regards the means of communicating and storing documents.

Documents can in general be stored in computerized form provided a true copy of the original can be reproduced.

Par. 3. Penalties

56.

Pursuant to Article 184 of the Austrian Tax Code, the tax authorities can themselves assess taxable income if the taxpayer does not produce the accounts or records required by tax law, or if the accounts or records produced are false or questionable.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

57.

Apart from Article 1346 of the Civil Code, which requires a security given by a non-trader to be in writing and signed, there are no provisions of Austrian law requiring commercial documents to be signed.

However, there are other cases in which signature is a condition of validity of a document or the corresponding transaction. This is the case, in particular, of instruments embodying rights.

Par. 2. Scope for using electronic signatures

58.

Electronic signatures are widely used. They are used by the BTX system and the banking sector.

59.

Although electronic signatures are possible, the basic rule where a signature is required is that it should be handwritten.

Article 886 of the Civil Code permits a signature to be reproduced by mechanical means only if this corresponds to usual commercial practice.

Par. 3. Penalties

60.

The penalties for failure to comply with regulatory constraints are generally determined by agreement between the parties or, failing that, by common law provisions.

As regards securities given by non-traders, infringement of Article 1346 renders the security given null and void.

Section 5. Constraints resulting from the law of evidence

61.

It is doubtful whether computerized commercial data are admissible as "documentary evidence" under Austrian law.

The Austrian Civil Procedure Code on documentary evidence contains no definition of the term "document".

Most authorities define a "document" as a recording of thoughts in manuscript form, generally determining facts.¹⁴

62.

However, the Austrian system of evidence lays down special procedures such as inspections and witnesses.

14. See DDR. Hans W. Fasching, *Lehrbuch des österreichischen Zivilprozeßrechts*, Vienna, 1990, Manzsche Verlags- und Universitätsbuchhandlung, p. 494.

So even if electronic records cannot be considered as "documentary" evidence, they can be the subject of an inspection, an expert opinion or a specialized inspection.¹⁵

63.

Pursuant to the Civil Procedure Code, the judge has absolute discretion in assessing the probative value of evidence presented.

Section 6. Relations with the customs and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

64.

Article 86 of the Tax Code authorizes the electronic transmission of applications which tax provisions require to be presented in writing, where this is allowed by the administrative rules of the Ministry of Finance.

"Application" is defined by the Tax Code as a request which the Tax Code provides must be in writing.

One example would be a request for the extension of a deadline.

The absence of a signature does not nullify such an application.

However, where the tax authorities consider it necessary, in view of the importance of the application, they may ask the applicant for signed confirmation of his application within an appropriate period, failing which the application is considered to have been withdrawn.

15 See DDR Hans W. Fasching, *Lehrbuch des österreichischen Zivilprozeßrechts*, Vienna, 1990, Manzsche Verlags- und Universitätsbuchhandlung, p. 525.

65.

Use of this option appears until now to have been limited to certain applications addressed to the Ministry of Finance or a regional Finance Directorate transmitted by fax.¹⁶

66.

As regards all other procedures relating to declarations of personal and company income, paper is still the most common means of communication, and it is usually transmitted by post.

67.

Pursuant to Article 96 of the Tax Code,¹⁷ copies of administrative decisions produced by a computer system need not be signed or certified and are considered to have been approved by the head of the tax authority whose name appears thereon.

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

68.

Electronic recording systems made available to the tax authorities when they inspect the accounts must permit the true reproduction of the originals of the documents recorded throughout the period for which they are required to be kept.¹⁸

Article 131 of the Tax Code lays down that electronic recordings must be reliable until the end of the required period of retention.

16 Verordnung des Bundesministers für Finanzen vom 29 Jänner 1990 über die Zulassung von Telekopierern zur Einreichung von Anbringen an das Bundesministerium für Finanzen und an die Finanzlandesdirektionen.

17 Annex G.

18 Article 131(3) of the Tax Code. Annex G.

Section 7. Conclusions of the study of Austrian law

69.

Most legal documents, including contracts, can be freely transmitted and concluded by electronic data interchange, except in a few exceptional cases where they are required to be in writing.

70.

Commercial documents may also be stored in computerized form for accounting and tax purposes, provided a true copy of the original can be reproduced throughout the period for which they are required to be kept.

71.

However, the probative value of legal documents established by electronic data interchange is less certain, as mechanical recordings do not appear to be recognized as documentary evidence.

CHAPTER 2: ANALYSIS OF THE LEGAL POSITION IN SWITZERLAND¹⁹

Results of the study of Swiss law by Mr Pierre-Yves TSCHANZ, of the TAVERNIER, GILLIOZ, PREUX and DORSAZ law office.

Section 1. Absence of specific rules in this field

72.

There are no specific provisions of Swiss law on electronic data interchange.

Section 2. Scope for the electronic transmission of commercial documents between firms

Par. 1. Electronic transmissibility of all kinds of commercial documents (orders, transport documents, documentary credits, etc.)

(a) Principles

73.

Consensualism prevails in Switzerland: the validity of legal documents does not in principle depend on any particular form.

Thus a legal document established by electronic data interchange is in principle valid.

19 To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Pierre-Yves TSCHAND, which they followed very closely.

(b) Invoices

74.

No legal form is laid down for invoices. Thus an invoice can validly be transmitted by electronic means under Swiss law.

(c) General conditions

75.

There is nothing in Swiss law to prevent the electronic transmission of general conditions of sale.

Pursuant to the principle of consensualism, a judge will simply seek to establish whether the general conditions of sale were brought to the purchaser's attention, however they were transmitted.

There appears to be no obstacle to establishing that they were brought to his attention by electronic data interchange.

(d) Contracts

76.

There does not appear to be any obstacle in Swiss law to the conclusion of contracts by electronic data interchange.

77.

However, the question remains as to the time and place of conclusion of such a contract.

78.

Swiss law recognizes the theory of confirmation. Articles 3 and 5 of the Code of Obligations provide that a contract is only validly concluded when the offerer receives confirmation of acceptance. However, there are exceptions to this principle.²⁰

²⁰ Article 9 of the Swiss Code of Obligations permits the offerer to withdraw his offer as long as the acceptor has not received it.

79.

Authors have asserted that in the case of electronic data interchange there is no interval between the sending and receipt of declarations of will, as electronic messages are received practically as soon as they are sent.

Thus a legal document established by electronic data interchange would immediately become effective, as the declaration of will is transmitted and received simultaneously.

Thus, in the case of electronic fund transfer without supporting documents, the time of payment is determined by the time when the data are introduced in the electronic data transfer system.

If the automatic transfer is accompanied by supporting documents, the time of payment is decided by the time of dispatch of the creditor's statement of account.²¹

In the case of interchange between computers, the contract is established when the electronic acceptance is entered, unless the parties intended to be bound only by the written form or by subsequent dispatch of a supporting document.

This is a derogation from the principle of confirmation, since the contract is concluded when acceptance is issued.

80.

Electronic stock exchanges are a case apart, in that offers to sell and buy are automatically matched by a central computer. In this case, contracts for the sale of stock are concluded between absent parties.

The rules of the electronic stock exchanges restrict the possibility of withdrawing an offer not yet "accepted", i.e. matched by the computer to a reciprocal offer.

21 SCHÖNLE, in the new electronic means of payment, under the direction of STANDER, p. 90.

Par. 2 Exceptions to the principle of the electronic transmissibility of commercial documents

81.

The first exception to the principle of the free electronic transmissibility of commercial documents occurs where the law requires the document to be in writing.

In this case the signatures of the contracting parties are necessary for the document to be valid.²²

82.

In general, the Civil Code and the Code of Obligations do not draw a direct distinction between documents which must be on paper and those that need not be.

However, the requirement for a document to be in writing and to be drawn up by a solicitor, where expressly laid down, necessarily requires a paper document.²³

83.

Although Article 14(2) of the Code of Obligations permits signature "by mechanical means" in cases where this is accepted practice, particularly for the signature of securities issued in large numbers, this provision is not in itself sufficient to open the way to paperless documents.

84.

(a) Promises to give

Promises to give must be in writing.

22 Article 13 of the Code of Obligations.

23 Annex 17 lists legal documents required to be in writing or drawn up by a solicitor under Swiss law.

85.

(b) Transfer of debts

Debts can be transferred only by a contract made out in writing.

86.

(c) Sureties

A contract of surety must be in writing.

87.

(d) Arbitration clauses

As regards national arbitration, cantonal law requires a document in writing, whereas federal law does not.²⁴

As regards international arbitration, the federal legislator has replaced the requirement of a document in writing by the requirement of a text. Article 178(1) of the 1987 Law on Private International Law lays down that:

"As regards form, an arbitration contract is valid if it is established in writing or by telegram, telex, fax or any other means of communication which allows a text to be produced as evidence thereof."

88.

(e) Hire purchase

Hire purchase contracts must be drawn up in writing and contain a number of compulsory statements designed to protect the consumer.

24 Concordat on arbitration, Article 6(1).

89.

(f) Company law

A company can be established only by a written instrument drawn up by a solicitor.

90.

The minutes of a company's general meeting must also, by tradition, be in writing. However, it is possible to establish the minutes by circular, i.e. to have the minutes signed by persons absent on the day of the company's general meeting, and to transmit the signed minutes to the company by fax.

91.

The transfer of bearer shares involves the drafting of a document in writing between the parties and an entry in the registers of the issuing company. Registered securities can be transferred electronically by transfer from one account to another.

In some cases a document in writing is required for registration formalities. This is the case, for example, for the sale of real estate.

92.

(g) Judicial law

Judicial documents (actions at law, conclusions) cannot be transmitted by electronic means to federal or cantonal courts.

93.

(h) Instruments embodying a right

Certain instruments embodying a right cannot be transferred electronically. This is the case for negotiable instruments (or bills of exchange) which are represented by a certificate and cannot be abstracted from their physical form.

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1 General obligation under Swiss law to keep documents

(a) Obligation under accounting law

94.

Swiss accounting law does not permit the keeping of entirely paperless accounts.

95.

Swiss accounting law prescribes the retention of the original or of a photographic representation of the current accounts which, according to Article 957 of the Code of Obligations, include the journal, cash book, stock book and live account file.²⁵ However, Swiss accounting law requires the trading account and the balance sheet to be kept in the original. Other accounting documents, on the other hand, may be kept in the form of recordings on image media, as can correspondence and supporting documents, provided a hard copy can be produced at any time.

In all cases, these documents must be signed by the persons responsible.²⁶

96.

Thus only correspondence and vouchers can be stored on data media.

25 Article 962(2) of the Code of Obligations lays down that:

"the trading account and the balance sheet must be kept in the original; the other books may be kept in the form of recordings on image media, and correspondence and vouchers in the form of recordings on data or image media, provided the recordings correspond to the documents and can be made legible at any time. The Federal Council may stipulate the conditions."

26 Article 961 of the Code of Obligations.

97.

All accounting documents must be kept for ten years.

(b) Obligations under tax law

98.

In 1979, the federal authorities published guidelines for tax purposes for the regular keeping of accounts and relating to the recording and storing of commercial documents on data and image media.²⁷

Documents kept in accordance with the guidelines have the same status as the original documents. The guidelines also harmonize the presentation of commercial documents on data or image media.

99.

Documents intended for the tax authorities must be kept for 5 years (the statute of limitations for tax offences under Swiss law).

Par. 2. Scope for keeping documents in computerized form

100.

Swiss tax law and accounting law do not permit the keeping of entirely paperless accounts.

The trading account and the balance sheet must always be kept in the original.

The stock book and the accounts in the narrow sense, i.e. those kept pursuant to Article 957 of the Code of Obligations, must be kept in the original or on microfilm pursuant to Article 962(2) of the Code of Obligations.

101.

Other documents, i.e. correspondence and vouchers, may be kept on data media.

Par. 3 Penalties relating to the obligation to keep documents for accounting and tax purposes

102.

