2. LEGAL FRAMEWORK

2.1 BACKGROUND

The current legal framework is tailored for paper-based commercial transactions. Therefore a need exists to formulate a new legal framework that also includes those transactions that are concluded electronically. From a policy perspective such a legal framework would have to address all the different factors and challenges that are associated with using an information and communication technology platform for a transaction to be legally valid.

Legal challenges around policy formulation in e-commerce basically revolve around the following issues to mention but a few.

- the application to electronic communications of statutory provisions which mandate paper or paper-based concepts such as original, writing and signature;
- Electronic formation of contracts
- Admissibility of electronic evidence;
- Authenticity and integrity of electronic communications;
- Information of material significance to confirm or enforce certain obligations to both dispatcher and recipient of goods or services, such as the time and place of dispatch and receipt of electronic information.
- Verification of dispatch
- Acknowledgement of receipt
- Management and retention of records
- Protection of the consumer
- New laws applicable and the relevance of the older ones
- Legal implications of e-commerce

To provide a certain and stable environment for conducting business, consumer protection becomes critical. The reason is that while the new environment provides new opportunities for business, it also brings new types of threats in the form of electronic fraud, cybercrime and new forms of cyber terrorism. The main areas that are cause for concern include privacy, fair trade, copyright protection, access by law enforcement agencies to information, increasing cross border business in consumer trade, computer crime, hacking and other aspects of the current legal framework designed to protect the rights of citizens. Because of the ease of operating across borders in the electronic environment, many of these issues have an international dimension that will be subject to negotiation of agreements, and potentially, to treaties in international forums.

The Internet on which e-commerce is strongly based makes it easy to operate across conventional country borders and poses new challenges for the laws of the country. This suggests that new laws will have an

international perspective that includes negotiating new rules and common standards of practice that are relevant in the global environment. For example some countries have a legal framework that is heavily influenced by its international obligations, either through enacting such obligations in domestic legislation or through the Courts interpreting domestic statute or common law in -terms of such obligations.

It is acknowledged that e-commerce is not taking place within a legal vacuum for which a totally new legal framework needs to be created. There is a need to adapt existing laws and regulations to accommodate e-commerce. In this regard the Department of Communications has commissioned Edward Nathan & Friedland to carry out an audit of South African law, by reviewing the law, identifying areas that could constitute barriers to the development of e-commerce, and suggest options to eliminate such barriers.

Principles that underpin the formation of the e-commerce legal framework

Principles that underpin the work of government and stakeholders in shaping the legal framework for e-commerce basically revolve around the following principles:

1. The need for legislation to support the national implementation of electronic commerce transactions within a framework of international standards
2. The need to ensure that commercial transactions can be effected either through paper or electronic means without presenting uncertainty about the latter.
3. The desire to recommend legislation and limit it to areas where it is likely to increase the overall efficiency of South African commercial transactions. Any proposed legislation should not be cumbersome, but should minimise the regulatory burden on business and government, and keep litigation and costs to a minimum.
4. To ensure that any laws that are enacted to adapt to the law of contract are expressed in a technologically neutral manner; so that changes in the law are not restricted to existing technology but can also apply equally to new and future technology.
5. Any proposed legislation must be uniform and conform to existing international standards and rules. The United Nations Commission on International Trade Law (UNCITRAL), through its the Model Law on electronic commerce has also contributed significantly in this regard.

Issues to be considered within the legal framework include the following:

- Types of electronic transactions to be covered by the proposed legislation
- Uniform Commercial code for e-commerce
- Intellectual property rights
- Privacy and security
- Contracting and trade laws
- Place of jurisdiction in cross border e-commerce transactions
- E-commerce and multilateral trading system
- Electronic payment systems
- Governance in domain naming
- Taxation in the e-commerce environment
- Consumer protection issues
- Protection of personal data
- Institutional and organisational framework
-

The relevant sections throughout the document further elaborate and expand on the legal implications of the above issues.

QUESTIONS FOR POLICYCONSIDERATION

1. *South Africa must become a key player in influencing the global legal framework of the e-commerce environment. Can we single out areas where we could lead and influence?*
2. *Should the South African legal framework be guided by the model set by UNCITRAL?*
3. *There are other legal frameworks that are currently being formulated that are country specific. Which countries come close to representing a legal framework that will be significantly useful in South Africa's legal framework?*
4. *What laws need to be addressed in South Africa that are extremely critical to shape the South African e-commerce legal framework?*
5. *Does the South African legal system have a rule of law about infringements outside the country's border and other jurisdiction matters; if so how is judgement enforced?*
6. *Taking cognisance of the changing nature of technology, how flexible should the laws be that are being proposed to accommodate future changes?*

   What other issues are to be considered in the formulation of a legal framework that are not covered in this chapter.

3. CONTRACTING AND TRADE LAWS

3.1 INTRODUCTION

This section deals with matters directly affecting the legality and enforceability of commercial transactions.

Every country in the world has a legal framework in which its citizens are ensured of the validity and certainty of its traditional paper based commercial transactions. South Africa has to determine which of its long established legal foundations of contract law are challenged by electronic commerce and to what extent. South Africa also has to determine whether new issues, if any, introduced to contract law by the emergence of electronic commerce, require legislative intervention.

Issues fundamental to establishing the validity, recognition and enforcement of electronic commerce in contracting are identified in the United Nations Commission for International Trade Law Model Law document on electronic commerce as follows:

* Ensuring the legal recognition for a data message
* Admissibility and evidential weight of electronic messages
* Formation and validity of contracts and the recognition of electronic documents by parties
* Attribution of electronic documents
* Time and place of dispatch of electronic communications
* Signature

Currently South African law recognizes verbal agreements as legally binding, and that writing is not essential for the contract to be deemed valid. However if each of the involved parties, or if a statute requires writing with or without signature, the contract will be deemed valid if there is compliance with such requirements. For example, the Credit Agreements Act No. 75 0f 1980. Therefore it is important to reach equality between electronic and traditional commerce.

Principles. The following principles were followed with regard to evaluating the need for electronic commerce legislation:

* **Not to re-invent the wheel.** Build on the extensive work that has already been done by international organisations and other jurisdictions.
* **Conform with international standards.** South Africa could introduce the "best" e-commerce laws in the world, based on international best practice. However in so doing South Africa should strive to retain legal independence.

* **Enabling and not regulatory legislative intervention.** Introduce legislation that seeks to give equal status and recognition to both electronic and traditional (non-electronic) commerce.
* **Allow for contractual freedom and self-regulation.** Introduce legislation that allows contractual freedom or flexibility in shaping the commercial relationship

3.2 ENSURING THE LEGAL RECOGNITION OF ELECTRONIC COMMUNICATIONS

As a general rule, commercial transactions need not be concluded in writing to become valid and enforceable in South Africa. As in most countries, contracting and trade laws in South Africa were developed in a paper-based environment, and as a result, these laws contain provisions and terms ordinarily associated with paper-based documents and actions. These laws include words such as "document", "writing", "signature", "original", "copy", "stamp", "seal", "register", "file", "deliver", etc. In terms of the ordinary rules of construction, the definitions of these terms may be confined to a paper-based environment. Some of the terms are irrelevant or not applicable in e-commerce based transactions. Since some laws locally and internationally require compliance with terms such as "original", "duplicate", "copy", "registration", "filing", "certification", "seal", "stamps", "authentication" etc either to establish or enforce an agreement. Non-compliance with these requirements may directly or indirectly affect the validity or enforceability of a transaction

Legislation governing contracting and trade that is technology neutral is required. The use of an electronic medium should not affect the laws that would ordinarily govern the transaction. In particular, the intended legislation should provide clarity on how electronic communications will satisfy requirements by law to the extent that:

- an electronic communication constitutes a document;
- certain information be "in writing";
- certain information be presented or retained in its "original" form;
- certain documents, records or information be retained;
- a document (electronic communication) be authenticated.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation on the legal recognition of electronic documents and communications? What considerations should be taken into account?*
2. *Should legislation prescribe standards to which electronic documents must conform before qualifying as "writing" or "original"?*
3. *What exceptions, if any, should be provided for (e.g. wills and sale of land agreements)?*
4. *To what extent should SA have regard to international guidelines and national legislative initiatives?*

3.3 ADMISSIBILITY AND EVIDENTIAL WEIGHT OF ELECTRONIC COMMUNICATIONS

Evidence, whether contained in documents or led through oral evidence, must be *admissible* before a court would have regard thereto. Certain admissible evidence carries more *evidential weight* or *value* than others. In terms of the rules of evidence, the admissibility or evidential weight of evidence would depend on whether the "*best evidence*" thereof had been presented to the court.

With regard to paper-based documentation, the "best evidence" rule provides that an original of a document must be presented to the court. If the original has been lost, destroyed or is unduly burdensome to obtain, a party may lead secondary evidence to prove that a copy thereof (e.g. a photocopy) is a true copy of the original. However, the evidential weight of such secondary evidence may be less.

