

# **Technical Note 105**

## **EDI - Trends & Legal Issues**

### **For Australian Industry**

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## 1 Introduction

This paper examines the broad legal issues facing the Australian business community with regard to the implementation of a major technology known as Electronic Data Interchange. To better appreciate the issues the document first places EDI in context to other technologies, provides a definition, and sights a specific investment amount by an Asian country together with examples of facilities offered here in Australia and a Federal Ministers comment on the import of such technology

The document then touches briefly on the potential for EDI before moving on to the legal issues where International Standards as well as domestic standards are addressed in conjunction with contract law and related legal vicissitudes.

The document closes with an informed insight into current commercial practice and an overview of the EDI Council of Australia.

## 2 Paperless Trading

Historian Geoffrey Blainey identified 'the tyranny of distance' as a major factor in the economic and social development of Australia. Today we enjoy some of the most advanced communication systems in the world, and the one system that negates the afore mentioned 'tyranny' is our **telecommunication** system. With the tremendous growth in international trading, travel and telecommunications, the time needed to process documents and the possibilities for human error increases proportionately.

Currently, if you were to buy a Boeing 747-400 series (\$200million) you would receive the appropriate owners manual just like the family car, except in this particular case the 'manual' would be several volumes and weigh some 27 tonnes! The electronics industry has responded to this state of affairs with 'imaging technology' and fast retrieval systems, and so it is with 'trade documentation' only instead of just 'storing' the paper work we can now raise and forward it electronically. The technology that performs this task is known as E.D.I. (*Electronic Data Interchange*).

Defined as the electronic transfer of business information from one independent computer application to another, using agreed standards to structure the data, it is no longer the preserve of trading companies but any business which exchanges information with a customer, client or supplier: banks, insurance companies, accountants, solicitors, transport providers, manufacturers, retailers, and many others.

An example of the time that can be saved using E.D.I. systems is customs documentation. This usually takes three to four days using paper based systems, but now can take only two to three hours using E.D.I. Additional advantages are reduction of errors, easier tracking of consignments, and subsequent cost savings. Although slow to be utilised by Australian industry our Asian neighbours have seen the 'light' and in the case of Taiwan have earmarked about **A\$3 billion** for the development of E.D.I over the next five years.

The combination of electronic transmission and standardised formatting of enterprise data is aimed at reducing the costs of market transactions. Both Federal and State Governments in Australia are fostering the diffusion of E.D.I in their own purchasing, in order to both reap efficiency gains for Government agencies, and promote leading-edge business practices in Australian business.

Present E.D.I services in Australia include Tradegate, which provides paperless trading and related services to the trade/transport industry including: customs, air and sea ports, shipping agents, truck companies and forwarders. Telecommunication functions have become increasingly integrated into the operations of companies, government agencies and most other organisations. There is a gradual recognition that the productivity of the entire economy depends upon an efficient telecommunications system responsive to a variety of changing demands.

The traditional view has been that telecommunication development was a natural by-product of general economic development. Now it is recognised as an integral part of economic development in both developed and developing countries. The World Bank, International Telecommunications Union and other international agencies are reassessing the increasing importance and contribution of the E.D.I networks to economic development

To assist in the control and administration of such networks boundaries were established. These were conceived to implement a total revision of the system, announced by the Australian government in November 1990<sup>1</sup>. In its 1990 *Resale* report AUSTEL considered the difficulties involved in defining boundaries between resellers and telecommunications carriers pointed out that

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<sup>1</sup>Hon.K Beazley, Minister for Transport and Communications, *Micro Economic Reform: Progress Telecommunications*, Canberra, November 1990 ("the Beazley Statement")

Where there is rapid change in technologies and markets, it is difficult to devise clear, stable boundaries between services or functions which might be reserved to the carriers and those open to wider competition. No country in the world has found a boundary line between carriers and resellers which is completely technologically or legally satisfactory<sup>2</sup>

### 3 EDI Potential

E.D.I has the potential to be one of the most significant technological developments for industry and commerce. An essential part of making 'it' work is to establish E.D.I. *trading partner relationships*. This relationship will be formed generally at the request of the organisation with greater influence in the relationship. An example of this is the Automotive industry. There the move to E.D.I. was initiated by the vehicle manufacturers, the organisations with major purchasing power and leverage in the purchaser/supplier scene.

The attributes of today's E.D.I. systems are:

- a computer to computer exchange of data;
- a standard format to be used in the business transactions;
- a close trading relationship between the two partners.

The Automotive industry E.D.I system in use today is based on the Telecom **Tradlink Network**. In this industry the transition from the customer-specific environment to the industry standard environment has been relatively straightforward.

Another area where success has been achieved is in the field of international freight forwarding with the introduction of the Australian Customs Service EXIT system.

However the potential offered by E.D.I. is not without its significant challenges.