Article 964 of the Code of Obligations lays down penalties for infringements of the duty to keep accounts and to retain accounts and correspondence.

It refers to Article 163, Chapter 1, paragraph 2 of the Penal Code, which imposes penalties for inaccurate accounting resulting in bankruptcy, and Articles 325 and 326 of the Penal Code, which impose penalties for failure to comply with accounting law.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

103.

Pursuant to Article 13 of the Code of Obligations, where the law or the parties require a document to be in writing, a handwritten signature is necessary.

Thus an electronic signature is not sufficient.

Par. 2. Scope for using electronic signatures

104.

Electronic signature procedures are known from banking practice. Banks provide their customers with coded magnetic cards giving them exclusive access to a safe deposit box or a bank account.

Insertion of the card in the machine combined with entry of the code on the keypad gives access to a bank account and constitutes an electronic signature.

However, there are no specific legal rules or court rulings on such electronic signature procedures.

Section 5. Constraints resulting from the law of evidence

Par. 1. Application to electronics

105.

There are two types of rules governing evidence in Swiss law: cantonal and federal.

106.

The cantonal codes lay down the rules of evidence applicable in cantonal courts. Two kinds of evidence are admissible: strict evidence and free evidence.

The system of strict evidence accepts only documentary evidence, while the system of free evidence accepts, in addition to documentary evidence, all forms of evidence not listed in the law. In practice, the system of free evidence is most often used.

107.

As regards federal law, Article 52 of the Federal Law on the Organization of the Judicial System states that for the purposes of the law a document means a document in writing, a certified true copy ("copie vidimée") being acceptable.

Article 52(1) of the Federal Law on Civil Procedure defines a document as follows:

"The original, a certified true copy or a photographic copy of the document shall be produced. The judge may order the original to be produced."

The question remains as to whether recordings on data or image media are themselves documents or whether only printed extracts from such media are considered to be documents.

In practice, printed extracts, such as bank statements, are frequently produced in court.

Such extracts are considered to be documents and are admitted as evidence in court.

108.

On the other hand, the production in court of the electronic recording itself is quite unheard of.

According to some authorities, a computer disk would not be considered to be a document within the meaning of Article 52 of the Federal Law.

109.

The laws of most cantons appear to have reservations concerning the production of magnetic recordings, unless they can be produced immediately and where they are not on disk.

On the other hand, there seems to be no obstacle to the production of computerized recordings in the form of printed extracts: only their probative value is questionable.

Par. 2. Probative value of a computerized document

110.

Most cantonal laws give the judge full discretion to assess the probative value of evidence, including documentary evidence.

A fact is considered to be proven when there is no longer any serious doubt in the judge's mind. The judge may call for an expert opinion to help him decide.

111.

A printed extract, such as a bank statement, will be considered to be indirect evidence, in that it does not relate directly to the point of fact in question, i.e. the legal document entered in the computer, but another fact, i.e. the content of a disk at a certain time.

Evidence of the existence of the alleged legal document implies visualization or printing at the time when the document is alleged to have been established by computer.

112.

Cantonal laws of procedure must recognize recordings on data or image media as having "the same probative value as documents" in the case of the accounts of companies required to keep accounts.²⁸

113.

However, accounting documents, as descriptive documents (Zeugnisurkunden), are subject to special treatment compared with documents which themselves constitute legal documents (Dispositivurkunden). The former are merely a result of the legal document and the obligations it entails. The latter, on the other hand, are themselves legal documents accomplished directly by a transfer of data, and are not covered by Article 962(2) (referred to above).

Section 6. Relations with the customs and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

114.

There are no specific rules for the customs authorities.

115.

The tax authorities have drawn up detailed rules concerning the retention and consultation of documents stored on data and image media.²⁹

28 Article 962(4) of the Code of Obligations.

29 Annex 4.

In particular, as regards the consultation and auditing of accounts, the employer's instructions must be such as to permit a qualified outsider to consult all recordings in a reasonable time.

At the request of an authorized person, the recordings must be presented in a form which can be read without the use of instruments.

The communication of non-transcribed media alone does not, therefore, appear to be possible.

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

116.

The Swiss tax authorities lay down specific requirements regarding the auditing of computerized accounts.

In particular, the company must make available a person who is fully conversant with the way in which the accounts are kept.

117.

The accounts corresponding to the period to be audited must be produced in a form enabling them to be read without the use of instruments (by printing or enlargement). The authorized auditor may ask for accounting documents recorded on data media to be printed.

Section 7 Conclusions of the study of Swiss law

118.

There are no major obstacles in Switzerland to legal documents being established by electronic data interchange. Indeed, the principle of consensualism authorizes it, except where the law or the parties require the document to be in writing.

119.

Although the validity of such documents is not a problem, their probative value is less certain: the only specific rule on the probative value of computer media is Article 962 of the Code of Obligations, which concerns accounting documents.

Under Article 962, certain accounting documents which have been correctly recorded on electronic media have the same probative value as documents in writing.

However, Swiss accounting law prohibits the keeping of entirely paperless accounts by requiring the originals of certain accounting documents to be kept.

Otherwise, the principle of judicial discretion applies in Switzerland, which leaves a degree of uncertainty as to the probative value of computer media.

CHAPTER 3: ANALYSIS OF THE LEGAL POSITION IN SWEDEN³⁰

Results of the study of Swedish law by Mr Kajsa JONSSON and Mr Peter BÄÄRNHIELM, of the LAGERLÖF & LEMAN law office.

Section 1. Absence of specific rules in this field

120.

Apart from the specific provisions of Swedish commercial law quoted below, the study was unable to discover any rules dealing specifically with electronic data interchange.

The authors of the study into Swedish law explain that there are as yet few references to electronic data interchange in Swedish legal doctrine, legislation and case-law.

³⁰ To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Kajsa JONSSON and Mr Peter BÄÄRNHIELM, which they followed very closely.

Section 2. Scope for the electronic transmission of commercial documents between firms

Par. 1. Electronic transmissibility of all kinds of commercial documents (orders, transport documents, documentary credits, etc.)

(a) Principles

121.

Subject to certain exceptions, which will be examined in paragraph 2, commercial data can in principle be freely transferred by electronic means under Swedish law.

(b) Invoices

122.

Invoices are not subject to any formal conditions. They can accordingly be transmitted electronically.

Swedish law lays down that in the absence of express agreement between the parties, interest becomes payable on a debt 30 days after dispatch of the invoice.³¹

The physical hand-over of an invoice can thus be important. In this case too, there are no formal conditions and the invoice can be transmitted electronically.

(c) General conditions of sale

123.

On the basis of Swedish contract law, the transmission of general conditions of sale by electronic means does not appear to give rise to specific problems.

124.

The general conditions of sale are considered to be an integral part of the contract if reference is made to them when the contract is concluded, if they are reasonable and if the purchaser has been able to consult them.

Where the purchaser is not aware of the general conditions of sale or does not have access to them, they must be sent to him if they are to form part of the contract.

125.

In general, the conditions of sale do not form part of the contract where they are sent to the purchaser or reference is made to them after the contract has been concluded. However, derogation from this rule is possible where the general conditions of sale correspond to usual practice in the sector concerned or between the contracting parties.

126.

According to the authors of the study, the reliability of the electronic transmission of the general conditions of sale is more a technical than a legal matter. In general, the general conditions of sale are transmitted at the risk of the sender, who accordingly has every interest in their safe transmission.

(d) Contracts

127.

Swedish contract law presents virtually no obstacles to the conclusion of contracts by electronic data interchange.

In Sweden the contract law is governed by the 1915 Law on Contracts,³² which contains three chapters: (I) formation of contracts, (II) agency agreements, (III) invalidity of contracts.

The chapter on the formation of contracts is drafted with reference to the sale of goods. However, the rules it contains apply to contracts in general.

32 Law on Contracts: SFS 1915: 218.

128.

A contract is legally formed by the exchange of messages consisting in offer and acceptance.

129.

The offer must be addressed to a specific person. An offer or acceptance of an offer can be revoked, provided the message revoking it reaches the addressee before or at the same time as the latter reads the corresponding offer or acceptance.

130.

Acceptance of an offer subject to amendments or additions is equivalent to withdrawal of the initial offer and the making of a new offer. If the initial offerer realizes, or can be reasonably expected to realize, that the other party believes his acceptance conforms to the offer, he must notify the accepting party of the differences noticed. If he refrains from doing so, the contract is deemed to have been concluded in accordance with the terms of the acceptance.

131.

Thus, subject to exceptions,³³ Swedish law clearly does not prohibit the conclusion of contracts by electronic data interchange.

The rule that a contract is concluded when acceptance reaches the offerer applies also where the offer and acceptance are exchanged by electronic means.

However, where offer and acceptance are entirely automatic, e.g. where an order is placed automatically following changes in stock levels, the authors of the study do not consider such transactions to be equivalent to an offer and acceptance. In this case, the parties must have previously concluded an agreement to the effect that they will conduct business in this way, otherwise the contract will not be deemed to have been validly formed.

33 See paragraph 2 below. The main exception is the contract for the sale of real estate.

132.

Determination of the place where a contract is concluded is important in international trade, since it identifies the national law applicable to the contract.

Swedish rules on the conflict of laws provide that the law applicable to the contract, unless the parties agree otherwise, is the national law of the seller. However, by way of exception, the national law of the purchaser applies where the seller has received an order in the State where the purchaser pursues his activities.

The Convention on contracts for the international sale of goods, concluded under the auspices of the United Nations, is an integral part of Swedish law, subject to Part II of the Convention on the formation of contracts.

This Convention applies to the partners of contracting States or other States where, pursuant to the rules on the conflict of laws referred to above, Swedish law applies.³⁴ The Convention does not apply to sales between a Swedish national and partners established in Denmark, Norway, Finland or Iceland.

Par. 2 Exceptions to the principle of the electronic transmissibility of commercial documents

133.

There are few cases in Swedish law where the drafting of a signed document in writing is required as a condition for the validity and execution of a legal act.

Swedish law does not require legal documents to be drawn up by a solicitor.

(a) Real estate

134.

Contracts for the sale of real estate must be concluded in writing and signed by both parties, pursuant to Chapter 4, Section 1 of the Law on Real Estate.³⁵ These requirements are a condition for the validity of the sale.

34 Article 1 of the Convention on contracts for the international sale of goods.
35 Jordabalken, SFS 1970: 1209. See Annex 4.

The original of the contract of sale must be registered for the transfer of property to take place.

(b) Leases

135.

Most long-term property leases must also be drafted in writing and signed by the parties; otherwise they are invalid.

(c) Gifts

136.

Legal provisions also stipulate that deeds of gift must be in writing if they are to be binding on the donor.

(d) Company law

137.

In many cases, documents relating to the life of a company must be registered with the competent government body. In particular, when a company is set up its articles of association must be registered.

The minutes and resolutions of the board of directors must be signed by the directors; they must accordingly be kept on paper.

Shares can be sold without the certificates being transferred. The transfer is simply recorded in the company's share register.

(e) Instruments embodying a right

138.

As Swedish law currently stands, instruments embodying a right which is transmitted by the physical hand-over of the instrument cannot be transferred by electronic means.

Such instruments include promissory notes, cheques, bills of exchange and bills of lading.

The rights embodied in these instruments cannot be exercised without physically possessing the instrument. Such documents must therefore exist on paper and bear a signature if they are to be valid.

The physical transfer of such documents has major legal consequences. For example, the person holding the instrument is protected against the claims of creditors of the person who transferred it.

The formal requirements for such documents are laid down in various specific laws. In particular, cheques and bills of exchange must be signed. These requirements are laid down by the Law on Cheques³⁶ and the Law on Bills of Exchange.³⁷ These laws are largely inspired by international conventions.

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1 General obligation under Swedish law to keep documents

(a) Obligation under accounting law

139.

A company's accounting documents must conform to the Swedish Law on Accounts,³⁸ and supplementary laws and regulations.