In the electronic environment, the distinction between original and copy becomes blurred. Documents created electronically (e.g. by word processor) have different attributes than a paper-based documents. Even though admissible, the evidential weight of electronic documents may be adversely affected by their ease of alteration without leaving any trace. Can or should a printout be said to be a "copy" (secondary evidence) of the "original" electronically stored version? It should be kept in mind that paper documents have generally carried substantial evidential weight because of the inherent inalterability thereof.

Discrepancies arising from the inaccuracy of computer evidence led to the enactment of the Computer Evidence Act 57 of 1983. However, problems experienced regarding its implementation led to an investigation by the South African Law Commission. The Commission found the Computer Evidence Act inadequate, even though the Act was expressly meant to address the admissibility of "computer evidence" in civil proceedings. According to the Commission, the reason for the inadequacy is the stringent requirement about authentication of computer printouts prior to their admission as evidence. It would seem that the Computer Evidence Act applies only to computer printouts where the data contained therein were created by some human agency or intervention. Accordingly, computer evidence created automatically without human intervention would not be governed by the Act. Thus courts would consider evidence with a view to how it was generated.

Therefore, law that provides clear guidelines on the admissibility and evidential weight of electronic records is required. Such law should possibly draw a distinction between computer evidence created with and without human intervention.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation on the admissibility and evidential weight of electronic communications and what considerations should be taken into account?*
2. *Is the current Law Commission initiative sufficient to address the problem? If not, what should the Commission take into account?*
3. *How should the law treat computer evidence generated with and without human intervention?*

3.4 FORMATION AND VALIDITY OF CONTRACTS AND THE RECOGNITION BY PARTIES OF ELECTRONIC DOCUMENTS

An agreement is concluded between two parties upon the acceptance by one party of the valid offer of another. In the absence of specific legislation requiring formalities, an offer and the acceptance of an offer can be expressed orally, in writing or by the conduct of the parties.

Although South African law is likely to give legal effect to an offer and acceptance in electronic format directly generated between two parties, some uncertainty may exist with regard to the absence of immediate human intervention in the generation by computers of electronic messages expressing offer and acceptance. An example of the latter is electronic data interchange (EDI), "click-wrap and shrink-wrap". To date the legality of the latter mode of contracting has not been tested.

Apart from electronic communications geared for the conclusion of a contract, certainty should also be provided regarding the use by parties of electronic messages geared for the performance of contractual obligations. Specific examples are notice of defective goods, an offer to pay, notice of places where a contract will be performed and recognition of debt.

3.4.1 Recommendations

The drawing up of legislation that recognises the validity and enforceability of a contract formed by transmitting an electronic communication. Furthermore, between the originator and the addressee of an electronic message, a declaration of will or other statement should also not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of an electronic communication

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation on the formation and validity of contracts and on the recognition by parties of electronic documents, and what considerations should be taken into account*
2. *Should the law prescribe specific procedures for offers and acceptance thereof in electronic form?*
3. *How should the law treat offers and acceptance of offers or other messages expressed as electronic communications generated automatically by computers without human intervention?*

3.5 ATTRIBUTION OF ELECTRONIC DOCUMENTS

Certain "default" rules or presumptions have been developed by the law over many years in terms of how the court, in certain circumstances, will deem a purported state of affairs to be a fact or the truth unless proven otherwise. In the absence of these presumptions, a party trying to prove a contract or a certain state of affairs may find it unduly burdensome or even impossible to prove or defend a claim.

There may be a question as to whether an electronic communication was in fact sent by the person who is indicated as being the originator. In the case of a paper-based communication, the question would arise as the result of an alleged forged signature of the purported originator. In an electronic environment, an unauthorised person may have sent the message but the authentication by code, encryption or the like, might be accurate. Due to the impersonal (not face-to-face) and instantaneous nature of e-commerce transactions, commercial practice may require the law to provide some measure of certainty in this regard.

The law may have to deal with the issue of attributing an electronic communication to its purported originator by establishing a legal presumption that in certain circumstances a communication would be considered as a message sent or authorised by the originator. Such a presumption must be qualified where the addressee knew or ought to have known that the electronic communication was not that of the originator. In traditional transactions, no express presumption of attribution exists. However, in terms of the doctrine of "estoppel" in South African law, a purported originator who never sent nor authorised a communication to be sent, may nevertheless be held bound in law if his negligent conduct, whether by action or omission, induced a reasonable belief of authenticity in the mind of the addressee, which caused the latter to act thereon to his/her peril.

Due regard should be taken that legal presumptions, if any, would apply only in the absence of contractual arrangements governing attribution, for example, the use of certification authorities.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation on attribution of electronic documents and what considerations should be taken into account?*
2. *Should e-commerce be perceived as introducing higher risk, if so, would this perceived risk factor justify specific legislative intervention concerning the attribution and reliance of electronic communication?*
3. *What exceptions to legislative intervention, if any, should apply?*
4. *Should presumptions be applied with regard to the attribution of electronic messages, and would these cause any imbalance in legal treatment of traditional and electronic transactions.*

3.6 TIME AND PLACE OF DISPATCH AND RECEIPT OF ELECTRONIC COMMUNICATION

To test and enforce compliance with the existing rules of law, it is important to ascertain the time and place of receipt of information.

The use of electronic communication techniques makes it difficult to ascertain the time and place of contracting. It is not uncommon for users of electronic commerce to communicate from one country to another without knowing the location of any information systems through which the communication is effected. Furthermore, the location of certain communication systems may change without either of the parties being aware of the change. The question is whether the law should take into account the location of information systems and their components; or whether there are more objective criteria, such as the place of business of the parties, that should be considered.

In terms of South African law, two general methods are applied by courts to establish the time and place of contracting. The distinguishing factor in each is the mode of delivery or communication used. The ***expedition theory*** generally applies to postal contracts and provides that a contract concluded via the post comes into existence at the place where and time. When a letter of acceptance is posted or the telegram of acceptance is handled in a post office. The ***information theory*** generally applied to modes of direct, interactive communication (e.g. the telephone) and provides that a contract is concluded at the place where and time when the acceptance is brought to the mind of the offeror. The question arises whether these theories provide adequate solutions or guidance where parties contract by electronic means (e.g. by exchange of email).

The time when and place where an e-commerce contract is concluded are fundamental to determining whether South African courts have

jurisdiction to adjudicate a dispute involving both local and foreign nationals and, if so, which country's laws our courts would apply. The capacity of one of the parties to contract (e.g. matrimonial property issues in different countries) may also be affected by the place where a contract is deemed to have been concluded.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation that provides clarity on the time and place of dispatch and receipt of electronic communications for the application of both the expedition and information theories to hold, and what considerations should be taken into account? In particular:*
2. *How should the law deal with issues relating to jurisdiction, choice of law and capacity to contract in an electronic commerce environment?*

3.7 SIGNATURE

As a general rule, written agreements need not be signed to become binding. However, when legislation or the parties require signatures, this requirement must be complied with for the agreement to be valid or enforceable. Signatures, in whatever form, serve primarily to (a) confirm or endorse the intent; (b) identify the signatory and (c) authenticate and confirm the integrity of the document signed.
In the faceless, impersonal environment of the Internet, these objectives will play a vital role in creating confidence in e-commerce transacting. In this regard, technology has been developed (generally referred to either as *electronic* or *digital* signature that serves to accomplish these objectives. The following distinction between *electronic* and *digital* signatures will be noted.

Electronic signature is a generic, technology neutral term that refers to the universality of all the various methods by which one can "sign" an *electronic* record. Electronic signatures can take many forms and can be created by many different technologies. Examples include a name typed at the end of an e-mail message by the sender; a digitised image of a hand-written signature that is attached to an electronic document; a secret code or PIN; a code that the sender of a message uses to identify herself; a biometrics-based identifier e.g. a fingerprint; and a digital signature created through the use of public key cryptography.

Digital signature is simply a term for one technology-specific type of electronic signature. It involves the use of public key cryptography to "sign" a message. For our purposes, we will use the same distinction between *digital* and *electronic* signatures hereinafter.

It is unclear whether the South African law would afford all forms of electronic signatures the same legal recognition and evidential weight as hand-written signatures. In the absence of specific requirements prescribed by legislation, the law generally appears to be flexible enough to regard any *mark or symbol* applied by a contract party signifying her or his intent to be contractually binding and therefore constituting a *signature*. However, in the absence of clear court rulings, parties will continue to use electronic signatures with some degree of legal risk. Moreover, some legislation may be drafted such that it confines signature requirements to a hand-written ink-on-paper format to accommodate electronic signatures.

The question arises then whether electronic signatures should be regulated to ensure the adherence to certain standards. In the absence of electronic signature standards, whether legislated or not, the general rule is that the party relying on an electronic signature would have to prove to a court that the underlying technology achieves the objectives.

