E-COMMERCE & WTO
- INDIAN CONSIDERATIONS

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BRINGING GLOBAL E-COMMERCE WITHIN THE WTO FRAMEWORK

Nishith Desai Associates is a research based international law firm based in Mumbai and Palo Alto, Silicon Valley, specializing in information technology, e-commerce, telecommunications, media and entertainment laws, international financial and tax laws and corporate and securities laws. It has acted as strategic and legal counsel to premier corporates in their Internet forays, including IL&FS, GE Capital, Jasubhai Group, software majors such as i2 Technologies, Mahindra British Telecom and communication companies such as Space Systems/Loral, New Skies Satellite, Flag and WorldTel. Apart from structuring and acting for a large number of private equity funds in India, NDA has been involved in American Depositary Receipt (ADR) offerings of Indian companies, representing Wipro, Rediff.com and Silverline Technologies and acting as underwriter's counsel in Infosys Technologies and Satyam's ADR offerings. NDA was involved in the first cross-border stock swap merger from India - BFL's acquisition of MphasiS besides Silverline's recent acquisition of Seranova Inc in an ADR stock swap deal. NDA was recently recognized as the "Indian Law Firm of the Year 2000" by the International Financial Law Review, a Euromoney Publication.

OVERVIEW

The World Trading Organisation ("**WTO**"), formed in April 1994 (by the WTO Agreement), is a single institutional framework encompassing several agreements and legal instruments regulating international trade in goods and services.[1] Some of the crucial agreements are (i) The General Agreement on Tariffs and Trade, 1994 ("**GATT**") and other agreements covering trade in goods (ii) The General Agreement on Trade in Services, 1994 ("**GATS**") (iii) The Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994 ("**TRIPS**") (iv) The Understanding on the Dispute Settlement ("**DSU**") and (v) The Trade Policy Review Mechanism ("**TPRM**"). In addition, there are a number of Ministerial Decisions and Declarations that supplement the agreements reached.

Since the inception of the WTO, India has been a party to the WTO agreement, including both the GATT and GATS. The principles and standards laid down in these agreements are binding on India and require changes to be incorporated into the Indian domestic law.

Electronic commerce was highlighted in the WTO in 1998 following a proposal from the United States ("**US**") that members must refrain from imposing customs duties on electronic transmissions. Following the US proposal, the Declaration on Global Electronic Commerce was adopted on May 20, 1998 wherein the General Council of the WTO was urged to establish a comprehensive work programme to examine all trade related issues.

The next WTO negotiations are to be held in Doha in November 2001. One of the main issues on the agenda of the Doha Ministerial is bringing e-commerce within the WTO framework. The Ministry of Commerce of India has approached the Internet Service Providers Association of India ("**ISPAI**"), for its inputs in this regard. The ISPAI has in turn, approached Nishith Desai Associates ("**NDA**") for their inputs. NDA has prepared a Report, which seeks to address the following topics:

- *Characterisation issues*: This topic is under significant discussion and debate within the WTO and has direct implications with relation to commitments under the GATT, the GATS and the TRIPs.
- *Harmonisation of e-commerce laws*: This is a critical issue, as divergent legal and regulatory responses of nations would need to be moulded to meet the requirements of the borderless nature of e-commerce.

With respect to each of the above topics, the Report has sought to examine: contemporary international developments, issues relevant to India and alternatives available to India. All suggestions in this Report are preliminary and would depend upon industry inputs and other social and economic considerations.

[1] http://www.wto.org

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EXECUTIVE SUMMARY

E-commerce was brought into the realm of the World Trade Organisation ("**WTO**") in early 1998 with the US-led proposal of continuing the moratorium on customs duties. Thereafter e-commerce has been a burning issue in the WTO. With the Doha Ministerial approaching in November 2001, countries have begun formulating their stance on this crucial issue.

1. Characterisation of E-commerce in International Trade

1.1. E-commerce has drastically enhanced the dimensions of international trade. Taking e-commerce into consideration, it can be said that presently, international trade is carried on in three modes:

- The traditional mode of conducting business transactions i.e. by offline (i.e. physical) ordering and delivery of goods and services;
- Conducting business transactions by the online (i.e. on the Internet) ordering of goods and services combined with their offline delivery; and,
- Conducting business transactions electronically i.e. online ordering and online delivery of goods and services.