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<sup>2</sup>

AUSTEL, *Resale Report to the Minister for Transport and Communications*, Melbourne, December 1990,p22.,

## 4 The Legal Issues

Many separate E.D.I. services and networks have already begun, and different standards have been employed by each network. Examples include AIAG (Automotive Industry Action Group), WINS (Warehouse Information Network Standards), and CIDX (Chemical Industry Document Exchange) in the US, and TRADACOMMS (UK Article Numbering Association), together with numerous private formats in electronic envelope systems.

Fortunately standards are now being rationalised through the United Nations, the International Standards Organisation's EDIFACT standards and the American National Standards Institute (ANSI).

E.D.I replaces the physical exchange of common paper documents such as purchase orders, bills of lading, invoices and acknowledgments between users. It can be effected by either a point-to-point connection between trading partners' computers or a transmission through the intermediary computer system of one or more third party service providers. A number of third party services commonly provide electronic mail boxes so E.D.I. messages may be stored between the time the sender delivers them to the third party and the time the receiver retrieves them.

Third parties often limit access to their networks, and account for message activity, by assigning users identification codes and passwords that must be disclosed to the network before delivery and receipt of messages. The implementation of E.D.I. has wide ranging legal ramifications as it replaces paper documents with a new, electronic medium, the status of which is still not defined in law. This causes some problems in the contractual relationship between trading partners.

Industry groups and lawyers around the world are considering the legal implications of E.D.I. The reason for this activity occurring now is that less experienced users are utilising E.D.I. and therefore the chances of a related law suit being brought into being are greatly increased, since until recent times, E.D.I. was the preserve of large companies where the trading relationship was more important than legal haggling. There are a number of organisations who are interested in establishing global legal standards in the development of E.D.I. these are; United Nations Economic Commission for Europe (ECE), the National Council in the US on International Trade Documentation (NCITD), the Automotive Industry Action Group and the International Chamber of Commerce (ICC). The ICC's Joint Special Committee participated in developing a set of voluntary guidelines for international transactions entitled *Uniform Rules of Conduct for Interchange of Trade Data by Teletransmission* (UNCID).

Although an interim solution to EDI legal shortcomings, UNCID was adopted by the ICC back in 1987 and still serves as a reference point for current development on procedural conduct of E.D.I. and identifies some problem areas such as:

- risks in transmission
- acknowledgments
- return receipts
- security
- data logging
- storage

Opinion has it that the 'rules' are useful as general principles but lack comprehensiveness and adequacy for substantive legal purposes.

Electronic messaging systems (EMS), electronic data interchange (E.D.I.) and electronic funds transfer (EFT) are changing the way companies negotiate and enter into contracts.

These changes also raise issues of *control, ownership and liability*. Until these issues are resolved companies will continue to face what is deemed as 'unacceptable' risks that their transactions may be unenforceable. The impact of this state of affairs on industry and commerce here in Australia remains to be seen .

In the area of contract law, to determine whether a contract or agreement is in existence, we look for an *offer* and an *acceptance*. Generally, if the parties dealt with one another in the face to face situation communications were effective. If an offer was spoken it could be accepted during conversation or until the *offerer* retracted it. In the situation where a letter or telegram was used, the message would be transmitted in full and a response returned in due course. Because of the delay in this method of communication , if one party changed its mind whilst the message was still *en route*, the *postal rule* was developed, since a revocation was effective only when received

Electronic messaging systems, including EDI, combine features of both instantaneous and delayed communication, often concurrently using several distinct communication technologies.

EDI standards makers have conspicuously disclaimed responsibility for deciding whether or when the interchange of data forms a contract. In the US, the EDI association's programming guide states: "The legality of EDI data as binding contracts is left to the marketplace and negotiation between individual buyers and sellers, shippers and carriers, payers and payees'

Other legal issues are also being addressed by various sub committee /working groups of the EDICA (EDI Council of Australia) These are:

- Evidence and Problems of Proof
- Trading Partner Agreements
- Future Technologies
- Security
- Privacy Intrusions
- Data Protection Laws
- Tortious Liability
- International Tortious Liability
- Audit and Error Checking, and
- Protection of Intellectual Property

The current practice for companies here in Australia<sup>3</sup> is to move away from actual contracts for the E.D.I. activity. There is a preference for heads of agreement (stating a willingness to establish a close business relationship) and a hand-shake. To the legal community this must seem a foolish practice, but it appears to have gained acceptance in the business community not just here but also overseas

The EDICA is developing a Code of Conduct which suggests that in the event of a dispute then they will be the independent arbitrator. The industry currently uses the EDIFACT and X12 standard and in the case of the Retail industry, use a sub-set of X12 known as VICS (Voluntary Inter Industry Communication Standard).

The E.D.I. Council of Australia is the representative body for E.D.I. users in Australia. It provides access to those businesses and government organisations which are planning and using electronic methods of document exchange in standard formats .

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<sup>3</sup>Botherway, David, Chairman of Retail Supply Group ELECTRONIC DATA INTERCHANGE COUNCIL OF AUSTRALIA.

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