In general, governments may elect to follow one of the following options with regard to digital or *electronic* signatures:
(a) no regulation or standards;
(b) private sector regulation;
(c) compulsory adherence to legislated standards; or
(d) voluntary registration in terms of legislated standards.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should Government introduce legislation on the recognition of electronic signature as equivalent to traditional signature and what considerations should be taken into account? In particular, which of the following options should Government follow and to what extent:*
2. *(a) no regulation or standards;*
3. *(b) private sector regulation;*
4. *(c) compulsory adherence to legislated standards; or*
5. *(d) voluntary registration in terms of legislated standards?*

4. ELECTRONIC COMMERCE AND SOUTH AFRICAN TAXATION

4.1 INTRODUCTION

As e-commerce changes the traditional ways of doing business, new electronic products and delivery systems result. Certain products may be delivered electronically rather than in physical form: examples include computer software, music, video clips, photographs and a whole range of written text. Where such products are sold, the important issue is whether payments are royalties, or for the provision of goods or services not involving the use of copyright. E-commerce gives rise to an issue concerning the characterisation of income under double taxation agreements. Taxation rules distinguish between the sale of goods, the provision of services and the use of intangibles. Where double taxation agreements are followed, the question of how taxing rights are allocated will have to be resolved. For example, many double taxation agreements allow the source country to tax royalty payments, payments for the lease of property and, in some cases, payments for certain types of services.

There is a legitimate concern by certain governments that the development of the Internet may have the effect of shrinking the tax base and hence reducing fiscal revenue. The reasons behind these concerns are on the one hand the difficulties inherent in defining jurisdiction in cyberworld; and on the other hand the problem of administration and enforcement. In addressing these problems and in developing a taxation framework, it is important to ensure that the taxation systems are fair, predictable and do not distort the conduct of business. The challenge therefore for South Africa is to develop a taxation policy that is not isolated from its e-commerce partners.

4.2 INTERNATIONAL PERSPECTIVE ON TAXATION

International organisations and governments have highlighted principles that should guide the work of governments in the field of taxation of electronic commerce. These include the Organisation for Economic Co-operation and Development (OECD), the U.S. government and the World Trade Organisation (WTO).

4.2.1 OECD Perspective

The principles-based approach adopted by the OECD culminated with an agreement that the following widely accepted general tax principles should apply to the taxation of e-commerce:

- **Neutrality.** Taxation should seek to be neutral and equitable between forms of e-commerce and between conventional and electronic forms

of commerce. Business decisions should be motivated by economic rather than tax considerations. Taxpayers in similar situations carrying out similar transactions should be subject to similar levels of taxation. In other words there is no need for a special new tax such as a "flat rate" or a "bit" tax.

- **Efficiency.** Compliance costs for taxpayers and administrative costs for the tax authorities should be minimised as far as possible.
- **Certainty and Simplicity:** The tax rules should be clear and simple to understand so that taxpayers can anticipate the tax consequences in advance of a transaction, including knowing when, where and how the tax is to be accounted.
- **Effectiveness and Fairness:** Taxation should produce the right amount of tax at the right time. The potential for evasion and avoidance should be minimised and counter-acting measures should be proportionate to the risks involved; and
- **Flexibility:** The systems for taxation should be flexible and dynamic to ensure that they keep pace with the technological and commercial developments.

The above framework is not at odds with the views held by SARS. Nevertheless, care should be taken to ensure that the existing South African tax-base is not eroded by international decisions favouring nations with sophisticated and developed economies.

4.2.2 The US Treasury Department

The document "*Selected Tax Policy Implications of Global Electronic Commerce"* dated November 1996, identifies the following points:

- New technologies, such as the Internet, have effectively eliminated national borders on the information highway. As a result, cross-border transactions may run the risk that countries will claim inconsistent taxing jurisdictions, and that taxpayers will be subject to quixotic taxation.
- In order to ensure that these new technologies are not impeded, the development of substantive tax policy and administration in this area should be guided by the principle of neutrality.
- Transactions in cyberspace will likely accelerate the current trend to de-emphasize traditional concepts of source-based taxation, increasing the importance of residence-based taxation.
- Another major category of issues involves the classification of income arising from transactions in digitized information.
- The major compliance issue posed by e-commerce is the extent to which electronic money is analogous to cash and thus creates the potential for anonymous and untraceable transactions.

On 21 October 1998, the Internet Tax Freedom Act was signed as public law 105-277 in the USA. This Act places a moratorium on any new taxes on Internet access and created a commission to study and make recommendations about domestic and foreign policies toward the taxation of e-commerce. This commission completed its work on 3April 2000 with a number of proposals, including an extension of the moratorium on new taxes on Internet access and support for the extension of the WTO moratorium on tariffs and duties on electronic transmissions. It should be stressed that the Internet Tax Freedom Act is in respect of new taxes and has no bearing on existing tax legislation, for example, the taxing of Internet sales for income tax or sales tax purposes.

QUESTIONS FOR POLICY CONSIDERATION

1. *To what extent should South Africa adopt the OECD and the U.S principles as stated above?*
2. *What would be the implications of not adopting and/or adapting these principles?*
3. *To what extent would the current moratorium on custom duties affect the South African fiscal revenue?*

4.3 E-COMMERCE AND TAXATION CHALLENGES

4.3.1 Characterization of income

Residence versus Source. The tension between residence-based and source-based taxation lies at the heart of the e-commerce debate. Most first-world countries follow the principle of taxing worldwide income of residents of the country and income sourced in that country belonging to non-residents. Where a double tax agreement (DTA) exists, income sourced in that country is only taxed in the case of non-residents where certain types of income are involved or a Permanent Establishment as defined by the DTA is present. Double taxation is avoided through DTAs, which make the residence country responsible for giving credit relief or exemption for foreign income taxed at source.

The basis of the South African income tax system is to change from one of source to one of residence with effect from 1 January 2001. This represents a major tax policy change in South Africa and in many respects pre-empts any such policy recommendation that might have arisen from the "E-commerce Debate". It should be borne in mind that this switch is much broader than catering for e-commerce alone. As such, much of the rest of this "residence versus source" debate relates to the position up until 31 December 2000.

It should, however, be noted that source will remain an issue for non-residents whose income is derived from a South African source after 1 January 2001. As a general rule, income earned from a South African

source is taxable in South Africa. The provisions of section 9 of the Income Tax Act, 58 of 1962 as amended, extend the circumstances under which amounts are deemed to have accrued from sources within the Republic. These are referred to as the 'deeming provisions'

The deeming provisions give rise to two important tests. The first is in respect of natural persons and involves residence, and relates to the question as to whether the person concerned is 'ordinarily resident' in the Republic of South Africa? The second is in respect of legal persons and relates to whether such an entity is 'managed and controlled ' in South Africa. In the context of e-commerce, there should be no problems regarding natural persons. The second is cause for concern and thus is addressed further in the following sub-sections:

Residence of Companies. Section 1, of the Income Tax Act, 58 of 1962, as amended, defines a 'domestic company' as *'a South African company or a company, which is managed and controlled in the Republic'.* In the world of e-commerce, a company may for all practical purposes only exist in cyberspace. Business can be conducted electronically with directors meeting by way of video-conferencing. SARS may now find it challenging to establish whether a company is in fact 'managed and controlled' in the Republic. The Katz Commission's main criticism of the definition of a domestic company is that it has proven subject to relatively simple, formalistic manipulation. This concept is also out of line with the commonly used, and much more substantial, tax treaty expression of 'effective management'. The Commission further recommends that the concept of effective management as referred to in Article 4(3) of the OECD Model Tax Convention be used consistently to designate the tax residence of persons other than natural persons. This recommendation has been taken up in the proposed change to the residence basis of taxation, as a company's residence will be determined by its place of incorporation or effective management. Even with the suggested change, determining whether an 'e-company' is effectively managed in the Republic could prove problematic. This is an international problem and is the subject of efforts by a working group of the OECD.

Residence of a Trust. In Section 1 of the Act a 'person' is defined as including an insolvent estate, the estate of a deceased person and any trust. A trust is considered to be a person for tax purposes. Where reference is made to the ordinary residence of a 'person' (other than a company), for example in Section 9(1) of the Act,it also includes a trust. It is submitted further that if the executors, administrators or trustees are resident in the Republic and if the estate or trust fund is administered from the Republic, the estate or trust is resident in the Republic. Each instance must be decided on its own merits, but the place where the assets of the estate or trust are managed or controlled may well be crucial. Sections 9C and D of the Act create no new difficulties as to the residence of a trust. Residence is established in Section 9C(1) where 'resident' is defined as meaning any natural person who is ordinarily resident in the Republic and

any person other than a natural person which has its place of effective management in the Republic. Hence, the residence of a trust, being a person other than a natural person, would be the same as that of a company. The proposed change to the residence basis of taxation builds on this formulation, as the residence of a trust will be determined by its place of formation or effective management.