36 Checklagen, SFS 1932: 131.

37 Väckellagen, SFS 1932: 130.

38 Bokföringslagen, SFS 1976: 125.

140.

Pursuant to Article 22 of the Law on Accounts,³⁹ all accounting documents, whatever form they take (paper or computerized), must be kept on Swedish territory for a period of at least ten years.

141.

Failure to comply with this obligation is a criminal act.

Chapter 11, Section 5 of the Swedish Penal Code⁴⁰ lays down that offenders can be sentenced to a fine or imprisonment of up to two years, or four years if there are aggravating circumstances.

(b) Obligation under tax law

142.

The legal obligation to keep accounting documents for a period of ten years is also laid down by tax law.

The main objective of this rule is to provide the tax authorities with effective means of control in order to prevent fraud and tax evasion.

Par. 2. Scope for keeping documents in computerized form

143.

Accounting law is one of the areas of Swedish law particularly affected by the development of electronic data interchange.

Accounting law and regulations are largely based on the idea that the accounts, supporting documents and other accounting documents are kept on paper.

39 See Annex 5.

40 SFS 1986: 43. See Annex 6.

144.

However, new rules have recently started to emerge to enable these documents to be transferred by electronic means.

Pursuant to Article 5 of the Law on Accounts,⁴¹ documents (such as invoices) received in connection with a particular commercial transaction must be used as supporting documents in the accounts.

Pursuant to Article 10 of the Law,¹³ computer records can be used as an accounting tool. However, it is not permissible to use computers both to store the supporting documents and to keep the accounts journal.

145.

The "Bokföringsnämnden", a government body which adopts supplementary rules and recommendations relating to the interpretation of Swedish legislation, has published a recommendation on the electronic transmission of invoices.⁴²

Pursuant to this recommendation, invoices received by electronic data interchange can be accepted as supporting documents provided the system used is reliable. The data recorded by the receiving computer must come directly from the transmitting computer system, and these data must not have been altered during transmission.

146.

According to the interpretation of Article 10, invoices received by electronic means must be recorded in writing by the addressee, and by the sender where the latter keeps his accounts journal on computer.

Accordingly, invoices transmitted by electronic data interchange may be kept in electronic form, where the accounts book is kept in writing.

41 See Annex I.

42 Recommendation of the "Bokföringsnämnden", U 89: 2, Electronic transmission of invoices.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

147.

In general, legal documents which are required to be in writing must also be signed.

This is the case for bills of exchange,⁴³ cheques,⁴⁴ promissory notes, bonds and bills of lading.

148.

Signatures serve to authenticate documents. They also make the parties aware of the importance and solemn nature of the undertakings they give.

149.

The law contains no provisions requiring a signature on promissory notes, but case-law has recognized that a signature is necessary.

Where promissory notes or bonds are issued en masse, a facsimile or printed signature is acceptable.

150.

A signature is also required for deeds of gift, contracts for the sale of real estate,⁴⁵ (and long-term property leases).

43 Law on Bills of Exchange. Våxellagen SFS 1932: 130.

44 Law on Cheques. Checklagen SFS 1932: 131.

45 Law on Real Estate. Jordabalken SFS 1970: 1209. See Annex 4.

Par. 2. Scope for using electronic signatures

151.

As Swedish law currently stands, an electronic signature is unacceptable for the documents referred to above, and they would be invalid. As commercial practices develop, Swedish legislation will need to be adapted to the new electronic data interchange technologies.

Such a development is essential, particularly as regards maritime bills of lading, which are traditionally required to be in writing and signed as a condition of validity.

These formal requirements obstruct the rapid transmission of maritime bills of lading: to counteract them and improve efficiency shippers have developed the practice of using printed or facsimile signatures or signature stamps. A facsimile signature is a duplicate or identical reproduction of a handwritten signature.

The prevailing opinion regarding bills of lading is that the current rules permit the development of electronic transfer systems in which the handwritten signature is replaced by other means of authentication.⁴⁶ However, Swedish law does not at present ascribe the same legal value to this technique as to a signature.

Par. 3. Penalties

152.

Where a legal document is required to be in writing and signed to be valid, use of an electronic signature would render it void.

⁴⁶ A Law passed in June 1990 now authorizes electronic means of authentication for the purposes of customs and excise duties.

Section 5. Constraints resulting from the law of evidence

Par. 1 Application to electronics

153.

The Swedish Code of Judicial Procedure recognizes the principle of the free assessment of evidence. In the light of all the evidence presented in court, it is for the Swedish judge to decide to what extent the alleged facts have been proven.

Apart from written affidavits by witnesses, all forms of evidence can be presented in court.

154.

Swedish law incorporates the principle of immediacy: a judgment must be based only on the evidence presented during the main court hearing.

Evidence must accordingly be presented during the main court hearing. Computerized data must be brought to court on paper or in any other form which the judge can read. Any form of evidence is admissible, provided the judge can access it and assess it.

Par. 2 Probative value of a computerized document

155.

The probative value of a computerized document must be assessed by the judge, in the same way as for any other piece of evidence. There is no hierarchy of forms of evidence. Evidence in writing does not necessarily have greater probative value than electronic evidence.

Depending on the circumstances under which computerized data have been recorded, the probative value of printouts may be deemed to be as high as that of a document in writing.

The authors of the report believe that judges will tend to question the authenticity and probative value of computer documents, particularly on account of the danger of computerized data being manipulated.

There is as yet no case-law on the probative value of electronic evidence.

Section 6. Relations with the customs and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

156.

There have been major changes in customs and excise legislation to permit the development of electronic data interchange.

The amendments concerned entered into force in June 1990.⁴⁶ The use of electronic procedures for processing the documents required for customs and excise purposes is now regulated. Transport documents and customs declarations can be transmitted to the authorities by electronic data interchange. The authorities can also transmit certain decisions electronically.

The technical aspects of the system set up by the legislation are very complex, particularly as regards the procedures for verifying an electronic signature in the form of an "electronic seal".

The system as a whole conforms to the United Nations EDIFACT and CUSDEC standards.

The preparatory work also underlines that the proposed legislation conforms to the uniform rules of conduct for interchange of trade data by teletransmission (UNCID), published by the International Chamber of Commerce, and the guidelines published by the OECD for the protection of confidentiality during the transfer of personal data.

⁴⁶ Law on Customs Registers. Tullregisterlagen SFS 1990: 137.

157.

It was the legislator's intention to define the concept of an electronic document in a sufficiently extensive fashion to enable these arrangements to be adapted to the rules currently applicable to paper documents.

This new legislation applicable in the customs field is a kind of pilot project, which we can expect to serve as a model for future legislation in other fields.

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

158.

Sweden has no rules or recommendations regarding the auditing of systems for the computerized processing of data as such.

159.

However, there are rules and recommendations on the auditing of accounts which are processed by computer, published by the Swedish Institute of Authorized Auditors (FAR).⁴⁷

160.

During criminal and fiscal investigations, the investigating authorities can have access to computerized data processing systems if they have reason to suspect criminal activities.

Section 7. Conclusions of the study of Swedish law

161.

According to the results of the study, Swedish law does not appear to present major obstacles to electronic data interchange.

47 FAR: Föreningen Auktoriserade Revisorer.

162.

Legal documents and contracts can be freely transmitted and concluded by electronic data interchange, except where a document is legally required to be signed and in writing as a condition of validity.

163.

Tax and accounting laws do not prohibit the keeping and transmission of accounting documents on electronic media, provided these documents remain accessible for the period for which they are required to be kept.

164.

The probative value of computerized legal documents is a more delicate matter. Swedish judges will probably hesitate to accord the same probative value to electronic evidence as to a document in writing.

165.

Sweden is in the process of adopting rules making electronic data interchange possible. This process is particularly advanced in the customs and maritime fields.

CHAPTER 4: ANALYSIS OF THE LEGAL POSITION IN ICELAND⁴⁹

Results of the study of Icelandic law by Thordur S. GUNNARSSON and Valborg SNÆVARR, of the T. S. GUNNARSSON law office.

Section 1. Absence of specific rules in this field

166.

Apart from the specific provisions of Icelandic commercial law, the study was unable to discover any rules dealing specifically with electronic data interchange.

167.

The Law on Telecommunications⁵⁰ gives the State a monopoly of telecommunications activities. It contains no reference to value added networks, and makes no distinction between such networks and telecommunications networks in general.

49 To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Thordur GUNNARSSON and Mr Valborg SNÆVARR, which they followed very closely.

50 Law on Telecommunications No 73/1984.

Section 2. Scope for the electronic transmission of commercial documents between firms

Par. 1. Electronic transmissibility of all kinds of commercial documents (orders, transport documents, documentary credits, etc.)

(a) Principles

168.

Commercial documents can in principle be freely transmitted by electronic means under Icelandic law.

However, Icelandic regulations contain formal requirements for certain commercial documents which make it impossible to transmit them electronically.⁵¹

(b) Invoices

169.

Invoices are subject to no formal conditions and can therefore legally be transmitted electronically.

(c) General conditions of sale

170.

General conditions of sale can be transmitted by electronic means under Icelandic law.

The general conditions of sale are presumed to form part of the contract when they have been brought to the purchaser's attention.

51 See paragraph 2 - Exceptions to transmissibility - below.

General conditions of sale which are not incorporated into the contract can also bind the parties where commercial practice is such that the conditions are known to the purchaser.

(d) Contracts

171.

Under Icelandic law, the parties are free to choose the method of concluding a contract. Thus there is no legal obstacle to a contract being concluded by electronic means where the parties have previously agreed to conduct their business in such a way.

172.

The place of conclusion of the contract and its date of entry into force can also be determined by the will of the parties.

In the absence of agreement between the parties, the contract is concluded when an offer has been accepted and the acceptance has reached the offerer.⁵²

This means that the contract is always concluded at the place and time of receipt of acceptance by the offerer.

The authors of the study consider acceptance received by electronic means to be valid.

Par. 2 Exceptions to the principle of the electronic transmissibility of commercial documents

(a) Document required by law to be in writing

173.

Commercial documents are not in general subject to any formal requirements. Icelandic law does not require documents to be in writing in order to be valid.

52 Law on Contracts No 7/1936, Chapter 1.

(b) Power of attorney

174.

There are, however, a number of exceptions. Article 16 of the Law on Contracts⁵³ provides that a written power of attorney must on request be presented and handed over to the person dealing with the representative to provide evidence of the legitimacy of the power of attorney.

(c) Real estate

175.

When real estate is sold or inherited, ownership must be transferred by a document in writing so that it can be invoked against third parties. The contract is nevertheless binding on the parties even if it is not in writing.

The same rules apply to the registration of mortgages.

(c) Company law

176.

Documents relating to the life of a company must also be in writing. To be legally valid, the contract setting up a company, its articles of association, resolutions of the board of directors and share certificates must all be in writing.

(d) Instruments embodying a right

177.

Cheques, bills of exchange and promissory notes must be in writing. The rights obtaining under these documents can be exercised and transmitted only by the physical hand-over of the instrument.

53 Law on Contracts No 7/1936, Article 16.

This is also the case for bonds, which must be made out in writing and signed by the issuer. Although there are no penalties as such for failure to comply with these formal requirements, the beneficiary of a bond which is not in writing and is not signed cannot benefit from the rules applicable to bonds to obtain payment thereof.

Shares must also be in writing in order to prove ownership.

Maritime bills of lading are subject to the same rules pursuant to the provisions of maritime law.⁵⁴ The bill of lading must be physically presented to obtain delivery of the corresponding goods.

Transmission of these documents by electronic means cannot, therefore, be contemplated under Icelandic law as it currently stands.

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1. General obligation under Icelandic law to keep documents

(a) Obligation under accounting law

178.

According to the Law on Income Tax⁵⁵ and the Law on Accounts,⁵⁶ commercial documents must be kept in paper form, on microfilm, on computer or in any other form considered reliable by the tax authorities.

The authors of the study consider that a document is reliable if it is not perishable.