While the first two modes continue to be regulated within the WTO framework, the trade in the *online or digitized goods* and *online* or *digitised services* ("**e-transmissions**") spawns a complex set of issues. E-transmissions have blurred the boundary between goods and services over the Internet, making the characterisation of electronic transmissions as goods or services very cumbersome for the purpose of international trade.

1.2. Characterisation of **e-transmissions** as goods or services would have specific implications for the Indian Government and the Indian industry, under the GATT or GATS. Some key implications that India would have to consider are set out in the table below.

Implications under the GATT	Implications under the GATS
(a) Formulating a system for imposition of customs duties or (b) the extension of customs moratorium.	Conforming to present GATS commitments under relevant service sectors
Conceptualisation of imports/ exports over the Internet	Adoption of regulations in a transparent manner with an opportunity to provide for public review and comment
Removal of subsidies, which favour exports and establishment of systems to prevent dumping.	Conceptualisation of what amounts to "cross-border" supply and "consumption abroad" over the Internet
Clarification on quota restrictions on cinematograph films (with reference to virtual screening)	Progressive liberalisation of restrictions in case of certain computer and related services / e-commerce services as well as infrastructural services necessary to support e-commerce.
	Removal of various market access barriers (including technical, legal, and infrastructural).

1.3 Positions taken by some countries are summarised below:

Country / Region	Stand Taken For Characterisation Of E-commerce
United States of America[2]	(a) Characterisation of e-commerce as "goods" under GATT may be advantageous as it could provide for more trade-liberalising outcome for e-commerce. However, moratorium on customs duties on e-transmissions should continue. (b) Reviewing present modes of delivery under GATS and considering the implications of digitised services on these modes. (c) Revisiting present market access commitments under GATS to facilitate e-commerce. (d) Existing commitments to encompass the delivery of service through electronic means, in keeping with the principle of technology neutrality.
European Union[3]	(a) Characterisation of e-transmissions as "services" and therefore, applying GATS framework. (b) Moratorium on customs duties on e-transmissions should continue.
Singapore and Indonesia[4]	(a) Electronic transmissions could be classified as services or intangible intellectual property rights. (b) Existing commitments under services should be revisited due to advent of e-commerce services. (c) Moratorium on customs duties should continue. Tariff barriers on physical goods should be brought down.
Japan	(a) GATS disciplines should be applied to the acts of supplying digital contents by electronic means (b) However, it is not clear what disciplines should be applied to the digital contents themselves, and therefore consideration should also be directed so that GATT principles apply to digital contents. (c) Moratorium on customs duties should continue.

1.4 Action points for India include:

1.4.1 Formulating a stand on characterisation of e-commerce. The alternatives available to India broadly are:

- Characterisation of e-commerce as "goods" and following the GATT regime.
- Characterisation of e-commerce as "services" and following the GATS regime.
- Characterisation of specific e-transmissions as "goods" or "services" based on details, rather than characterising e-commerce totally as "goods" or "services".
- Developing a new *sui-generis* system to govern e-commerce, ignoring the present GATT / GATS frameworks.

[2] WT/G/16; G/C/2; S/C/7; IP/C/16; WTCOMTD/17 dated February 12, 1999.
[3] WT/GC/W/306 dated August 9, 1999.
[4] WT/GC/W/247 dated July 9, 1999.

Recommendation:

It is not possible to characterise e-commerce completely as goods or services. Characterisation of e-transmissions would depend upon the facts of each case. Some factors may be kept in mind while characterising e-transmissions as goods or services.

Characterisation Factors for Digitised Goods	Characterisation Factors for Digitised Services
Possess Value	Duties rendered by one person to another
Can be possessed and traded	Cannot be possessed
Exist independently of the owner or provider	Cannot exist independently of the service provider
Directly competitive or substitutable with the offline form of goods	Do not possess physical characteristics
Mass manufacture capability	High customisation quotient

1.4.2 Formulating of a single classification system among the various international classification systems, with regard to e-transmissions, taking into account multi-jurisdictional and requires predictability.