Residence of a Partnership. A partnership in South Africa is not a separate legal *persona* distinct from the persons who constitute the partnership, nor is it recognised by the Income Tax Act as a distinct taxable entity.

Transfer Pricing. If it is determined that an enterprise does have a Permanent Establishment in another country, another important issue then arises of how to attribute profits to the Permanent Establishment. The Committee on Fiscal Affairs is currently considering this question as part of the wider issue of the application of the OECD transfer pricing guidelines to e-commerce.

4.3.2 Indirect (Consumption) Taxes

Even more urgent tax issues arise in relation to the application of indirect taxes to e-commerce.

Place of Consumption. Indirect taxes should apply where consumption takes place, and an international consensus should be sought on the identification of the place of consumption. Consensus is essential to avoid double taxation or unintentional non-taxation, particularly as double taxation treaties do not apply to indirect taxes. The main difficulties that arise here are that the supplier may not be able to determine the location of the customer and may also be outside the fiscal jurisdiction of the authorities in the country where the consumption takes place.

Electronic Products. The supply of electronic products should not be treated as a supply of goods. Many Revenue authorities have already reached this conclusion, which means that, under most VAT systems, the supply of electronic products would be treated as a supply of services. This treatment would prevent the problems that could otherwise arise in relation to taxes on importation and the application of place-of-supply rules.

"Reverse Charge" Mechanism. The use of the "reverse charge" mechanism or similar mechanisms should be considered for the taxation of businesses that acquire services and intangible property from suppliers outside the country. In relation to VAT systems, the "reverse charge" mechanism requires the customer to account for output VAT on imported services, but it also gives a right to an input tax deduction.

Private Consumers. The collection of indirect taxes from private consumers represents the major area of concern in relation to the application of indirect taxes to e-commerce. Three main options have been considered:

- The supplier is required to account for taxation in the country of consumption.
- The customer is required to account for the tax. This is the position in South Africa where goods are not required to be entered through Customs and Excise or a service is rendered.
- The payment intermediary (such as the bank or credit card company dealing with the payment) is required to account for the tax.

Each of these three alternatives is potentially unsatisfactory and it has been suggested that the best approach may be to require the supplier to account for the tax but to simplify greatly the existing registration procedures.

OECD and EC Treatment. How Vat should be treated online has not been fully resolved. The European Commission and the OECD have a position, which appears not to adequately address the issue. The blanket characterisation of all on-line deliveries as supplies of services, even where a similar product can be delivered physically at a zero or reduced rate, does not appear to be fair. Unless rates and other differences in treatment are equalised, this will result in the heavier consumption taxation of many electronic commerce transactions.

Fortunately these problems are less likely to occur with the South African VAT system as a result of the limited number of zero ratings and the uniformity of the system.

4.3.3 Customs and Excise

When establishing the treatment of imported supplies for customs duty purposes, a distinction should be drawn between goods ordered electronically but delivered by traditional means and direct on-line delivery of electronic products. With the increased use of electronic media as a method of ordering goods, there is likely to be a parallel increase in the number of small packages arriving in South Africa. As e-commerce becomes more popular and a greater number of small packages enter SA, so too will the workload of the customs component increase. SARS has already increased its presence at the three places of postal entry into the country. Noteworthy is that in South Africa even if an imported good is exempted from Customs Duty in terms of a *de minimus* rule, VAT is still payable.

4.3.4 Gaming and Betting

E-commerce has the potential to facilitate the growth of internet-based gaming and betting. “Virtual Casinos” established outside of South Africa will escape the need to be licensed as well as the duties payable unless

this issue is urgently addressed. The e-commerce forum of the Department of Communications would be the ideal facilitator in resolving this issue.

4.3.5 Stamp Duty

An issue requiring consideration in respect of stamp duty is where a transaction might be carried out without the need for a hardcopy legal document. In the United Kingdom in 1986, a Stamp Duty Reserve Tax (SDRT) was introduced as a backup for stamp duty where a transaction was carried out without the execution of a legal document. At that time, SDRT did no more than fill a few gaps. The two taxes do not apply simultaneously.

QUESTIONS FOR POLICY CONSIDERATION

1. *What further challenges can be identified that e-commerce poses to taxation?*
2. *What further measures and mechanisms should be put in place to address the challenges as stated in section 4.3 above?*
3. *What implications does Internet gambling have on fiscal revenue and foreign exchange control policy?*
4. *How should indirect taxes on electronic products be collected form private consumers?*

4.4 THE THREAT OF CYBER CASH

Payment systems fall into two basic categories: “accounted” and “unaccounted” systems. Accounted systems require payment to be effected through a third party, independent of the payer and the recipient. Examples are cheques and credit card transactions. The key feature is that accounted systems generate a record, linked to a person, which can be produced if necessary for tax or for other audit purposes.

Unaccounted systems allow value to be transferred without the involvement of an independent third party. The obvious example is cash. Here the key features are that there is no independent record and no need to identify the parties to the transaction.

Electronic payment systems can be categorised as either credit card systems, stored value cards (SVCs) or network money. SVCs or “smart cards” are like debit cards where the store of value is on the card and not in a linked bank account. The card user prepays the issuer, the value of which the issuer inscribes on the SVC. The card keeps track of the progressive decline in the inscribed value as the card is used to make purchases. In South Africa, a number of banks are at fairly advanced stages of SVC introduction.

Network money also represents stored value, which has been pre-purchased, but with the difference that the value is stored on the Internet or on devices attached to the Internet such as computers instead of a plastic card. Network money is therefore, transferable over the Internet. Electronic money can in principle be sent overseas with as little formal difficulty as attaching an enclosure to e-mail and sending it to a supplier. It is secure, not in principle limited to any maximum value, and delivery costs are low. From an audit trail perspective, payments such as these are very unlikely to be monitored.

A factor that may to some extent retard the popularity of electronic money, currently at any rate, is culture. People need to trust the system and the system needs to be useable and secure. Network money still requires substantial development to rid itself of the shackles of cultural conservatism. However, it is not believed that this will take very long, if the Internet is used as the yardstick in technological advancement.

The Australian Tax Office (ATO) notes that the widespread use of such unaccounted electronic payment systems would be a matter of extreme concern to most revenue authorities, allowing the enduringly problematic domestic physical cash economy to migrate to an international electronic cash economy. Revenue authority concerns regarding unaccounted electronic payment systems would be greatly alleviated by the inclusion of an appropriate minimum level of accountability in such systems. The ATO sees electronic money, and particularly unaccounted electronic money with its capability of effecting payment at a distance, likely to significantly and adversely impact upon the enforcement of tax law. The evasion potential of conventional cash is limited by its "hand-to-hand" nature. Payments of electronic money can be made across the globe in seconds.

The ATO make the following two recommendations:

- A regulatory distinction should be drawn between accounted and unaccounted payment systems; and
- Principles governing access to the records of electronic money issuers need to be developed internationally.

QUESTIONS FOR POLICY CONSIDERATION

1. *What implications does cyber cash electronic money have for foreign exchange control policy?*
2. *What principles should be developed to give access to the records of electronic money issuers and users?*

4.5 TAX ADMINISTRATION AND COMPLIANCE ISSUES

Identification. The accurate identification of the party responsible for paying a particular tax is a fundamental requirement of any taxation system. Tracing the physical owner of a website inadequately identified, can be a time-consuming process often with reliance having to be placed upon a third party. Conventional businesses are easier to keep track of as they operate from a physical and geographical location that can be visited. In addition, all conventional correspondence of Companies, Close Corporations and Trusts in South Africa require the relevant registration number to be displayed. As there is to some extent a blurring of the mere advertising and the actual trading capabilities of an enterprise's website, some attention ought to be given to drafting a minimum standard in respect of identification requirements.

It is considered advisable from both the SARS perspective and, as noted in Chapter 8, the consumer's perspective that a minimum standard of on-line contact information be required of enterprises using a website. The following information should be furnished on any commercial website owned by a South African resident, company, close corporation or trust: trading name of the business; the physical as well as the postal address of the business; an e-mail address; telephone or other contact information and statutory registration number in respect of companies; close corporations and trusts.

Many tax administrations consider information such as the above as the only means of identifying businesses engaged in e-commerce.

Information. The ability to access reliable and verifiable taxpayer information is essential for any tax administration to be able to do its job properly. Electronic accounting records have been used for years. In many instances SARS has been able to place reliance on secondary sources within the country in order to verify the reliability of the digital records. Where electronic data systems are sophisticated the businesses concerned are generally large, independently audited, with adequate segregation of duties, ownership and management. There would thus be some confidence that the electronic records are complete and accurate. Development in the nature of e-commerce potentially alter this.

A further problem that may to some extent complicate matters is that the storage of information overseas is becoming easier and cheaper as a result of reduced storage and transmission costs. It is also highly likely that many encryption keys will be stored overseas – particularly in respect of multinational enterprises.