179.

The legal period for the compulsory retention of commercial documents is seven years, whatever form they take.

54 Maritime Law No 34/1985.

55 Law on Income Tax No 75/1981.

56 Law on Accounts No 51/1968.

Pursuant to Article 25 of the Law on Accounts, any failure to comply with these legal provisions is punishable by the Penal Code, which imposes fines and imprisonment.⁵⁷

(b) Obligation under tax law

Par. 2. Scope for keeping documents in computerized form

180.

As mentioned above, commercial documents can be kept in any form, provided it is reliable.

The tax authorities have hitherto always accepted computerized documents.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

181.

Icelandic law lays down no general obligation to sign commercial documents.

There are, however, cases in which signature is a condition of validity of the document or of the corresponding transaction.

This is the case in particular of instruments embodying a right which must be physically handed over, including bills of exchange, cheques, promissory notes and bills of lading. It also applies to powers of attorney.

Par. 2. Scope for using electronic signatures

182.

If the authenticity of the document and the identity of the parties can be proved by other means, there is no legal obstacle to the use of electronic signatures.

Par. 3. Penalties

183.

Where a document is required to be in writing and signed to be valid, the absence of a signature renders it void.

Section 5. Constraints resulting from the law of evidence

Par. 1 Application to electronics

184.

The Law on Civil Procedure⁵⁸ does not restrict the admissibility of evidence in Icelandic courts. All forms of evidence are admissible, including electronic records.

Thus the presentation of computerized data as evidence is possible. However, the computerized document must be directly readable by the judge. Thus a document presented in coded form will be inadmissible as evidence.

Par. 2 Probative value of a computerized document

185.

The judge has absolute discretion to assess the probative value of a document presented in electronic form.

58 Law on Civil Procedure No 85/1936, Chapter X.

Icelandic law lays down no hierarchy of forms of evidence. Evidence presented in computerized form could be as valid as a document in writing bearing a signature.

However, the authors of the study point out that the question as to the probative value of a computerized document has not yet been examined by the Icelandic courts.

Section 6. Relations with the customs and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

185.

Pursuant to Article 20 of the Law on Customs,⁵⁹ importers may submit their import declarations in computerized form. However, the information contained therein must be confirmed in writing.

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

186.

The Icelandic authorities have access to electronic data processing systems and to computerized records.

Computerized systems are audited on the basis of documents printed from the data stored or directly by reading the data on the computer.

59 No 55/1987, as amended by No 96/1987.

Section 7 Conclusions of the study of Icelandic law

187.

The study of Icelandic law has shown that there is no legislation prohibiting electronic data interchange. Commercial documents can in theory be freely transmitted by electronic means.

188.

However, electronic transmission is not possible where a document or contract must comply with certain formal requirements, or where the physical hand-over of an instrument is required.

189.

Documents drawn up by electronic data interchange can be adduced as evidence. The judge assesses the evidence submitted to him freely, provided it is readable.

190.

There is nothing to prevent commercial documents being kept for accounting or tax reasons on computerized media. However, such data must be kept in a reliable form.

CHAPTER 5: ANALYSIS OF THE LEGAL POSITION IN FINLAND⁶⁰

Results of the study of Finnish law by Carita WALLGREN, of the ROCHIER-HOLMBERG & WASELIUS law office.

Section 1. Absence of specific rules in this field

191.

Apart from the specific provisions of Finnish commercial law, the study was unable to discover any rules dealing specifically with electronic data interchange.

Section 2. Scope for the electronic transmission of commercial documents between firms

Par. 1. Electronic transmissibility of all kinds of commercial documents (orders, transport documents, documentary credits, etc.)

(a) Principles

192.

Finnish law presents no obstacles to the electronic transfer of commercial documents between traders.

It lays down no specific formal requirements for such documents, subject to certain exceptions.

⁶⁰ To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Carita WALLGREN, which they followed very closely.

This means that documents such as invoices and orders can be transmitted electronically.

(b) Invoices

193.

Invoices are not subject to any formal conditions, and can hence be legally transmitted by electronic means.

(c) General conditions of sale

194.

Finnish law contains no specific provisions dealing with the transmission of general conditions of sale.

It is sufficient to establish that general conditions of sale which have been transmitted electronically have been brought to the attention of the other party in a sufficiently clear manner for it to be presumed that the latter has actually read and approved them.

Thus Finnish legislation does not present any obstacle to the electronic transfer of general conditions of sale.

195.

A committee set up by the Finnish Minister of Justice has presented draft legislation concerning general conditions of sale.

Under the proposal, the general conditions of sale would be binding only if they were clearly incorporated in a written agreement or if the agreement made clear reference to them.

The aim of this proposal is to enable the other party to be effectively informed of the conditions he is accepting by approving the agreement.

196.

The courts require the contracting party to have access to the general conditions of sale in writing.

However, derogation from this rule is possible where commercial practice is such that the purchaser should have known the conditions.

(d) Contracts

197.

Finnish law imposes no formal requirements for contracts. An oral agreement is just as valid as an agreement in writing.

Thus there is nothing to prevent the conclusion of a contract by electronic means.

Proof of the existence and content of an agreement concluded by electronic data interchange remains the main difficulty.

198.

The basic rule is that a contract comes into existence when an intelligible positive reply reaches the party who made the offer.

Acceptance can be received by electronic data interchange, it is not necessary for there to be human intervention where this is usual commercial practice.

In application of the principle of contractual freedom, the parties can agree the date of entry into force and place of conclusion of the contract.

Par. 2. Exceptions to the principle of the electronic transmissibility of commercial documents

(a) Document required by law to be in writing

199.

Finnish law contains no general rule making it a condition of the validity of commercial documents that they should be in writing.

However, certain contracts must be drafted in writing where one of the parties so requests. This applies in particular to agency agreements, leases and employment contracts.

200.

Certain legal documents have to be drawn up by a solicitor; it is a condition of validity of such documents that they should be in writing and drawn up by a public authority.

Such documents cannot, therefore, be transferred by electronic means.

These include documents for the sale of real estate and related mortgage agreements.

Certain company documents must also be in writing. The document setting up a company and the articles of association must be registered with a public authority, which implies that they must be in writing. The minutes and resolutions of the board of directors must also be signed and set down in writing.

Contracts of association must be registered with a government body and must therefore be in writing.

Finnish law lays down that arbitration clauses must be in writing. However, the authors of the study are not convinced that the courts would invalidate an arbitration clause not set down in writing.

The declaration of election of jurisdiction need not necessarily be in writing. The jurisdiction chosen must, however, be clear.

Loan contracts need not be in writing. However, Swedish consumer protection law provides that consumer credit contracts must be in writing.

Insurance contracts can be concluded orally. It is not a condition of their validity that they should be in writing.

(b) Consequence of the imposition of stamp duty

201.

Another exception to the transmissibility of commercial documents by electronic means results from the stamp duty imposed on certain documents.

The sale and transfer of securities and standardized options and the sale of real estate are subject to stamp duty.

Legislation and current practice presuppose that the legal documents setting down the transaction on which stamp duty is imposed are in writing.

However, there is no legal obstacle to the transmission of such documents by electronic means, except where the document in question has to be drawn up by a solicitor.

(c) Instruments embodying a right

202.

As explained above, instruments embodying a right which is transmitted by the physical hand-over of the instrument cannot be transferred by electronic means.

The requirement that such instruments should be in writing as a condition for their validity is not the result of an express provision of Finnish law, but rather a legal necessity linked to the fact that the rights incorporated in the instrument cannot be exercised without physically possessing the instrument.

203.

This exception to electronic transmissibility concerns:

- bills of lading, as negotiable instruments incorporating the rights attached to the instruments themselves: physical possession of such instruments is a precondition for the exercise of the corresponding rights;

- promissory notes, which must also be in writing if they are to be used as negotiable instruments in accordance with the law;
- bills of exchange;
- cheques.

(d) Company law

204.

A law adopted by the Finnish Parliament in May 1991 introduced paperless shares and bonds.

Henceforth, the physical form of these instruments is replaced by their entry in a computerized register, which will also contain references to the rights and restrictions attached to them.

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1. General obligation under Finnish law to keep documents

(a) Obligation under accounting law

205.

Pursuant to the Finnish Law on Accounts, the stock book and the balance sheet must be drawn up in writing and kept in a bound ledger.

Finnish law lays down that accounts and accounting documents must be kept for ten years or six years, according to their nature.

(b) Obligation under tax law

206.

Like the obligation under accounting law, the taxpayer must keep his accounting documents in such a fashion that they can be examined where necessary by the tax authorities, in particular in support of a tax declaration.

Likewise, as regards turnover tax, the taxpayer must keep his accounts in such a fashion that the information necessary for calculation of turnover tax is accessible to the tax authorities.

207.

Entries in the accounts must be supported by dated and numbered documents which must be kept in a directly readable form attesting to the commercial transactions.

208.

Tax declarations must be submitted on standard forms. They must be dated and signed. Thus it is impossible to transmit them electronically.

(c) Obligation under the law on statistics

209.

Every trader or other commercial entity is subject to a legal obligation to provide information to the official statistical bodies.

This information is transmitted on special forms, which prevents them from being transmitted electronically.

Par. 2. Scope for keeping documents in computerized form

210.

Subject to certain reservations, Finnish law does not prohibit the keeping of commercial documents on computer.

Accounts may be kept on microfilm.

211.

The Finnish Council of Accounts can authorize entries in the journal and statements in the general ledger to be entered by technical means.

Authorization can also be granted for certain accounting documents to be kept on microfilm, and for their transfer to optical disk or an equivalent procedure.

In this case, the legal periods for the compulsory retention of the documents apply as usual.

Par. 3 Penalties relating to the obligation to keep documents for accounting and tax purposes

212.

Failure to comply with the Finnish Law on Accounts can result in a fine or imprisonment.

Failure to comply with the rules relating to the calculation of tax, notably as regards the production of the documents required, can obviously lead to a revised tax assessment.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

213.

Finnish law does not, as a general rule, require a signature as a precondition for the validity of a document.

214.

The principle in Finnish law is that of contractual freedom. The parties are free to decide whether or not a signature is necessary for the validity of the agreement.

Thus case-law has found a legal document to be duly signed where one party has signed for the other in accordance with the latter's instructions.

215.

A signature is required under Finnish law for sales of real estate and for bills of exchange and cheques.

In general, a signature is considered to be necessary where a document is required to be in writing.

Par. 2. Scope for using electronic signatures

216.

Under Finnish law, an electronic signature is not equivalent to a handwritten signature.

Section 5. Constraints resulting from the law of evidence

Par. 1. Evidence under Finnish law

217.

The principle of the judge's absolute discretion to assess evidence applies in Finnish law.

The Finnish judge has complete discretion in assessing the probative value of a document presented to him: he is not restricted by any legal rules.

Moreover, the judge can draw information from all the factual details arising in the case.

Par. 2. Application to electronics

218.

As a result of these principles, Finnish law presents no objection to the use of evidence on electronic media.

In Finland, the judge can therefore freely decide the value he attaches to an electronic procedure as evidence.

Par. 3. Probative value of a computerized document

219.

We can suppose that in assessing the probative value of a document the judge will pay great attention to the degree of recognition and protection enjoyed by the electronic system in question.

The courts would most likely attach greater probative value to evidence in writing than to electronic evidence.

Section 6. Relations with the accounting and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

220.

Tax law lays down that each taxpayer must fill in a tax declaration on a specific form signed by him.

The annexes to the tax declaration, i.e. supporting documents for tax deductions, can be presented on paper, but they can also be transmitted in another reliable manner.

This means that the tax authorities may at their discretion allow the annexes to be transmitted to them by electronic data interchange.

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

221.

It must be possible to transmit data stored on electronic media and make them available to the authorities.

Where the accounts are kept on an electronic medium, the way in which entries are made and their relation to the stock book and the balance sheet must be such that they can be established without needing to use an electronic system.