2. Harmonisation of E-commerce Laws

2.1. At an international level, several global organisations (such as OECD, UNCITRAL, WIPO) are revisiting existing laws to cope with the global nature of e-commerce. However, after e-commerce was brought within the WTO framework, the Working Group on E-commerce has also been considering harmonisation of e-commerce law within the WTO framework.

2.2. The important issue that needs to be considered is ***whether the WTO is the right forum to address all issues pertaining to e-commerce***. If India agrees that the WTO is the right forum to address these issues, then various other aspects concerning taxation of e-commerce, the Internet management structure, intellectual property protection, privacy and data protection, content regulation and security and authentication must be addressed during the next round of the WTO negotiations.

2.3. Action points for India include:

2.3.1. Formulating a stand on whether the WTO must consider harmonisation of all e-commerce issues within its framework.

Recommendations:

If India agrees that WTO is the right forum to address these issues, then the action that is suggested below should be undertaken by the WTO:

- Co-ordination with the OECD to conceptualise factors that would distinguish between digitised goods and services for the purpose of direct and indirect taxation and to avoid disparities in the two forms of taxation.
- Collaborate with international Internet management bodies (such as the ICANN, IETF, IRTF, etc) to formulate adequate standards and policies for the Internet and encourage participation of WTO member nations in these international bodies.
- Reviewing domestic intellectual property laws in view of international commitments, and taking on additional commitments favourable to growth of e-commerce.

- Outlining basic criteria concerning privacy protection, similar to the Safe Harbour principles, that must be adhered to while conducting international trade, especially over the Internet;
- Development of key parameters to be followed for publishing and transmitting content for the purpose of trade over the Internet and articulating basic principles for determining the liability issues;
- Ensuring that a clear encryption policy is adopted and that security and authentication measures adopted under Indian regulations are recognised by other countries. This may require reciprocal commitments by India.

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APPROACH AND METHODOLOGY

Nishith Desai Associates ("**NDA**") was approached initially by the Internet Service Providers Association ("**ISPAI**") to provide inputs on a "Discussion Paper on E-commerce" circulated by the Ministry of Commerce, Government of India, on e-commerce issues with relevance to the World Trade Organisation ("**WTO**") for the next round of negotiations at Doha in November, 2001.

In response to the invitation, NDA undertook to prepare a preliminary report covering the issues outlined in the Discussion Paper. The methodology adopted in preparing this report was to first understand the nature of e-commerce and how it has changed the manner of trading. Thereafter, we (Vaibhav Parikh, Annapoorna Ogoti, Aashit Shah and Nilesh Zacharias) undertook a study of existing international agreements within the WTO, especially the General Agreement on Tariffs and Trade ("**GATT**") and the General Agreement on Trade in Services ("**GATS**") and the commitments that India and other member nations had made with respect to the GATT and GATS. We also outlined the other issues pertaining to e-commerce, identified the international approach with respect to these issues and chalked out action points that India must undertake in this regard.

Once the Interim Report was prepared, it was forwarded to ISPAI who in turn forwarded it to various Ministries of the Government of India. Thereafter, on July 6, 2001 we (Annapoorna Ogoti and Sandeep Farias) gave a presentation to the various Central Ministries regarding the implications of bringing e-commerce within the WTO framework. After this presentation, we (Annapoorna Ogoti and Sandeep Farias) also had further discussions with the Ministry of Commerce and ISPAI on July 19, 2001 with respect to the further action to be taken to aid the formulation of the negotiation positions to be taken by India at the WTO.

After the discussions with the Government Ministries, we (Annapoorna Ogoti, Aashit Shah and Vaibhav Parikh) prepared a questionnaire seeking inputs from various industry personnel that would enable NDA to formulate a comprehensive report for the Government of India. The questionnaire was forwarded to ISPAI, who in turn forwarded the same to several industry personnel.

In response to the questionnaire NDA received inputs from NASSCOM, who submitted a report that was jointly prepared by NASSCOM and the Boston Consulting Group on "E-commerce Opportunities in India", and had occasion to interact with members of the BCG team. We also received responses from Software Exports Promotion Council.