Evidence. In South Africa, tax laws as described above have developed to provide a framework for the collection and retention of commercial documents by taxpayers. To date the law has been based on physical businesses conducting business using traditional methods to record their transactions. This legal framework is also dependent on established rules of evidence which apply in court to test the probity of facts and documents.

A foundation has been laid by the SA Law Commission to ensure the admissibility and probative value of computer evidence in litigation.

The ATO considers that where the integrity of electronic records can be verified and ensured, the records should have the same standing as traditional paper documents.

Collection. Some of the most efficient collection mechanisms are those which make use of a leverage point. A common example is PAYE where a limited number of employers collect the taxes on behalf of SARS from a significant number of taxpayers. Collection activities are concentrated, in other words. As e-commerce tends to eliminate the "middleman", so too could tax collection efficiency be reduced.

All collection proposals, in essence, require a greater degree of international co-operation in revenue collection than currently exists. To this end the OECD is considering developing an article for inclusion in its Model Tax Convention to allow for assistance by one State in the collection of tax for another State. Efficient tax collection mechanisms are fundamental to an effective tax administration and as the risks are essentially common to all administrations. The UK Inland Revenue, in its report of November 1999, concludes that many of these risks can best be tackled in co-operation with other countries.

QUESTIONS FOR POLICY CONSIDERATIONS

1. *SARS has already indicated some of the perspectives in the tax administration of electronic transactions. What other views and proposals should be taken into consideration?*

4.6 AREAS OF CONCERN FOR POLICY CONSIDERATION

Areas of immediate concern to SARS, which could seriously impact upon the effectiveness of ensuring tax compliance in respect of e-commerce within South Africa, are reflected below. Accordingly, it is suggested that policy recommendations be formulated and the necessary action taken to ensure that the e-commerce environment in South Africa is fair and equitable for all stakeholders:

- **Residence Basis of Taxation.** A policy decision in this regard has already been made as announced by the Minister of Finance in the Budget Speech of 23 February 2000. With effect from tax years ending on or after 1 January 2001, South African residents will be taxed on

"worldwide" income, irrespective of where in the world that income was earned.

- **Electronic Money.** Principles governing access to the records of electronic money issuers need to be developed.
- **Identification of website owners.** Principles governing the information to be furnished on any commercial website owned by a South African resident, company, close corporation or trust need to be developed.

Many commentators are of the opinion that there is no need, at this stage, for the implementation of any new taxes relating specifically to e-commerce and that with modifications, where necessary, existing legislation is capable of coping with the risks concerning e-commerce transactions. Most of the developments taking place internationally are going to require consensus from all stakeholders in order to ensure that e-commerce is harnessed and not effectively stifled.

QUESTIONS FOR POLICY CONSIDERATION

1. *In your opinion, is there any need to introduce new taxes on electronic commerce transmissions? If yes, how should they be administered?*

5. THE MULTILATERAL TRADING SYSTEM AND E-COMMERCE

5.1 INTRODUCTION

The Multilateral Trading System (MTS) is currently embodied in the WTO, and the term "multilateral" is used because not all countries are members of the WTO. The predecessor of the WTO was the General Agreement on Tariffs and Trade (GATT), the rules of which governed international trade from the time of its establishment in 1948 until the birth of the WTO in 1995. The WTO was legally established on 1 January 1995 and currently consists of 136 members. It is the only international body dealing with the rules of trade between nations. The WTO Agreements negotiated and signed by most of the world's trading nations, provide the legal ground-rules for international commerce in order to promote a stable, predictable and transparent multi Internet trading system. In effect, these agreements are contracts, binding governments to keep their trade policies within agreed limits.

In essence, the establishment of the WTO has considerably circumscribed the freedom of sovereign governments to develop macroeconomic policy. All such policies must be WTO-consistent, and if not found to be so by a dispute settlement panel, may result in retaliatory measures by the aggrieved country or countries. The legal enforceability of the WTO and its Agreements stem from the fact that they are permanent, unlike the GATT, which was ad hoc. As an international organisation the WTO has a sound legal basis because members have ratified the WTO Agreements and incorporated them into national legislation. Further, the Agreements themselves describe how the WTO is to function. It is therefore clear that all WTO member countries have to take cognisance of their WTO commitments when formulating macroeconomic policy since these commitments are contractual obligations which governments have agreed to undertake.

Although e-commerce is currently being debated in various multilateral forums such as the OECD, WIPO and WTO, sufficient consensus in other areas around e-commerce has not been reached. To facilitate the growth of e-commerce it is essential that trade agreements and the domestic laws implementing them are, and should be technologically neutral, applying the same rules to an economic transaction, irrespective of the technology used to produce or deliver the product.

There is an agreement among Governments that the international and domestic regulation of commerce has been and will continue to be dealt with in various international forums, but principally within the framework of rules and procedures set out in the WTO Agreement.

As a founding Member of GATT and the WTO, South Africa is committed to the development of a stable, predictable and transparent Multilateral Trading System. In embarking on a national policy development initiative on e-commerce it is imperative that SA take cognisance of its WTO commitments, firstly, to ensure that such policy is compatible with the relevant WTO rules and regulations, and secondly, to determine the impact of e-commerce on these commitments. The e-commerce Work Programme currently underway in the WTO should inform the first step in this analytical process currently underway in the WTO.

CHALLENGES REGARDING THE USE OF THE INTERNET FOR E-COMMERCE TRANSACTIONS

In dealing with the issues around e-commerce MTS, the following concerns should be addressed:

- Market access for products conducive to e-commerce
- Issues linked to customs valuation; import licensing; rules of origin; technical barriers to trade and tariff concessions

Classification issues such as e-commerce transactions, for example, trade in goods, services.

5.2 STRUCTURE OF THE WTO

The WTO's top level decision-making body is the Ministerial Conference, which meets at least once every two years. Below this is the General Council (normally ambassadors and heads of delegations in Geneva, but sometimes officials sent from members' capitals) which meets several times a year in the Geneva headquarters. The General Council also meets as the Trade Policy Review Body and the Dispute Settlement Body. At the next level, the Goods Council, Services Council and Intellectual Property (TRIPS) Council report to the General Council. Numerous specialised committees, working groups and working parties deal with the individual agreements and other areas such as the environment, development, membership applications and regional trade agreements.

5.2.1 Fundamental principles underpinning the WTO agreements

Although some exceptions are allowed, two fundamental principles underpin all the WTO Agreements:

* **Most favoured nation principle** (MFN): a concession granted by one country to another must be extended to all other Member countries; and
* **National treatment**: countries should treat foreign nationals, products, services and intellectual property no different from their own, once they have entered their domestic markets.

5.2.2 E-commerce, regulatory issues and the WTO

At the second WTO Ministerial Conference in Geneva in 1998 Ministers adopted a Declaration on e-commerce which was twofold:

* that the General Council would establish a comprehensive work programme to examine all trade-related issues relating to global electronic commerce, taking into account the economic, financial and development needs of developing countries, and to report on the progress of the work programme, with any recommendations for action, to the Third Session; and
* that member countries would continue to refrain from imposing customs duties on all electronic transmissions (commonly referred to as the "moratorium").

In September 1998 the General Council established a Work Programme on electronic commerce for the relevant WTO bodies, namely the Council for Trade in Services, the Council for Trade in Goods, the Council for TRIPS and the Committee for Trade and Development. An interim review of progress in the implementation of the Work Programme was conducted by the General Council in March 1999. The final Reports, including recommendations, of these four bodies were submitted to the General Council on 31 July 1999. Based on these Reports the General Council was supposed to have submitted recommendations for decision by Ministers at the Seattle Ministerial Conference which took place in December 1999. The two key aspects of such a decision would have been whether to abolish or extend the current moratorium on the levying of customs duties on electronic transmissions; and whether to extend the current Work Programme on e-commerce. In the Seattle Ministerial Conference, South Africa, together with the Southern African Development Community (SADC), supported the extension of the moratorium until the next Ministerial Conference when it would be reviewed.

However, the failure of the WTO Seattle Ministerial Conference to reach consensus on the launching of a new round of trade negotiations has resulted in a lapse on the way forward for the multilateral trading system. This has resulted in confusion and ambiguity as to the current status of the moratorium on the levying of customs duties on electronic transmissions. Member country proposals on the moratorium, in the run-up to Seattle, ranged from the US calling for a permanent ban on such duties, to some developing countries refusing to extend it altogether. In general, most countries seemed agreeable to a limited extension of the moratorium until the next Ministerial Conference when it will be reviewed.

The Reports on the e-commerce work programme submitted by the TRIPS Goods, and Services Councils to the General Council in July 1999 were inconclusive, and the general consensus was that the "educative process" should continue.