The taxpayer must have documentation describing the method of electronic processing of the accounts kept on computer, and must keep this documentation for a period of ten years.

Thus the entries in the accounts must be such that they can, if necessary, be printed in a directly readable form. Likewise, it must be easy to establish the method of processing the information concerned.

Section 7 Conclusions of the study of Finnish law

222.

The study of Finnish law has shown that there is no legislation which specifically prohibits electronic data interchange and, in general, commercial documents may be freely transmitted by electronic means.

However, electronic transmission is not possible where a contract or a document has to meet certain formal requirements, or where the physical hand-over of an instrument is required.

The study nevertheless showed that these cases were exceptions rather than the rule.

223.

Legal documents established by electronic data interchange are admissible as evidence. Under Finnish law the judge has absolute discretion to assess the evidence before him.

224.

Commercial documents can be kept on computer for tax and accounting purposes, provided a true copy of the original can be reproduced throughout the period for which documents are legally required to be kept.

CHAPTER 6: ANALYSIS OF THE LEGAL POSITION IN NORWAY⁶¹

Results of the study of Norwegian law by Mr Audun GJ STEIN of the SIMONSEN & MUSÆUS law office and Professor TORVUND of the University of Oslo.

Section 1. Absence of specific rules in this field

225.

Norwegian law contains no specific rules on electronic data interchange.

The Norwegian authorities are planning to set up a special programme to create a "national information technology infrastructure".

The project is intended to introduce electronic data interchange in the public sector and for communications between the public sector and the private sector.

61 To preserve the unity of approach throughout this study, the authors drafted this chapter on the basis of a report by Mr Audun GJOSTEIN of the SIMONSEN & MUSÆUS law office and Professor Olav TORVUND, which they followed very closely.

Section 2. Scope for the electronic transmission of commercial documents between firms

Par. 1. Electronic transmissibility of all kinds of commercial documents (orders, transport documents, documentary credits, etc.)

(a) Principles

226.

In general, subject to the exceptions described below, there is no obstacle in Norwegian law to a commercial document being transmitted by electronic data interchange.

(b) Invoices

227.

In principle there is nothing to stop an invoice being transmitted by electronic means.

An invoice can serve to establish the date on which a debt is due.

228.

In practice a great many firms transmit their invoices by electronic means. Such electronic transmission is perfectly valid under commercial law.

229.

It should, however, be stated that Norwegian accounting law opposes this principle by requiring the originals of invoices received to be kept.

This provision of accounting law therefore makes it essential for the creditor to send a paper invoice, even if a copy of the invoice has already been transmitted by electronic means.

(c) General conditions of sale

230.

According to Norway's common law of obligations, the purchaser must have been validly informed of the general conditions of sale if he is to be bound by them.

Otherwise such conditions cannot be invoked against him unless they correspond to an established practice between the parties or in the sector concerned.

231.

In accordance with this general principle, it is quite possible to invoke the general conditions of sale included in a contract transmitted by electronic means, provided this means of communication has enabled them to be brought to the attention of the purchaser.

The only problem arising for all sales transactions is how the seller can prove that electronic transmission of the contract has indeed brought the general conditions of sale to the attention of the purchaser.

To the authors' knowledge, there is no case-law on this question, which remains hypothetical.

(d) Contracts

232.

Under Norwegian law, contracts are not subject to any particular formal requirements. A contract can be concluded in writing or orally, by electronic means or in any other way, whether it is a civil or a commercial contract.

233.

Norwegian law recognizes the theory of receipt: the contract is deemed to be concluded when acceptance reaches the offerer. These rules also apply where the offer and acceptance are exchanged by electronic means.

234.

According to Norway's common law of obligations, an offer is in principle irrevocable, unless otherwise specified. Revocation of an offer or acceptance is valid only if it reaches the addressee before or at the same time as the latter is informed of the offer or acceptance, as the case may be.

However, according to Article 40 of the Code of Obligations, a message retracting the offerer's offer to contract is considered to be valid if it is sent by mail, telegram or other "appropriate" means.

235.

The authors of this report believe that a message sent by electronic data interchange would be considered to have been sent by "appropriate" means.⁶² If for some reason the message is delayed or does not reach its addressee, the sender will nevertheless be deemed to be discharged of his offer.

236.

This last rule could obviously be circumvented by the parties signing a separate agreement to the effect that the contract will be concluded as soon as the offer is accepted by the acceptor's computer.

237.

In general, it would be possible for the parties to stipulate, in a separate agreement, that contracts will be concluded by an offer being sent by computer and accepted by computer, the speed of transfer making the offer and acceptance thereof quasi-simultaneous. This would be the case in Norway for the purchase of listed securities.

(e) Insurance

238.

Norwegian law contains no specific provision requiring insurance contracts to be drawn up in writing and signed by the parties. Since insurance contracts may be concluded by telephone, there would appear to be no reason why they should not be concluded by electronic data interchange.

⁶² The General Law on Contracts (avtaleloven 31 May 1918 N° 4) is currently being reviewed by a committee set up for that purpose. Specific provisions on EDI are being contemplated.

Par. 2 Exceptions to the principle of the electronic transmissibility of commercial documents

(a) Document required by law to be in writing

239.

As a general rule, commercial documents are not subject to any formal conditions.

240.

Authentication by a solicitor is rarely a condition of validity of documents under Norwegian law.

(b) Real estate

241.

However, Norwegian law lays down certain exceptions, particularly as regards contracts for the transfer of the ownership of real estate, the conclusion of a mortgage agreement and long-term leases.

242.

Such contracts are valid and enforceable between the parties, even if they have been concluded orally or by electronic means, but they cannot be invoked against third parties until they have been recorded in the Land Registry, and this requires a document in writing.⁶³

63 Tinglysningsloven, 7 June 1935 No 2.

(c) Credit sales

243.

Credit sales including a guarantee clause relating to the goods sold also require a contract in writing.⁶⁴

(d) Company law

244.

Most companies under Norwegian law must be entered in the Central Companies Register.⁶⁵ This applies to joint stock companies, limited companies and unlimited companies. The documents setting up a company and its articles of association must be drawn up in writing.

245.

Only one type of company, the "silent company" ("stille selskap"), is not required to be registered. Written documents setting up the company and written articles of association are not needed to set up and run such companies.

A silent company is a limited liability company in which the liability of the "silent" associate is limited to a fixed amount while the principal associate in whose name the company is established has unlimited liability. This form of company is often used by Norwegian businessmen.

246.

As a general rule, shares in unquoted companies can be transferred by any means, including a contract concluded orally. Such transfer can therefore take place by electronic data interchange.

However, the registration formalities for the transfer of shares in quoted companies require a document to be drafted in writing.

64 Panteloven 8 February 1980, No 2, §3-14 to 3-22.

65 This Register is kept at Br nn ysund.

(e) Door-to-door sales

247.

There are no rules requiring contracts of sale concluded at the purchaser's home to be in writing or signed. The Law on Door-to-door Sales provides that a consumer can cancel such sales during a period of ten days following delivery of the goods.

The seller is obliged to inform the purchaser in writing of his right to cancel the contract during the ten days following delivery. If this information is not communicated to the purchaser, the period within which cancellation is possible is extended without in any way affecting the other obligations of either party.

(f) Clauses electing jurisdiction

248.

These clauses do not need to be in writing. However, the Norwegian courts traditionally demand convincing evidence before recognizing the validity of an agreement designating a foreign court as the competent jurisdiction. In practice such agreements are therefore concluded in writing.

(g) Judicial documents

249.

Procedural documents (actions at law, conclusions, etc.) cannot be transmitted by electronic means under Norwegian law.

(h) Instruments embodying a right

250.

Instruments embodying a right must be on paper.

They must therefore be in writing and duly signed, otherwise they are void.

251.

The documents subject to these specific rules are payment instruments such as bills of exchange,⁶⁶ cheques⁶⁷ and promissory notes.

252.

Transmission of such instruments by electronic means, whether for payment or endorsement, cannot therefore be contemplated as Norwegian law now stands.

253.

Likewise, listed shares and securities cannot be created in electronic form and must be recorded in a register. Registers of stocks, shares and securities are governed by the Law on Stock Registers.⁶⁸

Section 3. Constraints resulting from tax, accounting or other obligations to keep documents

Par. 1 General obligation under Norwegian law to keep documents

(a) Obligation under accounting law

254.

Accounting law⁶⁹ requires the accounts to be kept in writing in appropriate books.

66 Vekselloven, 17 December 1976 No 100.
67 Sjekkeloven, 27 May 1932 No 3.
68 Verdipapiersentralloven, 14 June 1985, No 62.
69 Regnskapsloven, 13 May 1977, No 35.

255.

Article 11 requires all invoices received and copies of letters and other documents to be kept for auditing purposes.

Invoices received on paper must accordingly be kept on paper. This does not preclude the sending of invoices by electronic means, but it means that the creditor must send a paper original as well as the electronic copy.

256.

All accounts documents must be kept for ten years. However, the government can reduce this period by regulation or individual administrative decision.

257.

The law lays down that accounts documents can be transferred to microfiches 3½ years after the expiry of the accounting period concerned. However, these documents may not be read by optical scanner and stored on computer.

258.

The Government can authorize certain firms (such as banks and credit institutions) to keep their accounts in computerized form and to keep all documents on computer.

(b) Obligation under tax law

259.

Tax law contains no general obligation to keep documents. Nevertheless, a provision of the Norwegian tax law provides that the taxable basis must be presented in accordance with accounting rules "of a high standard", which in practice implies full compliance with the provisions of accounting law.

260.

The authorities have the right to carry out inspections to ensure that both accounting and tax provisions have been complied with.

The tax authorities can reassess tax on inspection of information dating back ten years, the period for which accounting documents are required to be kept under Norwegian law.

Par. 2. Scope for keeping documents in computerized form

261.

Pursuant to Article 6 of the Accounts Law, the Government can adopt a regulation authorizing accounts to be kept in forms other than writing, and in particular on computer.

262.

However, no rules giving general authorization for the keeping of computerized accounts have yet been adopted.

263.

The Government has authorized certain firms (such as banks and credit institutions) to keep their accounts in computerized form and to keep all documents on computer.

For these firms, Norwegian law stipulated criteria ensuring the reliability of the documents kept on computer. These rules obviously apply only to persons specially authorized to keep accounts on computer.

264.

These rules⁷⁰ state that the operation of the computers and their programs must be explained in "comprehensive and explicit" documentation, enabling every entry in the accounts to be traced and inspected, and specify the layout when the document is printed.

70 The "Loose Leaf Regulation".

265.

The Norwegian tax authorities can contest the value of such explanatory documents.

266.

The Norwegian Association of Government Authorized Auditors has published recommendations concerning the auditing of computerized accounts systems. These recommendations provide a number of criteria to be observed for the drafting of the above-mentioned explanatory documents.

Par. 3 Penalties relating to the obligation to keep documents for accounting and tax purposes

267.

The Code of Accounts and the Penal Code impose fines for failure to comply with the provisions on the keeping of accounting documents on paper.

268.

The tax authorities have the power to reject accounting documents presented in a form other than that laid down by the law.

Income is then taxed on an assessed basis and the taxpayer is taxed on this basis. This can result in an additional financial penalty for the taxpayer.

Section 4. Constraints resulting from the obligation to sign documents

Par. 1. Obligation to sign documents

269.

Norwegian law contains no general obligation to sign commercial documents.

270.

However, where the law expressly requires a signature on a legal document, this means that an original handwritten signature is a condition of validity.

This is the case for the transfer of real estate, shares in listed companies and ships.

271.

The original document does not necessarily have to be presented to the registration authority: proof of the existence of the handwritten signature can be provided by other means where the document has passed before a solicitor or lawyer.

Par. 2. Scope for using electronic signatures

272.

Norwegian law expressly permits the use of electronic signatures in certain cases, e.g. for the issue of company shares.

273.