On August 16, 2001, we (Annapoorna Ogoti) had a meeting with representatives of ISPAI, NASSCOM, FICCI and MAIT. At the meeting it was concluded that e-commerce classification would depend upon the particulars of the commodity in trade. Based upon guidance and suggestions of Nishith Desai, we prepared an Executive Summary of the Interim Report and circulated it to ISPAI, NASSCOM, FICCI and MAIT, requesting them to forward the same to their members so that we could receive additional inputs. This was in pursuit of our endeavour to get a deeper insight into this issue, considering the magnitude of this project and the impact it is likely to have on Indian as well as International trade.

We have now prepared the "Final Report" which summarizes some of the issues facing the characterisation debate with respect to e-commerce, and the harmonisation of e-commerce related law.

THE TEAM

Ms. Annapoorna Ogoti: Annapoorna is an Information Technology Lawyer and is a member of the Technology Law Division at Nishith Desai Associates ("**NDA**").

Mr. Aashit Shah: Aashit is a member of the Strategic Initiatives Team at NDA and his main areas of practice include e-commerce law and international trade law.

Mr. Vaibhav Parikh: Vaibhav is an Information Technology Lawyer and heads the Technology Law Division at NDA.

Mr. Sandeep Farias: Sandeep heads the Strategic Initiatives Team at NDA and his main areas of practice include corporate and securities law.

Mr. Nilesh Zacharias: Nilesh is a member of the Strategic Initiatives Team at NDA and his main areas of practice include e-commerce and privacy regulation.

Mr. Nishith Desai: Nishith is the founder of NDA and takes special interest in laws relating to the taxation of e-commerce.

In addition we also thank Mr. Deepak THM, Mr. Vijay Sambhamurthy, Ms. Daksha Bakshi, Ms. Manisha Aurora and Mr. Parag Bhuptani of NDA for their invaluable assistance and professional support in making this report.

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We extend our special thanks and appreciation to the following persons for providing their valuable advice and inputs on this Project:

Mr. Amitabh Singhal	:Secretary, Internet Service Providers Association of India ("**ISPAI**")
Mr. Colonel Ramchandran	:General Manager, National Association of Software and Service Companies ("**NASSCOM**")
Mr. James Abraham	:Vice President, Boston Consulting Group, India
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CHAPTER A

DEMYSTIFYING THE WORLD TRADE ORGANISATION

A. DEMYSTIFYING THE WORLD TRADE ORGANISATION

1. Establishment of the World Trade Organisation ("WTO") [5]

The emergence of several separate economies, after the World War - II, led to the establishment of a multilateral trading system, under the General Agreement on Tariffs and Trade ("**GATT**"), 1947. The objectives of the multilateral trading system were to promote free trade and establish a common forum for member states to enter into agreements.

However, the GATT had certain limitations (eg. lack of institutionalisation, limited scope only in respect of trade in goods, the adoption of certain plurilateral undertakings, and an inadequate dispute settlement mechanism) which led to a review of existing systems.

As a consequence, the WTO was formed in 1995, after the Uruguay Round of GATT Negotiations between 1986 and 1994, with the conclusion of the Marrakesh Agreement in 1994. The WTO provides the institutional framework for a multilateral system of rights and obligations for the following:

(a) Trade in goods;
(b) Trade in services; and,
(c) Protection of intellectual property rights.

The overriding objective of the WTO is to help trade flow smoothly, freely, fairly and predictably. This is done by:

(a) Administering trade agreements;
(b) Acting as a forum for trade negotiations;
(c) Settling trade disputes;
(d) Reviewing national trade policies;
(e) Assisting developing countries in trade policy issues, through technical assistance
(f) and training programmes; and,
(g) Co-operating with other international organizations.