5.3 THE GOODS COUNCIL

The Goods Council is faced with the challenge of determining whether e-commerce means dealing with goods and services, or something altogether different. Agreement on such classification is important since it impacts on whether such trade is governed by the rules of GATT, General Agreement on Trade in Services (GATS) or a combination of the two. The classification issue is dependent on defining the products of e-commerce. Neither the term "*goods*", nor the term "*service*" is strictly defined in multilateral commercial agreements. Until the advent of the "digital world" the distinction between goods and services was fairly evident. However, innovations in

communications and information technologies together with the birth of the Internet have seen this distinction becoming increasingly blurred in regard to certain products of electronic commerce. From a legal perspective, the application of the rules of GATT or GATS depends upon the definition of the products of e-commerce.

Where goods are ordered and paid for over the Internet, but physically delivered to the buyer, it is clear that the rules of GATT would apply. Merchandise and services can be bought, paid for and delivered via the digital medium. The most common examples are books, CDs, videos, software, financial services and distance education learning. When such transactions occur no physical or tangible goods are crossing borders, and this raises the question of whether the levying of customs duties are applicable in these circumstances.

5.4 THE SERVICES COUNCIL

Thus far there is general agreement on the following issues:

- That the electronic delivery of all services falls within the scope of GATS;
- Electronic delivery of services can take place under all 4 modes of supply. To explain, the GATS classify services according to the mode of delivery. There are four modes: cross-border supply (mode 1), consumption abroad (mode 2), commercial presence (mode 3), and the movement of natural persons (mode 4).
- that GATS is technologically neutral in that it draws no distinction between the different technological means through which a service may be delivered (e.g., in person, by mail, courier, or Internet);

- while recognising Members' rights to regulate domestically, governments should strive to ensure that such regulations do not become trading barriers themselves.

It should be noted that GATS Article XIV provides for General Exceptions in which issues such as protection of privacy, public morals, and prevention of fraud could be accommodated. There is, however, a process mandated under Article VI.4 of GATS to develop disciplines for domestic regulation.

A contentious point that has emerged is the lack of clarity as to the distinction between services provided under Mode 1 and that of Mode 2. Assuming that electronic trade is subjected to the GATS discipline, it is certain that member countries will have great difficulty in differentiating between modes 1 and 2. There are no clear-cut objective criteria that can be brought to bear on this classification. Therefore, it is likely to be negotiated as part of the next round of negotiations. The choice of classification has two principal implications.

Firstly, the classification will determine the liberalising impact of the commitments made in the UR and post-UR GATS negotiations on services. During these negotiations countries made commitments based on the modes of supply of services. Consequently, the impact of these commitments will, to a large degree, depend on whether electronic trade is classified as being supply by mode 1 or mode 2. For example, if a country gave full market access under mode 2 for a particular financial service that is traded electronically, the commitment would have no liberalising impact if e-commerce is classified as supply under mode 1 rather than2. It is therefore obvious that the liberalising impact of previous commitments will depend on the mode of supply under which e-commerce is classified.

From the schedules of commitments it would seem that countries undertook more obligations for liberalisation under mode 2 than under mode 1. Accordingly, the liberalising impact of the commitments will be greater if e-commerce is classified under mode 2. It would appear that developed countries would be the greatest beneficiaries since they are net exporters of electronic services, and would enjoy increased market access if these services are classified under mode 2.

Secondly, the classification will determine jurisdictional issues for purposes of regulation and dispute settlement. In terms of current international law, for supply under mode 1, the transaction is considered to have occurred in the country where the buyer resides. The regulatory regime of the importing country is then applicable to the transaction. Conversely, under mode 2, the law of the country of residence of the supplier is applicable. Countries are therefore likely to opt for mode 1 if they are of the view that they need to

protect their buyers' interests. It seems evident that some tension will be inherent in the choice of classification depending on the objective. The market accesses objective favours mode 2 whereas the consumer protection objective tends towards mode1. In making their liberalisation commitments in the UR and post-UR negotiations countries, in general, considered electronic transactions between suppliers and recipients in different countries as cross-border transactions. It would therefore seem prudent to treat them as such since an alternative interpretation may yield unintended liberalisation effects.

There is a further complicating factor regarding the classification of e-commerce under GATS. Although there appears to be an emerging consensus in the WTO that all e-commerce transactions are covered by the provisions of GATS, irrespective of the medium of delivery, there still remains some important issues that are yet unresolved. Currently, most products that are delivered electronically, like telecommunications and financial services, are covered in the services classification lists. However, will this cover all existing services and all digital transactions? There is as yet no compulsory or universally agreed classification system for existing services. Generally, the coding system used is that based on the provisional Central Products Classification (CPC) of the United Nations, although it is not fully comprehensive since it is not used in a number of sectors, including financial services, telecommunications, air transport and maritime transport. Further, the CPC was last issued in 1989 which makes it highly likely that current technological developments and delivery options could not have been foreseen. The concept of "technological neutrality" could also prove problematic since even in cases of CPC the description may not be technologically neutral in that it may describe means of delivery without accounting for electronic means. Since this classification does not apply across the board (especially to new services that have emerged or may emerge) it is common practice to adopt the category of "other services". Such classification is both arbitrary and questionable.

For discussion of intellectual property matters, refer to the section on **Intellectual Property**

5.5 DECLARATION ON TRADE IN INFORMATION TECHNOLOGY

At the Singapore Ministerial Declaration on Trade in Information Technology Products (ITA) was concluded at the Singapore Ministerial Conference in December 1996. At that time 29 Member countries signed the Agreement. Since then many other countries have joined the ITA. The ITA requires all participating countries to reduce tariffs to zero on a range of IT products, which are stipulated in the Declaration, by 1 January 2000. Some of the products covered are semi-conductors, telecommunication

products, scientific instruments, computer software and semi-conductor manufacturing equipment.

It is evident that most of the hardware and software necessary for the conduct of e-commerce is covered by the ITA, although talks have begun in the WTO to expand its product coverage even further. South Africa is not a signatory to the ITA, but perhaps an analysis should be done as to whether it is in our interests to remain outside of it. This should not in any way be interpreted as advocating that SA should join, but should rather be seen as an observation that the technological and economic milieu of the global economy has changed markedly since the ITA was completed in 1996, and that in the light of this, alternative strategies should possibly be explored.

5.6 Trade and Development Committee

This Committee has been primarily concerned with the potential of e-commerce to promote economic growth and development in developing countries; in other words, the development dimension of e-commerce. There has been a general acknowledgement that the development perspective should serve as a point of departure for a multilateral debate on e-commerce. Although not a solution to all the trade problems facing developing countries, e-commerce could enhance growth and development by increasing the efficiency of economic activities and promoting a balanced development of the global economy. However, such benefits would remain beyond the reach of developing countries if they do not possess the necessary infrastructure, which makes e-commerce possible.

Developing countries can play a vital role in promoting the growth of e-commerce within and among themselves by instituting appropriate educational, industrial, technological and economic policies. Nevertheless, developed countries and multilateral organisations such as the WTO, ITU, UNCTAD, World Bank and WIPO should ensure that they provide sufficient technical assistance and human resource development programmes to enable developing countries to make the transition from “traditional” to “information” societies. This is essential if the benefits of e-commerce are to be universal. Anything less will result in continuing growth of the gap between rich and poor countries and the continuing deprivation of billions of people of the so-called technological wonders of the twenty first century.

Electronic commerce should not be viewed as a sector of economic activity, but rather be seen as an instrument that can aid developing countries in the fight against economic marginalisation. SA has stated its commitment to poverty alleviation worldwide, especially within Africa. As the most needy continent, the challenge of development in Africa is the most daunting. As a

member of SADC, SA is committed to promoting economic growth and development in the region, since SADC constitutes an important market for SA goods and services. Promoting the development of telecommunications infrastructure and ICT networks in SADC and throughout Africa is therefore considered a priority. Such development, however, will require substantial levels of direct foreign investment which will only translate into development if it includes the necessary transfer of technical and managerial skills, as well as the development of local industrial and commercial enterprises. A key challenge facing SA, and developing countries in general, is the development of programmes to leverage such foreign investment into the telecommunications sector.