Electronic signatures are already used in the banking sector and the international transport sector, and in the new customs system set up by the Norwegian authorities (see Section 6, paragraph 1, of this report).

274.

The use of electronic signatures is nevertheless possible only on the basis of a prior contractual commitment by the parties to recognize the obligations which they will undertake to respect when using this form of signature.

Par. 3. Penalties

275.

To the knowledge of the authors of the study of Norwegian law, there is no uniform penalty for failure to comply with the provisions requiring a handwritten signature.

The penalty will depend on the judge's assessment of the seriousness of the failure to comply with the obligation to sign in writing. The judge could decide that the failure to comply with this obligation equates to the absence of a signature.

276.

The judge might also decide that the electronic signature translates the will of the signatory to enter into the commitment. He could then set a deadline for the parties to correct the formal error or take other corrective measures.

Section 5. Constraints resulting from the law of evidence

Par. 1. Procedural principles and application to electronics

277.

The admissibility of evidence under Norwegian law is governed by the Penal Procedure Code and the Civil Procedure Code.

278.

The fundamental principle of the procedural rules is that of the judge's absolute discretion to assess evidence. During the procedure, judges must take into account all information enabling them to arrive at an opinion, and then determine to what extent the facts are proven.

279.

Apart from written affidavits of witnesses, all types of evidence are admissible under both civil and criminal law.

280.

Evidence is presented by the lawyers of each party and each lawyer has the opportunity to discuss and question in court the reliability and relevance of the evidence presented.

281.

The courts have the right to reject evidence produced "in litigation", i.e. evidence produced by one of the parties after the proceedings have started because it supports his arguments.

282.

The courts can also reject evidence which they do not consider to have been presented in a satisfactory form. According to the authors of the study, the production of diskettes, magnetic tapes and other computerized media would probably be rejected by the courts, which would require the data to be printed on paper.

Par. 2. Probative value of a computerized document

283.

In accordance with the general principles laid down by the Norwegian Codes of Procedure, the probative value of a computerized document must be assessed by the court in the same way as all other forms of evidence.

284.

Although, as far as the authors of the report are aware, there is no case-law on the production of computerized documents as evidence in Norwegian courts, it is possible to reason by comparison with similar cases.

Thus the courts recognized that a contract had been concluded by telex in a case where the offerer had provided evidence that the information relating to the offer in question had been sent.

According to the authors of the study, the courts thus have the right to admit evidence that a computer has sent data if a code number in the computer reliably identifies the origin of the data.

Section 6. Relations with the customs and tax authorities

Par. 1. Scope for transmitting data to these authorities electronically

285.

In Norway, the tax authorities have been recognized as having the right to inspect information stored on computer by banks, credit institutions, social security bodies, etc.

286.

Employers (major companies in general) which have lists of their employees stating, in particular, their pay and income tax, must communicate these lists to the authorities in machine readable form.

287.

This system provides the tax authorities with sufficient information to estimate the tax of many taxpayers.

It is, however, based on a written agreement from the taxpayer giving the tax authorities all powers to collect the necessary information on his personal situation.

The authorities then draw up a tax notice in respect of the taxpayer, which it submits to him for signature.

288.

This system is currently used only by certain municipalities and concerns only specific categories of taxpayers whose financial situation is relatively simple.

289.

A system making direct use of electronic data interchange is also used in Norway for customs purposes.

290.

Exporters send a declaration by electronic data interchange to the customs authorities, which process this declaration and calculate the duties to be paid. The amount is then notified to the party concerned.

All participants have entered into an agreement on the operation of this system, under which the participants are identified by numerical codes.

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

291.

There are no specific rules concerning the auditing of computer systems or electronic data interchange under Norwegian law.

292.

However, the Norwegian Association of Government Authorized Auditors has published recommendations concerning the auditing of computerized accounts systems.

These recommendations lay down inter alia a number of criteria to be observed for the drafting of documents explaining how the computers and their programs operate.

Section 7 Conclusions of the study of Norwegian law

293.

The major obstacle to the widespread introduction of electronic data interchange in Norway appears to be accounting law, which requires accounts to be kept in writing and the originals of invoices to be kept.

294.

However, it should be noted that the authorities can authorize certain firms to keep entirely paperless accounts, and that rules designed to ensure the reliability of the means of storing accounting documents on computer have already been laid down.

295.

The Norwegian authorities themselves make extensive use of electronic data interchange systems for tax and customs purposes.

The authors of the study of Norwegian law believe that it is important to establish international rules for electronic data interchange, particularly to ensure the reliability of telecommunications equipment and liability resulting from their use.

296.

Another area in which they believe harmonization is called for is that of the rules on the conflict of laws. The authors stress that even in the case of a national transaction, conflicts of law can arise if the telecommunications service is provided by a third party situated in another country.

PART TWO

"HORIZONTAL" ANALYSIS

CHAPTER 1: CURRENT REGULATORY SITUATION IN THE TWELVE MEMBER STATES

297.

Our investigations in the six EFTA Member States revealed legislation dealing specifically with electronic data interchange in just one country: Austria.⁷²

Even so, this legislation is not generally applicable to users of electronic data interchange.

It concerns only the "Bildschirmtext" (BTX) electronic mail network run by the Austrian post and telecommunications administration, which is open to the general public, and lays down the conditions of access and use and the liability of the parties involved.

Thus it is really only a "communication agreement" setting out the general conditions for use of this open network which, given the number of potential users, has been raised to the status of a regulation to make it more easily enforceable.

298.

The other regulations identified by the study apply only indirectly to electronic data interchange, and have the following objectives:

- to enable accounts to be kept exclusively in computerized form and to determine the conditions under which the documents and data on which such accounts are based can be kept exclusively in computerized form;⁷³

72 See Part One, Chapter 1: Results of the study of Austrian law, Section 1.

73 See Part One, Chapter 1: Results of the study of Austrian law, Sections 3 and 6; Chapter 3, Results of the study of Swedish law, Chapters 3 and 6; Chapter 4, Results of the study of Icelandic law, Section 6; Chapter 6, Results of the study of Norwegian law, Section 3.

- to enable tax or customs declarations to be made by EDI or with the aid of computers;⁷⁴
- to protect privacy by restricting the information which may be transmitted by EDI;⁷⁵
- to permit the use - in limited circumstances - of what is known as an "electronic signature".⁷⁶

299.

Beyond the scope of these regulations, and a fortiori in the absence of such regulations, EDI is generally governed by common law provisions as interpreted by the courts and by the practices of national administrations, in particular tax and customs administrations, whether or not these are set out in legal provisions.⁷⁷

300.

The study did not find any regulations governing the admissibility of a computerized recording as evidence in court.

This is due to the less rigid system of judicial evidence in force in most EFTA Member States.⁷⁸

74 See Part One, Chapter 1, Results of the study of Austrian law, Section 6; Chapter 3, Results of the study of Swedish law, Section 6; Chapter 4, Results of the study of Icelandic law, Section 6; Chapter 6, Results of the study of Norwegian law, Section 6.

75 See Part One, Chapter 1, Results of the study of Austrian law, Section 2.

76 See Part One, Chapter 2, Results of the study of Swiss law, Section 2; Chapter 6, Results of the study of Norwegian law, Section 4.

77 See Part One, Chapter 2, Results of the study of Swiss law, Sections 3 and 6; Chapter 5, Results of the study of Finnish law, Sections 3 and 6; Chapter 6, Results of the study of Norwegian law, Sections 3 and 6.

78 See Part Two, Chapter 2.

CHAPTER 2: LEGAL OBSTACLES TO THE DEVELOPMENT OF ELECTRONIC DATA INTERCHANGE - TYPES OF CONSTRAINT

301.

The legal obstacles to the development of electronic data interchange are a result of:

- (a) the obligation for documents to be drawn up, issued, transmitted or kept on paper and signed (Section 1);
- (b) the ephemeral nature of data transmitted by electronic data interchange and the resulting difficulty in proving what has been exchanged (Section 2);
- (c) the difficulty of determining the time and place of conclusion of the operation carried out by electronic data interchange (Section 3).

302.

The way in which the associated problems of security and confidentiality are or are not resolved by the laws of the various countries can also constitute a legal obstacle to the development of electronic data interchange.

The same applies to questions of liability.

However, as agreed with the sponsors of this study, these issues are not dealt with here.

303.

The relatively recent appearance of national regulations intended to protect personal data and privacy and public order and morality has given rise to a new category of legal obstacles to the development of electronic data interchange.

In general these obstacles are the result of restrictions imposed on the information which may be transmitted by EDI (Section 4).

Section 1: First type of constraint: the obligation for documents to be drawn up, issued, transmitted or kept on paper and signed

304.

A document is generally required to be in writing:

- where this is a condition of validity of the legal act which the document records and where failure to comply with this requirement renders that act null and void or without legal effect;
- where the document is subject to a subsequent legal operation such as enrolment, registration or the affixing of stamps, where the document must be presented and where failure to comply with this requirement deprives the document of some or all of its legal effects and renders the person concerned liable to administrative, tax or even criminal penalties;
- where transfer of the rights and obligations embodied in a document requires the physical transfer of the document;
- where a written document is required as valid evidence of a legal act or document.

305.

In this section we examine the consequences of the first three requirements only.

The consequences of the requirement of a written document as evidence will be examined in Section 2 of this Chapter.

306.

The need for a document in writing as a condition of validity of a legal act is clearly an absolute obstacle to the development of EDI.

For such time as this requirement is upheld, the use of electronic data interchange to accomplish the legal act in question is excluded.

307.

Where the legal act is subject to a subsequent legal operation requiring the presentation of the paper document and failure to complete that operation results only in a penalty or the loss of certain legal effects, the use of electronic data interchange is excluded only where it is not possible to conclude the document and complete the subsequent legal operation at a later date.

At the very least, such a requirement constitutes a serious obstacle to the development of electronic data interchange.

308.

Our study of the six EFTA Member States led to a conclusion which we had already reached at the end of the earlier study of the twelve EEC Member States, namely that the laws of these States are really relatively informal, especially with respect to legal operations of interest to industry, services and commerce.

309.

Independently of the question of evidence, to which we will return in the next section of this Chapter, the following operations are not subject to any formal condition in any of the EFTA Member States:

- drawing up and sending an invoice,
- making an offer of sale or service,
- submitting an order,
- communicating general conditions,
- concluding most everyday transactions.

310.

The main problem as regards general conditions is to make them enforceable.

In the six EFTA Member States, as in the twelve EEC Member States, the judge has absolute discretion to decide whether under the circumstances of the case the person concerned can reasonably be considered to have had the opportunity to read the general conditions and to have decided not to oppose their application in whole or in part.

This requirement is sometimes applied even more flexibly by the courts in certain EFTA Member States where the clauses of the general conditions correspond to the established commercial practice of the sector concerned.

Whatever medium is used to render the general conditions enforceable, the problem is the same.

Thus the problem is not specific to electronic data interchange, and does not exclude the use of EDI for this purpose.

311.

According to the law of certain countries, certain clauses are enforceable only if they are "reasonable".

This, again, is a separate problem unrelated to electronic data interchange, and it clearly does not exclude the use of EDI.

This would not be the case if, as under Italian law, such clauses could be rendered enforceable only if the person concerned had expressly accepted them in writing in advance.⁷⁹

312.

However, the investigation did reveal certain exceptions to the general informality of the legislation of the EFTA Member States.

These exceptions are referred to, not always exhaustively, in paragraph 2 of section 2 of each of the six chapters in Part One of this study.

79 Article 1341 of the Italian civil code; see also Part One, Chapter 5, draft Finnish legislation on general conditions of sale.

313.

These exceptions vary from one Member State to another.

A particular legal operation or a particular desired legal effect does not uniformly require the prior existence of a document in writing, or the physical transfer or presentation of the document.

The prior existence, transfer or presentation of a document in writing does not always necessarily serve the same purpose in all six EFTA Member States.

314.