2. Membership and structure

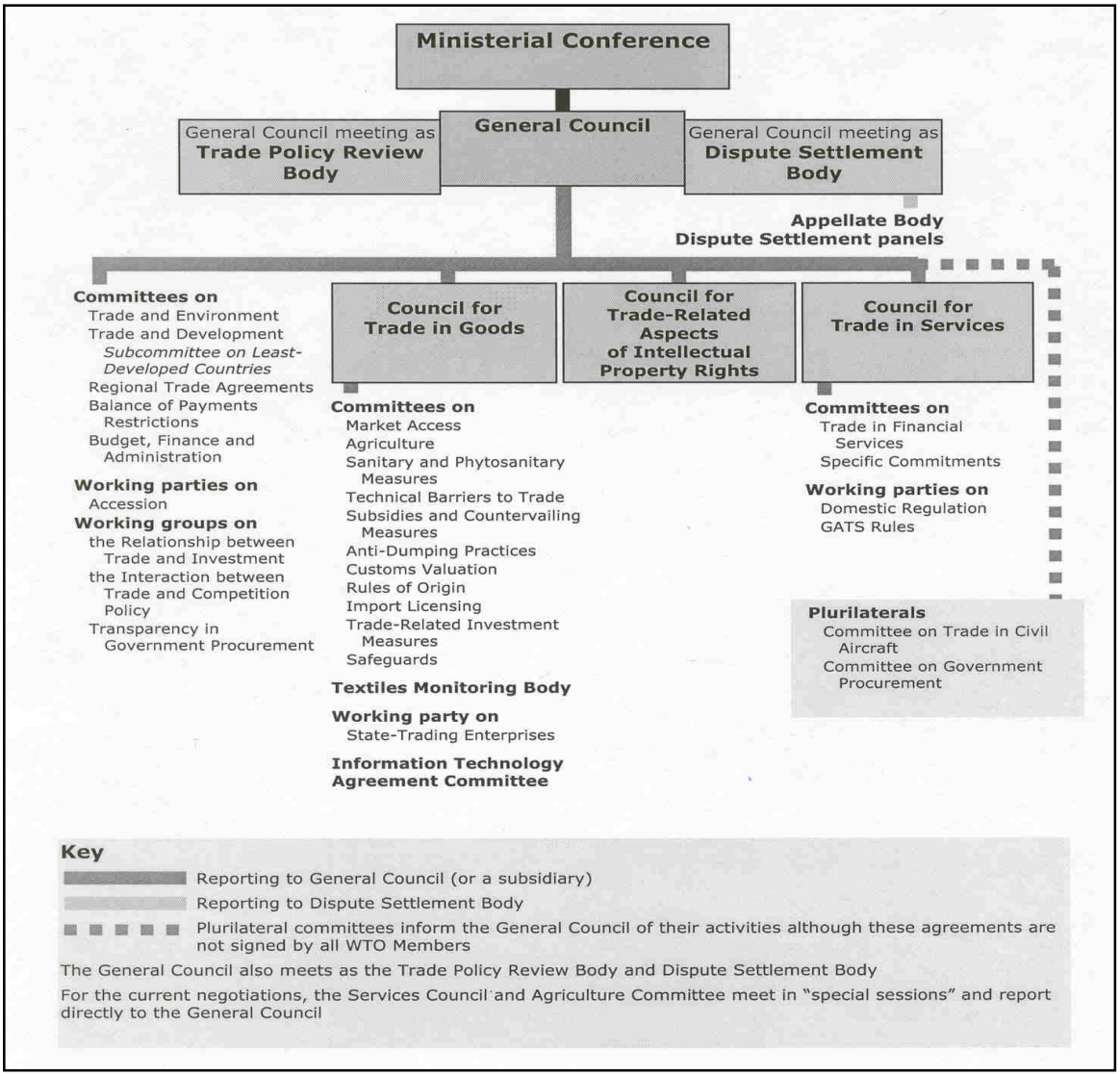
The WTO consists of 142 member nations. The decision making bodies are the

(a) Ministerial Conference;
(b) General Council (also acting as the Trade Policy Review Body and the Dispute Settlement Body);
(c) Goods Council, Services Council and the Intellectual Property Council; and,
(d) Committees and other bodies.

Decisions are made by consensus. Although decision by a majority vote is possible, it is used very rarely.

[5] The contents of this section of the paper have been obtained from different parts of the Official Website of the WTO at www.wto.org.

FIGURE 1: WTO STRUCTURE[6]



3. Obligations under the WTO Agreements

The trade obligations of the members of the WTO are contained in a complex set of Agreements, which cover several aspects of free trade. By and large, the Agreements govern the following aspects:

(a) Trade in goods, contained under the GATT;

(b) Trade in services, contained under the General Agreement on Trade in Services ("**GATS**");

[6] Official website of the WTO: www.wto.org

(c) Intellectual Property, contained under the Agreement on Trade-related Aspects of Intellectual Property Rights ("**TRIPS**");
(d) Dispute Settlement; and,
(e) Trade Policy Review Mechanism.