QUESTIONS FOR POLICY CONSIDERATION

1. *What is the current impact of the moratorium* on the levying of customs duties on electronic transmissions *on the South African customs revenue, and on SACU customs revenue?*
2. *What approach should SA adopt in positioning the country and other developing countries in the debate within the WTO, and how should the views of business, labour, NGOs and civil society be articulated in such a discussion?*
3. *Should SA consider joining the ITA and what would be the consequences of such a move, and how would this compare with the status quo?*
4. *Is there a need of domestic regulation of e-commerce?*
5. *The fact that many services can now be delivered electronically has implications for most countries' services commitments since many of these commitments were made without consideration of electronic delivery of such services. What is the potential impact of this on SA's commitments?*
6. *What are the potential consequences of SA's services commitments if e-commerce is classified as either* ***mode 1*** *(cross border supply) or* ***mode 2*** *(consumption abroad)?*
7. *In view of the fact that there are increasing calls that Internet Service Providers (ISPs) be scheduled as separate service providers in GATS commitments, what should SA's approach be, considering Telkom's current monopoly?*
8. *How can SA further strengthen the development dimension in the deliberations of the Committee on Trade and Development?*
9. *How can SA, as Chair of the NAM and as a member of other multilateral and regional organisations such as G77 & China, the OAU and SADC use its influence to advance the technological development of the South?*
10. *As the technological powerhouse of Africa, what role can SA play in promoting the growth of e-commerce in SADC and the rest of Africa?*

6. INTELLECTUAL PROPERTY RIGHTS AND E-COMMERCE

6.1 INTRODUCTION

Intellectual property rights are legal means to protect and balance the interests of an individual against those of the public. This is done in terms of disclosure, dissemination, alteration, use and abuse of ideas, with an exclusive right to control and profit from invention and/or authorship of such intangible goods, services and ideas. The World Intellectual Property Organisation (WIPO) classifies intellectual property into two categories, namely, industrial property, such as inventions, trademarks, industrial designs and appellations of origin and copyright literature that refers to items such as musical, artistic, photographic and audio-visual works.

It has become relatively easier to infringe intellectual property through the use of electronic technologies. Therefore there is an urgent need to formulate a system of laws that define and protect intellectual property as a response to technological change, particularly emerging circumvention technologies that are constantly defying copyrights on electronic systems. In this context, it becomes increasingly challenging to ensure intellectual property rights and related neighbouring rights are applied to the electronic environment in a manner that is promoting e-commerce.

6.2 CHALLENGES AROUND THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS

Some of the problems around the adaptation, protection and enforcement of intellectual property rights in e-commerce are:

- There could be excessive regulations limiting or discouraging the generation, use and sharing of ideas
- Difficulty in distinguishing between the original owner of intellectual property and the host or custodian of such property in an electronic environment
- The availability of free, unsolicited, and cheap electronic goods and services online
- Availability of inexpensive (sometimes free), sophisticated and innovative methods for reproduction and distribution often referred to as circumventing technologies including duplicating devices of intellectual property.
- Absence of adequate legislation relating to the protection of indigenous South African intellectual property.
- Limited presence in South Africa of adequate capacity, instruments and mechanisms to monitor and protect intellectual property rights
- The ever changing technological innovations relating to the use of Internet for commercial transactions

- The dominance of developed countries in the creation of Intellectual Property
- The global nature of e-commerce, the Internet transcending boarders, juxtaposed to traditionally local or territorial nature of intellectual property laws
- Inadequate legal framework to regulate rights and responsibilities for and on behalf of Internet Service Providers in terms of liability.

6.3 LOCAL CONTEXT

South African intellectual property law is not fully equipped to deal with the implications of the internet, convergence, multimedia, digital technology and hence e-commerce. The advent of the Internet has changed the underlying assumptions of the original copyright laws entailed in the Copyrights Act 98 of 1978. The Trade Marks Act no. 194 of 1993 provides for instances under which trademarks cannot be infringed, yet domain naming has created a loop-hole in the Act, i.e. Trademarks Vs domain names (discussed in detail later).

For South African laws to comply with the Agreement on Trade-Related Aspects of Intellectual Property (TRIPs), which forms part of the package of agreements and instruments establishing the World Trade Organisation (WTO), intellectual property statutes were amended by the Intellectual Property Laws Amendment Act (Act 38 of 1997).

Although it is believed that the amendments adequately provide for and accommodate e-commerce, certain changes are envisaged in the near future to ensure full compliance and to meet new demands and realities of e-commerce. The changes largely revolve around terminology and scope of definition of some words and clauses of the act. Most words do not accommodate electronic versions of goods and services.

The application of traditional copyright law to open, public, global networks such as the Internet is hindered by the fact, that traditional protection of intellectual property rights has always specifically referred to the protection of information contained in tangible media such as books. Therefore convergence of traditional forms of communication into a single electronic environment presents challenges in the attempt to amend the Act and accommodate this new environment.

Thus it is crucial for South African intellectual property law to keep abreast of technological development and for the South African Parliament to enact legislation that conforms with innovation.

6.4 INTERNATIONAL CONTEXT

Debates relating to intellectual property rights are ongoing in international forums such as the World Intellectual Property Organisation, the World Trade Organisation, the European Union and the Organisation for Economic Co-operation and Development and the Internet Corporation for Assigned Names and Numbers, with the purpose of finding a suitable framework for intellectual property rights.

There is currently no sufficient international agreement on various issues fundamental to the protection of intellectual property rights in the electronic environment. To date multilateral and bilateral treaties prove to be the most feasible way to deal with trans-boarder intellectual property related issues. Traditionally, intellectual property rights are limited by territorial boundaries. The scope of the rights established in each country is determined by that country and the effect of those rights, as well as their protection, are, in principle, confined to the territory of the country. The trend is that the copyright law of the country, in which an act of infringement takes place, presides over the matter. However, the transnational nature of e-commerce suggests that several national laws could apply to a single act of transgression. This can create legal uncertainty that may unduly hamper the progress and the growth of e-commerce and the general flow of information, at the same time also facilitating resolutions of issues.

The TRIPS Agreement (The Agreement on Trade-Related Aspects of Intellectual Property) was adopted in 1994 to provide rules concerning trade-related intellectual property rights, basic principles of previous intellectual property conventions, standards regarding availability, scope, and use of intellectual property rights. Appropriate enforcement, multilateral dispute settlement procedures and transitional arrangements for countries are also included in the agreement. Administered by the WTO, the TRIPS Agreement is enforced through WTO consultative panels and dispute resolution mechanisms.

TRIPS basically covers copyrights and related rights such as the “rights of broadcasters, performers, producers, of sound recording and broadcasting organisations; industrial designs and patents including the protection of layout and design of integrated designs; undisclosed information including trade secrets and test data; trademarks and service marks. It also outlines the main elements and standards of protection to be provided by each member, the nature of the subject matter to be protected, the rights to be conferred and permissible exceptions those rights, as well as the duration of protection. It further outlines enforcement mechanisms on behalf of the standards and their protection. These include provision of civil and

administrative procedures, criminal procedures, remedies, the procedures, remedies for such an environment and other dispute resolution mechanisms. Further, TRIPS also allows developing member countries with a grace period and autonomy to implement compliant necessary changes as recommended in the agreement.

The contribution of the Internet in the creation, production, and use of literary and artistic works, performances and phonograms, including its potential to undermine the basic tenets of copyright and related rights, has compelled the WIPO to lead the adoption of two treaties in December 1996, namely, the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). These treaties are commonly referred to as the "Internet treaties". These treaties address issues of the definition and scope of rights in the electronic environment, and some of the challenges of online enforcement and licensing. Although South Africa has signed the WCT, it has not yet implemented this treaty.

The mandate of WIPO regarding intellectual property protection. To give impetus to the efforts to reach global consensus on the protection of intellectual property, WIPO has developed a "digital agenda" to pursue over the next two years, namely:

* Broaden the participation of developing countries through the use of WIPONET and other means for access to intellectual property information, participation in global policy formulation and opportunities to use their intellectual property assets in e-commerce.
* Bring into effect the WCT and the WPPT treaties before December 2001.
* Promote adjustment of the international legislative framework to facilitate e-commerce through the extension of the principles of the WPPT to audiovisual performances, the adaptation of broadcasters' rights to the digital era and progress toward a possible international instrument on the protection of databases.
* Implement the recommendations of the Report of the WIPO Domain Name Process and pursue the achievement of compatibility between identifiers in the real and virtual worlds through the establishment of rules for mutual respect and the elimination of contradictions between the domain name system and intellectual property rights.
* Develop appropriate principles with the aim of establishing, at the appropriate time at the international level, rules for determining the circumstances of intellectual property liability of Online Service Providers (OSPs) which are compatible and workable within a framework of general liability rules for OSPs.
* Promote adjustment of the institutional framework for facilitating the exploitation of intellectual property in the public interest in a global economy.

* Introduce and develop online procedures for the filing and administration of international applications for the PCT, the Madrid System and the Hague Agreement at the earliest possible date.
* Study and, where appropriate, respond in a timely and effective manner to the need for practical measures designed to improve the management of cultural and other digital assets at international level.
* Study any other emerging intellectual property issues related to electronic commerce and, where appropriate, develop norms in relation to such issues.
* Co-ordinate with other international organisations in the formulation of appropriate international positions on horizontal issues affecting Intellectual Protection, in particular the validity of electronic contracts and jurisdiction.
* On December 1999, the Department of Trade and Industry (DTI) consulted stakeholders with a view to accede to these Treaties. The majority of stakeholders cautioned that before acceding to them, South Africa should analyse the benefits which accrue to small and medium enterprises.

6.5 COPYRIGHT

Copyrights are referred to as the rights to ensure protection of information from duplication and distribution. Computers are changing the way that copyrighted goods can be illegally copied and distributed.