Leaving aside the "teleological" criterion used at the start of this section⁸⁰ and taking a more "sectoral" criterion, we note that, quite apart from the need to establish admissible evidence, the existence of a document in writing is required to accomplish certain operations in the following sectors:

- (a) the sale and in some cases the renting of real estate;⁸¹
- (b) the sale of tangible movable goods requiring special consumer protection;⁸²
- (c) transport;⁸³
- (d) credit;⁸⁴
- (e) payment techniques;⁸⁵
- (f) securities;⁸⁶
- (g) the setting-up, change and control of companies;⁸⁷

80 See paragraph 264.

81 Sales of real estate require a document in writing, and in many cases this must be authenticated and/or registered. In some countries, the latter requirements are needed only to make the sale legally binding on third parties. In some countries long-term leases must be drawn up in writing and signed by the parties.

82 For example, hire purchase contracts or doorstep sales.

83 Negotiable travel documents and accompanying documents must be in writing.

84 Where this requires special consumer protection (consumer credit, etc.).

85 Cheques, bills of exchange and promissory notes.

86 The requirement for securities to be in writing is sometimes general (mortgage loans), sometimes limited to non-traders.

87 This concerns acts in respect of which the associated parties or third parties must be protected, particularly by means of publication and/or registration. Bearer shares and company securities often require a document in writing signed by the issuer, although the signature may be mechanically printed. In Finland, the shares and securities of certain companies are no longer represented by paper documents, which have been replaced by entries in a computerized register.

- (h) dispute settlement;⁸⁸
- (i) power of attorney;⁸⁹
- (j) bequests and donations;⁹⁰
- (k) transfer of intangible rights;⁹¹
- (l) legal, tax and administrative procedures.⁹²

315.

Where a document must be in writing to be valid, it is generally also required to be signed.

In such circumstances most EFTA Member States require the signature to be handwritten. Others accept printed signatures in certain cases,⁹³ but do not necessarily require an electronic signature.

Section 2: Second type of constraint: obstacles linked to the requirements of proof

316.

Electronic data interchange, like computers and telematics, offers the undoubted advantage of enabling legal operations to be performed more rapidly.

The drawback is the ephemeral nature of the data transmitted: the data appear and disappear, which makes it difficult to provide evidence of what has been exchanged.

Such evidence may be required in court (paragraph 1) and/or for accounting and/or tax purposes (paragraph 2).

88 A document in writing is not always required to determine the law applicable to a transaction or to appoint a judge or arbitrator.

89 In certain countries a document in writing is required in case of doubt or dispute.

90 This is a general rule for the transfer of real estate. As regards movable property, a document in writing is sometimes required only for promises to give.

91 E.g. transfer of a debt.

92 Most pilot schemes for filing applications by computer/electronic link concern fiscal and customs procedures.

93 E.g. in Norway to issue company shares.

317.

In both cases, not only must an acceptable form of evidence be established, it must also be kept for the period during which it can be invoked under the legal procedure concerned or for the period during which the administrative, tax or other authorities are empowered to carry out inspections.

318.

Within EFTA the scope and duration of this obligation to keep documents varies considerably between areas of law and between Member States.

Par. 1 Judicial law

319.

The law of evidence is not uniform throughout the EFTA Member States.

320.

The system of "free evidence" applies in Finland, Iceland, Sweden and Norway.

The judge takes into account all evidence which enables him to form an opinion and then determines the extent to which the facts of the case are proven.

The judge's discretion is limited only by some form of hierarchy of forms of evidence. Subject to certain nuances specific to Sweden and Norway,⁹⁴ which do not affect our study, the judge has absolute discretion as regards both what is admissible in court as evidence and the probative value of the evidence admitted.

94 Written statements by witnesses are not admissible as evidence.

321.

Thus in the "Nordic" States the admissibility as evidence of a computerized record and the probative value attached to such evidence do not a priori constitute an obstacle to the development of electronic data interchange.

In practice, however, this statement requires certain qualifications.

322.

To enable the judge to arrive at an informed opinion and the party against whom the evidence is used to exercise fully his right of opposition, computerized records produced as evidence in court must be "legible" and leave no room for doubt or suspicion of manipulation.

Although the lawyers who examined the law of the four countries referred to above believe there is as yet no case-law deciding this matter one way or another, it is highly likely that:

(a) judges will require a printout of the computerized record to be produced;

(b) victims of their ignorance of computers and thus also of prejudices which are unfortunately still all too common, judges will tend to doubt the authenticity and the probative value of computerized documents.

323.

Paradoxically, the free nature of the law of evidence in Finland, Iceland, Sweden and Norway may well increase the risk of legal uncertainty, and this may damage the development of electronic data interchange.

324.

The codes of civil procedure of Austria and of certain Swiss cantons accept only the system of "strict" evidence: computerized records are inadmissible as evidence in court.

Computerized records do not match the definition of a "document" under Austrian law and the majority doctrine in Switzerland, which appear to require a document to be in writing and on paper.

325.

When data are recorded on computerized media and the magnetic records thus produced are transcribed onto paper in the form of computer printouts, the document produced is always regarded as a "copy".

Although "copies" are admissible as evidence in court, their probative value is automatically less than that of the "original", which the judge can always require to be produced.⁹⁵

At the very least, the probative value of a "copy" produced by printing out a computerized record is liable to be questioned on account of the real or perceived risk of manipulation.

326.

Fortunately, the laws of both countries accept "inspections", "expert opinions" and "witnesses" as evidence.

These forms of evidence, and in particular the opinion of experts, can enable the doubts referred to above to be overcome and can give a "copy" printed on paper from a computerized record the value of a "copie vidimée", i.e. a document certified to have been compared and found to be a true copy of the original.

Thus it can have the same probative value as the original of a document in writing.

Evidence of an act or document stored on a computerized medium can thus be accepted by a court and, particularly by referring to the opinion of an expert, attain a probative value close or comparable to that of the original document in writing.

327.

Thus the system of "strict" evidence described above does not constitute an insuperable obstacle to the development of electronic data interchange.

95 See, for example, Article 52(1) of the Swiss Federal Civil Procedure.

It is unquestionably such as to hamper its development, although there is a trend towards greater liberalism, largely as a result of the development of banking practice.⁹⁶

328.

In most Swiss cantons, the procedural codes setting out the rules of evidence applicable to cases before the cantonal courts also accept the system of "free" evidence.

Thus the remarks made concerning the Finnish, Icelandic, Swedish and Norwegian law apply here too in the absence of rules or instructions determining the conditions under which a computerized document can be accorded probative value.

329.

In the meantime, the difficulties referred to above can be overcome by the contractual technique.

"Communication agreements" often include an agreement between users of a given network relating to evidence.

In the case of "membership contracts" or agreements concluded with parties considered to be in a position of weakness, enhanced protection might be desirable.

Par. 2. Accounting and tax law

330.

Accounting and tax requirements give rise to difficulties comparable to those identified in the previous study of the legal situation in the twelve EEC Member States.

⁹⁶ Bank account statements are frequently produced in court and rarely give rise to problems of authenticity.

331.

Certain EFTA Member States have shown administrative tolerance or have revised their rules to enable accounts⁹⁷ and/or the documents or data on which the accounts are based⁹⁸ to be kept exclusively on computer and/or tax and customs declaration to be filed exclusively by computer.⁹⁹

332.

Where this has not occurred, the requirement for documents to be in writing clearly constitutes an obstacle to the development of EDI.

Such an obstacle is tolerable where the requirement is limited to the keeping of accounts books and registers.

It is less tolerable, or indeed quite intolerable, where this requirement applies also to supporting documents and data on which the accounts are based and to customs declarations.

333.

In Sweden, the law of accounts authorizes the keeping of computerized accounts or the storage of supporting documents on computer, but prohibits the simultaneous computerization of both operations.

Thus an invoice transmitted exclusively by EDI can be used as a supporting document for accounting purposes and kept as a computerized record only if the accounts themselves are not kept on computer.

97 The Finnish Accounting Council may, for example, authorize entries to be made in the accounts journal or the general ledger by technical means. However, this is not possible under Swiss law.

98 For example, in Finland, Iceland and Switzerland.

99 Pursuant to Article 20 of the Icelandic customs law, amended in 1987, importers can file their customs declaration by computerized means. Particularly detailed rules were adopted in 1990 in Sweden in order to facilitate the filing of customs declarations and the presentation of transport documents by EDI. The Austrian tax code has also been revised to make this possible for tax purposes in general.

334.

Where the requirement for a document to be in writing and on paper has been dropped, its "transcription" into that form is sometimes still required.¹⁰⁰

In other cases, it must generally be possible for computerized documents to be "read" at any time by linking the computer to a printer,¹⁰¹ and strict conditions have been imposed by the legislator, the authorities or accountancy institutes with a view to guaranteeing the reliability of data supplied by computer and controlling such data.¹⁰²

335.

However, this openness is not yet the rule in all the EFTA Member States, and it is not practised uniformly.

These disparities constitute an obstacle to the development of electronic data interchange within and beyond EFTA.

Par. 3. Signature

336.

Except where it is required "ad solemnitatem", a document in writing does not normally have to be signed.

However, where a document in writing is a condition of validity of an act, the use of an electronic signature can make that act null and void. In this case, the signature must in principle be handwritten.

100 Austria allows accounts to be kept on computer but requires them to be transcribed onto paper so that they can be signed by the auditor.

101 In Iceland, however, the tax authorities may also audit accounts by reading the data on the computer, provided they are given easy access to the software.

102 See, for example, the guidelines issued by the Swiss federal tax authorities in 1979.

337.

However, this situation is changing. Photocopied and printed signatures are increasingly being accepted.

Electronic signatures are beginning to be accepted, either expressly as in Norwegian law, or tacitly or implicitly as in Austrian and Icelandic law.

Even in Norwegian law, the possibility of signing electronically is sometimes still subject to a prior contractual commitment by the parties to accept that a document signed in this way can produce the desired legal effects.¹⁰³

Electronic signatures are not currently accepted by Swedish and Swiss law.

Finnish law refuses to accord electronic signatures the same value as handwritten signatures.

Section 3: Third type of constraint: difficulties associated with the determination of the time and place of conclusion of operations performed by EDI

338.

The problem of determining the time and place of conclusion of operations performed by EDI clearly arises only where the parties have not agreed on this point.

339.

In this case, the time and place of conclusion will be determined in accordance with the rules applicable to the conclusion of contracts between absent parties.

However, unlike the situation in the EEC Member States, the solutions provided by the laws of the EFTA States all follow the theory of receipt: the contract is concluded at the time and place where the offerer receives acceptance of the offer.

103 This is generally the case in banking practice.

340.

Thus there appears to be no need to distinguish whether the message is transmitted direct from computer to computer or via a VAN or an intermediary.

341.

Where the parties have not agreed on the law applicable to the contract and the court competent to rule on disputes, these are determined in accordance with international law, with the risks of conflict this entails.

However, these risks are not specific to electronic data interchange.

342.

There is a further nuance in Swedish law.

When an order is placed automatically (following changes in stock levels, for example), the contract is not necessarily concluded at the time and place the order reaches the offerer.

The agreement will only become effective in this way if the parties have previously concluded an agreement expressly authorizing this procedure.

343.

To protect the public, a specific clause was included in the general conditions of use of the Austrian "Bildschirmtext" electronic mail system.¹⁰⁴

All transactions concluded via this network are subject to a cooling-off period, unless the offerer has formally excluded this possibility in advance.

However, this does not constitute a specific obstacle to the development of electronic data interchange.

104 See Part Two, Chapter 1.

Section 4: Fourth type of constraint: rules or practices restricting the information which may be transmitted

344.

Telecommunications regulations and regulations laying down the general conditions of use of an electronic data interchange network sometimes impose restrictions on the information which may be transmitted, justified either by the purpose of the network or by requirements of public order, security or public morality.

These restrictions are clearly obstacles to the use of electronic data interchange.