There are over 60 Agreements, and separate schedules of commitments made by each member, in specific areas. **Figure 2** provides the structure of the various agreements under the WTO.
(a) The broad principles are contained in the main Agreements.
(b) The extra agreements or annexes deal with special requirements of specific sectors or issues.
(c) The detailed schedules indicate the commitments made by individual countries.

FIGURE 2: STRUCTURE OF VARIOUS AGREEMENTS UNDER THE WTO				
	Goods	Services	Intellectual Property	Disputes
Basic Principles	GATT	GATS	TRIPS	Dispute Settlement Understanding
Additional Details	Other Goods Agreements and Annexes	Services Annexes		
Market Access Commitments	Countries Schedule of Commitments	Countries Schedule of Commitments		

Each of the main agreements under the WTO framework, echoes the fundamental principles of the Marrakech Agreement which established the WTO:
(a) Most Favoured Nation ("**MFN**") treatment: Members are bound to treat products / services of each member in a manner no less favourable than that of any other member's products / services.
(b) National Treatment ("**NT**"): Members are bound to treat products / services of each member in a manner no less favourable than its own products / services.
(c) Transparency: Members are bound to comply with notification requirements to guarantee fullest transparency possible in their trade policies relating to goods, services or intellectual property rights.

3.1 GATT, 1994

The GATT covers trade in goods between countries and lays down general principles based on which members can regulate trade. Broadly, members are bound by the MFN obligation, National treatment obligation and their schedules of concessions on tariff rates (import duties). *The GATT aims at free trade amongst nations by promoting market access and removal of tariff as well as non-tariff barriers.* It establishes detailed rules on non-tariff measures, quantitative restrictions, unfair trade practices, emergency safeguard measures, border measures, etc.

The principal obligations under the GATT have led to the conclusion of several supplementary Annexes and Agreements, which spell out the obligations in further details. Some of the key supplementary Agreements and Annexes are:

(a) Agreement on Trade Related Investment Measures;
(b) Agreement on Technical Barriers to Trade;
(c) Agreement on Implementation of Article VI of the GATT, 1994 (antidumping);
(d) Agreement on Implementation of Article VII of the GATT, 1994 (customs valuation); and,
(e) Agreement on Subsidies and Countervailing Measures.

3.2 GATS, 1995

The GATS covers various service sectors and lays down the general obligations of the members. Under the GATS, trade in services is categorised based upon four different modes of supply[7]:

(a) from the territory of one member into the territory of any other member ("**Mode 1**");
(b) in the territory of one member to the service consumer of any other member ("**Mode 2**");
(c) by a service supplier of one member, through commercial presence in the territory of any other member("**Mode 3**"); and,
(d) by a service supplier of one member, through presence of natural persons of a member in the territory of any other member ("**Mode 4**").

The general obligations under the GATS include *inter alia,* MFN treatment, NT, objective and reasonable regulations, transparency, mutual recognition etc. Unlike the GATT, the GATS is a relatively new agreement and provides for a *framework of progressive liberalisation of the services sector, and members are allowed greater flexibility in scheduling their commitments*. Thus, member nations have made certain exemptions with respect to the MFN treatment and NT.

Like the GATT, the GATS also has several annexes on specific sectors / issues. Some of the key Annexes are:

(a) Annex on Movement of Natural Persons;
(b) Annex on Financial Services;
(c) Annex on Basic Telecommunications; and,
(d) Annex on Air Transport Services.

A comparison of the obligations under the GATT and the GATS is provided in **Annexure A**.

3.3 TRIPS, 1994

The TRIPS is an attempt by the WTO to narrow the gaps in which rights relating to ideas and creativity are protected around the world. Aspects that are not covered by the GATT and GATS are sought to be covered under the TRIPS. As in the GATT and the GATS, the TRIPS also has certain basic principles relating to non-discrimination: MFN and NT. The Agreement goes on further to cover the following broad issues:

(a) Application of basic principles of trading systems, and other intellectual property systems;
(b) Adequate protection of intellectual property rights;
(c) Adequate enforcement of intellectual property rights;
(d) Settlement of disputes relating to intellectual property rights; and,
(e) Special transitional arrangements.