Violation of copyrights is difficult to monitor in the electronic environment, since content exists not physically but in electronic form and can be instantaneously distributed without even being copied. All of this occurs cheaply and easily. This creates new challenges for copyright owners and law enforcement agencies in that the distinction originally drawn between copying and distribution is blurred. The Intellectual Property Laws Amendment Act, 1997 introduced a number of amendments into the Copyrights Act in order to provide for digitised formats of copyrighted goods. A number of legal issues still need to be addressed. To highlight but a few: -

- The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention. At issue then is whether electronic reproduction is "reproduction" in terms of the South African copyright law, whether temporary storage is "reproduction", whether the copyrights owner can and should prohibit/authorise the digitisation of his/her copyright work, whether technology devices/measures to

reproduce and or prevent unauthorised reproduction should be protected.

The WIPO Copyright Treaty responds to this fundamental change by requiring each country to specify that creators have the basic property right to control distribution of copies of their creations. The Treaty also requires each country to provide in its laws for a copyright owners exclusive right of making available its works to the public for on demand access. This makes it clear that the traditional property rights of copyright owners apply in cyberspace.

The Department of Trade and Industry proposed amendments to clarify issues of “fair deal” in the Copyright Act, 1993. The proposals will be tabled in Parliament soon.

The Copyright Act No.98 of 1978, recognises the notion of "fair use", which provides that copyright shall not be infringed by any fair dealing with certain works, such as copying for purposes of research or private study or personal or private use, etc. The Berne Convention noted that the "fair use" provisions in the context of digitised use should be approached just as they are in "traditional" environments. Commercial use, which harms actual or potential markets, will, therefore, probably constitute infringement, whereas non-profit educational transformative use will most probably often be deemed fair. Between these extremes the courts (or parliament) will have to determine what constitutes fair use?

QUESTIONS FOR POLICY CONSIDERATION

The following questions arise: -

1. *How should liability be determined in copyright infringements given intangibility and documents in transit?*
2. *What is the potential liability of end-users "reproducing" infringing copies (transient copies) of copyrighted works by the mere act of viewing them on their PC's, etc?*
3. *How do we strike a balance of enforcing and monitoring intellectual property rights with the need to promote use of e-commerce and cyberspace publishing?*
4. *Is framing (the incorporation of a website within a website) and hyperlinking (the creation of digital paths linking two or more websites) an infringement of copyright?*
5. *How are the expenses, efforts, duration and technical evidence demands for enforcing copyright protection in court going to be implemented?*
6. *What constitutes fair use of copyright material in an electronic environment?*

6.6 PATENTS

The process of patenting entails the registration and protection by law of new and innovative ideas that have industrial or commercial value. An invention can be defined to be a novel idea, which permits in practice the solution of a specific problem in the field of technology. More formally WIPO defines a patent to be a document, issued by a government office, which describes the invention and creates a legal situation in which the patented invention can only be exploited (altered, used or sold) by, or with the authorisation of the patentee.

Lack of material objects is not the only problem for intellectual property rights owners, posed by the digitalisation of information. Information in digital form is much more easily manipulated and adapted than traditional forms of information and the changes are much harder to detect. Again historically patents are technical and territorial in nature. There is an increasing need to protect software, business practices, formulas, recipes etc. The scope of definition and the criterion in rendering a patent therefore have to be widened with emphasis on protection, monitoring and enforcement measures. This should apply on a local and a legally compatible and interoperable global basis. There is a need to implement a global integrated mechanism for the administration and issuing of patents to synchronise the growth, globally, of the knowledge based society.

Under the PCT system, the PCT-EASY software has been introduced, and the establishment of further legal and technical standards for electronic filing and processing of PCT applications is underway.

The Patent Law Treaty (PLT) which is designed to streamline and harmonize formal requirements set by national and regional patent offices for filing and processing of national and regional patent applications, the maintenance of patents and certain additional requirements related to patents and patents applications, including electronic filling (signatures and forms) of patents applications, has also been adopted by WIPO.

6.7 Trademarks

A trademark is a sign, or a combination of signs, capable of distinguishing goods and services of one undertaking to those of other undertakings. The sign may consist of one or more distinctive words, letters, numbers, drawings, pictures, emblems, colours or combination of colours. The emergence of a truly global electronic market place has created an increase in demand for brand-named consumer goods and, unfortunately a concomitant rise in illegal copying and reproduction of these goods.

Trademarks Act are an old practice of protecting the public from fraud and brand confusion; promoting the goodwill of business and facilitating product distinction and integrity in society.

The Trademarks Act no. 194 of 1993 sec. 34 and 35 presently provides for instances where trademark rights will be infringed, which generally revolves around the prevention of registration of already registered trademarks. The framework regarding the unauthorised use of trademarks in relation to goods and services in the traditional environment should hold for the virtual environment as well. Therefore the definition of a Mark as per Act should be amended to accommodate digitised marks. The scope of the Act should be enhanced to accommodate the digital, virtual and electronic environment

Trademarks are territorial in nature i.e. their registration applies to a particular country or jurisdiction. There is a general discrepancy between the national scope of trademark laws and the international nature of electronic commerce, particularly since e-commerce is borderless and instantaneous in nature. For example, different parties can register a trademark in different jurisdictions at almost the same time.

Provision has been made by article 6b of the Paris Convention for the protection of Industrial Property attempts to provide for the protection of "well known marks". This article provides for the prohibition and/or cancellation of use of a trademark, which institutes a reproduction, imitation, and translation or is likely to create confusion of a mark. However the shortcoming here is that the definition of "a well known mark" is relative and only goods are mentioned and not services and digitised products.

Another issue is of trademarks or "well-known marks" as domain names? Domain names are to be understood to be essentially addresses allocated to websites through which traders, vendors and virtual locations can be identified and located on the Internet. Currently there are no definite linkages between trademarks and domain names. This means that one can register a trademark as a domain name irrespective of whether the trademark belongs to one or not. Naturally this does not appeal to the original owner of the trademark, and unfortunately the Act does not provide any guidelines. However this still constitutes an infringement in that the uniqueness of the mark will no longer hold. This is called "Cybersquatting" as perpetrators do not register trademarks as domain names with the purpose of trading but rather with a purpose of selling the domain name to the original owner of the trademark. This issue definitely calls for immediate global and national attention. The issue of cybersquatting is even aggravated in instances where the trademark is not registered at the domicile or jurisdiction of the domain name.

It was very difficult to resolve these issues before WIPO Dispute Resolution were adopted by ICANN. Further, South Africa may encourage the litigants jointly or unilaterally, to submit a dispute to WIPO Dispute Resolution Panel.

It is uncertain to what extent the Trademarks Act No. 194 of 1993 would or should apply to domain names. Section 34(1)(a) of the Act protects the proprietor of a registered trade mark from the unauthorised use, in the course of trade, in relation to goods or services for which the mark is registered, of an identical mark or a mark so nearly resembling it as to be likely to deceive or cause confusion. Section 34(1)(b) provides a similar protection with relation to a mark used on or in relation to similar goods or services. Section 34(1)(c), that deals with "dilution" of a trade mark, provides that unauthorised use of a registered mark which is identical or similar to a mark which is also well-known in South Africa would amount to infringement, if such use is likely to take unfair advantage of, or be unfairly prejudicial to its distinctive character or repute (it is not necessary to prove deception or confusion). The same principle applies to the dilution of well-known "foreign marks", even if the foreign mark is not registered in South Africa (Section 35).

Under the Business Names Act No. 27 of 1960, sections 4 and 5 of the Act, the Registrar of Companies has the power to prohibit the use of certain forms of domain names to the extent that no person may carry on any business under any name, title or description which includes the words "government" or any other words, or any *abbreviation* (e.g. gov). In terms of the Act, the Registrar of Companies, it is submitted, may have concurrent jurisdiction with any body or organisation administering domain names to the extent that the Registrar may order the removal of such names or description used as domain names.

QUESTIONS FOR POLICY CONSIDERATION

1. *Who should hold the rights of a trademark registered in different jurisdictions by different parties almost at the same time? What is the basis of determining this?*
2. *Does there appear to be shortcomings in terms of the Trade Marks Act of 1993 in terms of addressing the digital or electronic environment? If yes what are those shortcomings and what are the kind of amendments that need to be implemented?*
3. *Should there be a linkage of administration between trademark registry and the domain name registry to prevent cybersquatting?*
4. *How can SA utilise digital technology to promote protection of local indigenous knowledge?*
5. *What are the implications of these treaties for SA in terms of its capacity for monitoring and enforcing violations of the intellectual property rights protected by these treaties?*

6. *What proposals can SA make in the upcoming TRIPS review to ensure that the development dimension is entrenched in the TRIPS Agreement?*
7. *Does South Africa's intellectual property law address the challenges posed by e-commerce?*