However, they are an expression of the recognized sovereignty of States or parties and they meet requirements such as respect for public order, public security and public morality or contractual autonomy, which extend beyond the field of electronic data interchange.

345.

Other regulations restricting the information which may be transmitted are justified by the law on privacy.

In Austria, electronic data interchange has to comply with the Federal Law on the Protection of the Personal Data of Individuals.

The transfer of personal data relating to an individual requires prior authorization, except under certain conditions, in particular where the country to which the data is to be sent has regulations granting equivalent protection.

Such regulations, although restrictive, are justified by legitimate considerations which are not specific to electronic data interchange; despite the legislative disparities, these regulations are drafted so as to permit rather than to obstruct the free circulation of data, including personal data, in accordance with the principles which led to their adoption.

PART THREE

CONCLUSIONS

I.

346.

The sponsors of this study gave us the dual task of:

- identifying any legal obstacles in each of the six Member States of the European Free Trade Association to increased use of the electronic interchange of trade data; and
- identifying, on the basis of needs and drawing on any experiments under way, priorities for legislative action at European level to overcome or circumvent such obstacles and encourage the development of the electronic interchange of trade data.

II.

347.

The authors' intellectual approach was accordingly identical to that used for the previous study carried out in the twelve EEC Member States, not only because the same task can a priori justify the use of the same means, but also and above all because the previous study was published in full by the Commission of the European Communities, survived relatively unscathed the test of general criticism of its findings, analyses and conclusions, and above all saw its findings validated.

348.

Although technology has raced ahead of the law, the law is also changing.

Indeed, the law is changing so fast that no sooner had the previous study been completed than the authors learned of subsequent developments in legislation and case-law.¹⁰⁵

This inevitable circumstance did not lead us to revise the method we previously adopted, particularly as the changes which have occurred have not led to any fundamental change in our conclusions.

III.

349.

Although the same method was used, it became clear following our examination of the laws of the six EFTA Member States that, leaving aside the associated problems of security and confidentiality, the main legal obstacles to the development of EDI there are:

- (a) the obligation imposed in various legal fields, varying substantially between the six Member States, for signed paper documents to be drawn up, issued, transmitted or kept;
- (b) the ephemeral nature of data transmitted by electronic data interchange and the resulting difficulty of establishing evidence of what data have been transmitted for judicial and/or accounting and tax purposes.

350.

At least the time and place of conclusion of a transaction concluded by electronic data interchange are determined by a legal procedure common to the six EFTA Member States: the theory of receipt applied to transactions concluded by absent parties.

¹⁰⁵ See, for example, the French rules on the conditions of use of electronically transmitted invoices for tax purposes, introduced by Article 47 of the 1990 Amended Finance Law, the relaxations of the law about to be introduced in Denmark and the progress being made in Portugal, Belgium and elsewhere.

IV.

351.

The obligation to establish a document in writing is an insuperable obstacle where it is a condition of validity of the legal act concerned and - as is always the case - failure to comply with this formal requirement either makes the act itself null and void or deprives it of all legal effect.

352.

The survey conducted in the six EFTA Member States nevertheless resulted in the assessment, already made in the EEC study, that the laws of these States are really not particularly formalist.

353.

The transactions covered by the requirement to draw up a document in writing *ad solemnitatem* or for registration purposes are generally marginal to trade between manufacturers, service providers and traders.

354.

However, retention of the requirement to draw up a paper document *ad solemnitatem* in three areas - transport, payment techniques and dispute settlement - is a major obstacle to the development of trade.

355.

Where a document in writing is required only to protect persons presumed to be in a position of weakness, the same result could be obtained, where necessary, by extending the notion of a document in writing and not restricting it to documents on paper.

Such an extension could be obtained by introducing a uniform regulation on the law of evidence or by amending the protective laws themselves in line with a general recommendation.

356.

In the field of transport, in the EFTA States too the major obstacle is clearly the embodiment of the rights and obligations of the consignor, consignee and carrier in a document (bill of lading, consignment note, etc.) and the requirement for this document to be physically transferred in order to transfer the rights and obligations incorporated in it.

The resulting drawbacks make it necessary to develop and bring into general use an "electronic bill of lading".

357.

The first experiments in this field have been conducted in relatively closed environments where the use of contracts suffices to resolve the legal problems arising from the issue, communication and transfer of electronic bills of lading and their endorsement between users of the network.

The internationalization of economic life and the resulting need to transport goods more quickly throughout an ever increasing area require the opening of value added networks within which such electronic bills of lading can circulate.

358.

The opening of such networks can continue to be based on the use of contracts, in particular membership contracts. There is no doubt that practice will develop in this direction at the instigation of the trade groupings concerned.

359.

The adoption at international level of a standard communication agreement to which the various parties could refer or be deemed to have referred would in itself constitute a substantial advance, less illusory than waiting for international conventions to be adopted and for the national rules on each transport document to be harmonized.

Such an agreement or such standard general conditions, possibly for each transport document, could be adopted within the future "European economic area" following coordinated action by EFTA and the EEC, taking into account the wishes of the trade circles concerned and the specifics of the various transport sectors.

In this spirit, the coordinated action should not result in the adoption of any compulsory standard, but could take the form, within each sphere of influence, of recommendations, which might lead to de facto harmonization of national rules, but leaving the legislative autonomy of the Member States, particularly of EFTA, intact.

In any case, it would appear that competence to act could be based on the fact that the EEC has a common transport policy and on the future developments clause included in the free-trade agreements concluded between the EFTA countries and the European Communities.

In view of the complementary, exemplary, suggestive and inciting nature of such general conditions, the fact that the free-trade agreement concluded with Finland does not include a future developments clause is of little importance, in the absence of normative value, and since the Finnish legislative authorities remain free to decide whether or not to base themselves on such general conditions and to join the coordinated action, just as the users remain free to decide whether or not to refer to them.

360.

In the field of payment techniques, three techniques are hampered by the need to use paper documents: cheques, documentary credits and bills of exchange.

In view of the function of cheques and the development of magnetic payment and electronic fund transfer systems, an "electronic cheque" would appear to be of little interest.

Documentary credits generally make use of local correspondents and communications between financial institutions. Accordingly, they do not appear to justify priority legislative action. However, consideration could be given to extending the scope of the standard communication agreement for transport documents to this payment technique which is closely associated with the carriage of goods.

The particular advantages to traders of the bill of exchange might justify the creation of an "electronic bill of exchange". As it is a private instrument, uniform rules would appear to be the only way of achieving this. Since the various operations affected by the bill of exchange are hardly ever instantaneous, legislators see no advantage in taking on such an ambitious legislative reform in this field. Recognition at the most international level possible of the equivalence of an electronic signature transcribed onto paper and a handwritten signature should suffice at the current stage of development of computer security.

361.

In the field of dispute settlement, three subjects are worthy of attention: the choice of the law applicable and of the competent jurisdiction, and the arbitration clause.

362.

The choice of the law applicable and the competent jurisdiction do not give rise to any particular problem in the EFTA countries.

This choice does not necessarily have to be the result of a signed paper document, provided that in the circumstances of the case there is no doubt as to the will of the parties.

The inclusion of such clauses in general conditions clearly gives rise to problems regarding their enforceability, particularly with regard to non-traders, but these problems are not in fact specific to EDI.

363.

The arbitration clause does not give rise to problems in international trade, largely because the States concerned have signed the European Convention on International Commercial Arbitration, signed at Geneva on 21 April 1961.

For example, Switzerland requires a document in writing for national arbitration, but has abandoned this requirement at international level by authorizing the electronic transmission of the arbitration clause.

V.

364.

The authors of this study also considered requirements relating to evidence to be a potential obstacle to the development of electronic data interchange.

365.

The study revealed that four EFTA Member States practised the system of "free" evidence, that Austria practised the system of "strict" evidence and that in Switzerland practice varied at federal level and between cantons, both systems being applied.

366.

The system of "strict" evidence, which accords superior status to "documents" as regards their admissibility and the assessment of their probative value, is applied more strictly in the EFTA States than in those EEC Member States which apply it.

In Austria and in those parts of Switzerland where this system is applied, the transmission of magnetic impulses transcribed onto paper can be admitted as evidence, but, unless the parties or the courts apply the law loosely, this requires forms of evidence which are admitted but are more onerous to provide. The presentation in court of a computerized record as such would not be admitted as evidence.

This in itself warrants priority joint action in this field.

367.

Such Community action should also help to define uniform conditions regarding the probative value to be attached to computerized evidence, both in the Nordic members of EFTA, where a computerized record and/or its transcription onto paper are a priori admissible as evidence, and in the southern EFTA members, where the probative value of the evidence admitted is always left to the absolute discretion of the judge.

The result is the following paradoxical situation:

- prejudice in computer matters, particularly as regards the possibility of manipulation, is likely to make judges suspicious of computerized evidence so that they accord it a priori greater or lesser probative value depending on the intensity of their prejudice, resulting in a risk of legal insecurity which is damaging to the development of electronic data interchange;

- the greatest legal security as regards evidence for the user of a computer system is obtained in Switzerland, where a certified true copy ("copie vidimée") is admitted as a "document", even if the judge always retains the right to demand the original and verification by an expert that the copy conforms entirely to the original.

368.

For accounting and tax purposes, a distinction must be drawn between the keeping of accounts themselves and of supporting documents.

The requirements of the various EFTA Member States vary on both aspects.

Some do not authorize computerized accounting, others prohibit it, and one authorizes it only if the supporting documents are not kept in computerized form.

This is itself an obstacle to the development of electronic data interchange.

Some States authorize the keeping of supporting documents on computer media, while other do not.

As in the European Economic Community, this is liable to hamper the development of electronic data interchange, for obvious reasons.

Although overall the EFTA States show a degree of openness to computerized accounting, uniform rules would be welcome.

VI.

369.

We conclude from the above that:

(a) the disparity of legislation requiring a paper document as a condition of validity of an act does not warrant priority action;

any such action would face obstacles so closely bound to mentalities and cultures that it would not be effective;

(b) greater use should be made of the "electronic registered letter";

the electronic mail services established here and there in the future European economic area should be able to extend their networks, preferably applying uniform or harmonized conditions of use;

(c) priority action must be considered in the field of transport;

definition at the most extensive level possible of an authoritative "standard communication agreement" to which firms which trade in, consign, transport or finance the purchase of goods could refer should suffice;

such an agreement could be adopted under the auspices of the EFTA and EC authorities and be the subject of a recommendation;

(d) no priority action need be contemplated at EFTA level alone with a view to harmonizing the criteria applicable, in the absence of agreement between the parties, to the determination of the place and time at which a transaction is concluded by EDI: the solutions adopted under the national legislation of each EFTA State are comparable;

this is not the case in the EEC;

(e) uniform conditions are necessary, on the other hand, to encourage the admissibility as evidence in court and for accounting and/or tax purposes of a document transmitted by EDI and kept in computerized form.

VII.

370.

Any action taken should take account of recent technological progress, which has made computerized records as secure as paper, if not more so.

To play a role similar to that of paper, a computerized record must be on a stable, lasting and reliable medium.

Computer media meeting the dual requirements of permanence and security are available.

371.

To fulfil this role properly, any action taken should lay down the following rules:

(a) a computerized record should be declared admissible as evidence for judicial, tax and accounting purposes;

(b) a computerized record should be accorded the highest probative value provided the following conditions are fulfilled:

- the record comes from a secure computer system which cannot be falsified;
- the sender and addressee of the message can be identified;
- the formal completion and authenticity of the transmission can be verified;
- the data recorded can be retrieved in a directly legible form.

372.

Action should be taken at EFTA and Community level to introduce the above uniform conditions.

The EFTA Council of Ministers could adopt measures compelling the Member States to introduce legislative provisions according an electronic recording the same probative value as a document on paper.

An agreement should also be concluded by EFTA and the EC in order to harmonize the rules on the admissibility of electronic recordings as evidence.

Such coordination would greatly facilitate electronic data interchange, since a document recorded on an electronic medium would have legal force.

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