The WTO works closely with the World Intellectual Property Organisation ("**WIPO**"), with regard to intellectual property issues, and has also signed a formal agreement with the WIPO in 1995.[8]

[7] Article 1(2), GATS.

4. Ongoing Work At The WTO

Member nations are gearing up for the next Ministerial rounds of the WTO to be held in November 2001. Some of the issues that are identified for future negotiations include:

(a) Rules for dealing with subsidies, government procurement and safeguard measures

(b) Rules for permitting professional services by foreign service providers (accountancy as a priority sector)

(c) Commitments as regards the maritime transport sector

(d) Bringing E-commerce within the WTO framework

E-commerce was brought into the realm of the WTO in 1998, pursuant to the proposal by the United States to continue the moratorium on customs duties on e-commerce. Thereafter, the WTO has been actively involved in evolving parameters to integrate e-commerce within the WTO structure. **Figure 3** outlines the chronology of events pertaining to this issue.

FIGURE 3: CHRONOLOGY OF EVENTS[9]	
Date	**Event**
February, 1998	Proposal from the US to continue with the practice, all over the world, of not imposing customs duties on electronic transmissions.
May 20, 1998	Adoption of "*The Declaration on Global Electronic Commerce"* (the "**Declaration**") on 20 May 1998 at the second session of the Ministerial Conference of the WTO [10] in Geneva. In the Declaration, the General Council ("**GC**") of the WTO was urged to 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 at Seattle.
September 25, 1998	The GC established a Work Programme on Electronic Commerce[11] for the four WTO bodies.[12]
March 31, 1999	The GC conducted an interim review of progress in the implementation of the Work Programme based on interim reports presented by the four subsidiary bodies of the WTO.
July 1999	The four WTO bodies reported in greater detail on the progress made in their work to the GC in July 1999.
November 30 to December 3, 1999	In Seattle, the draft text of the declaration that was circulated also had a para on e-commerce. This text was put forward although it did not enjoy the full consensus of all WTO Members. This text affirms electronic supply of services falls within the scope of the GATS Rules and it sought to extend the application of the declaration until the Fourth Session, at which time it was to be reviewed.

[8] Agreement Between the World Intellectual Property Organization and the World Trade Organization, December 1995, http://www.wto.org/english/tratop_e/trips_e/wtowip_e.htm.
[9] Source of these events is the Discussion Paper on E-commerce circulated by the Ministry of Commerce and Industry, India.
[10] Document WT/MIN(98)/DEC/2.
[11] Document WT/L/274.
[12] The four bodies are: (i) The Council for Trade in Services; (ii) the Council for Trade in Goods; (iii) the Council for TRIPS; and (iv) the Committee for Trade and Development.

	The GC was also invited to resume to consider this matter by establishing a horizontal non-negotiating group with the group reporting progress to the Fourth Session.
May 8, 2000	The GC advised the four subsidiary bodies to resume their work under the Work Programme and to submit progress reports by December 2000.
May 8, 2001	The GC resumed substantive consideration of the Work Programme at its regular sessions.
November 9 to 13, 2001	Doha Ministerial: The moratorium on imposing customs duties has been extended until the next session.

The four WTO bodies have been meeting at regular intervals to carry forward their discussions. The key issues that have been highlighted in their discussions are summarised in **Figure 4**.

FIGURE 4: IDENTIFICATION OF KEY ISSUES BY THE FOUR TRADE GROUPS			
Council for Trade in Goods	**Council for Trade in Services**	**Council for TRIPS**	**Committee on Trade and Development**
1. Characterisation of e-commerce 2. Rules of Origin Issue 3. Customs Valuation Issues 4. Granting Market Access 5. Importing Licensing Procedures 6. Classification under existing classification systems	1. Characterisation of e-commerce 2. Inclusion into the existing GATS commitments under Mode 1 and 2. 3. Technology Neutral 4. Transparency Obligations 5. Liberalisation of Market Access 6. Privacy rights and Consumer Protection 7. Classification under existing classification systems 8. Customs Duties	1. Classification of intellectual property products 2. Use of technology in developing and managing IPRs 3. Infringement of IPRs on the Internet 4. Challenges to enforcement of IPRs 5. Relationship between TRIPS and WIPO Treaties 6. Implications of the WIPO domain name process 7. Use of patents in relation to software and business methods 8. Anti-competitive practices 9. International Co-operation	1. Human Resource Development 2. Infrastructure Development 3. Effect on Modes 3 and 4 under GATS, due to e-commerce 4. Issues impacting developing nations: market access, competition, tariffs, customs revenue, IPR protection and regulatory regimes

One of the most important issues that is being debated is whether e-commerce can be characterised as goods or services. We shall consider this issue in detail in the next chapter.

CHAPTER B

CHARACTERISATION OF E-COMMERCE IN INTERNATIONAL TRADE

B. CHARACTERISATION OF E-COMMERCE IN INTERNATIONAL TRADE

1. Introduction

The term "e-commerce" has come into use relatively recently leading some to suppose that it is a new way of conducting business.

E-commerce is understood to mean the *production, distribution, marketing, sale or delivery of goods and services by electronic means*.[13] The Asia Pacific Economic Co-operation ("**APEC**") has adopted a wider definition of e-commerce to include *all business activity conducted using a combination of electronic communications and information processing technology*.[14] The United Nations Economic and Social Commission for Asia and the Pacific ("**UNESCAP**") has also defined e-commerce as '*the process of using electronic methods and procedures to conduct all forms of business activity*.[15]

It may perhaps be defined more formally as "*a way of conducting business by utilising computer and telecommunications technology to exchange data between independent organisational computer information systems in order to complete a business transaction*".[16]

From the above, it is clear that there is no clear and definite meaning of e-commerce. However, among the principal activities that can be identified as contributing to global e-commerce are[17] (a) Government services and information; (b) Business-to-business wholesale and retail services and sales; (c) Business-to-consumer (and consumer-to-consumer) retail sales and transactions; (d) Financial services and transactions; (e) Subscription and usage-based telephony, online and Internet access services; (f) Subscription or transaction-based information services and software sales; (g) Advertising and marketing services; and (h) Ancillary functions contributing to business / commercial activities.

Over the past few years, global trade has expanded due to the explosive growth of electronic commerce. Predictions by the Forrester Research expect worldwide e-commerce transactions to be slated at US$6.8 trillion in 2005.[18] While e-commerce is still at a nascent stage in India, the NASSCOM-Boston Consulting Group Report ("**NASSCOM-BCG Report**") estimates that the total transaction volume of e-commerce in India is expected to grow rapidly to Rs. 195,000 crore by 2005.[19]

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[13] "The Work Programme on Electronic Commerce; Background Note by the Secretariat", Council for Trade-Related Aspects of Intellectual Property Rights, WTO.
[14] "A. Didar Singh, "Electronic Commerce: Issues for the South" Trade-related Agenda, Development and Equity, Working Paper, South Centre, October 1999, p. 4.
[15] "A. Didar Singh, "Electronic Commerce: Issues for the South" Trade-related Agenda, Development and Equity, Working Paper, South Centre, October 1999, p. 4.
[16] "Electronic Commerce for Customs" Secretariat Note, World Customs Organisation, Permanent Technical Committee, ADP Sub-Committee, 34th Meeting.
[17] "Discussion Paper on Electronic Commerce Policy" Department of Communications, Republic of South Africa, Issued in July 1999.
[18] "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 5.
[19] Current e-commerce transaction volume estimated to be between Rs. 15,000 to Rs. 20,000 crore (FY 2000): "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 7. BCG defines e-commerce to include all electronic transactions including EDI.

A typical e-commerce transaction would take place in the stages as shown in the table below:

FIGURE 5: STAGES IN AN E-COMMERCE TRANSACTION	
Stage	**Description**
Research for selection	A consumer would access the Internet to obtain information regarding a particular good or service
Feedback	The online vendor or online service provider would provide him the necessary information over the Internet
Ordering	The consumer would then place his order for goods or services over the Internet
Payment	The payment for the goods or services would either be made online by credit cards or digital currency or offline upon delivery
Delivery	The online vendor or online service provider would deliver the goods or supply the services, respectively, either online or offline

With the growth of e-commerce, means of international trade are changing rapidly. Taking e-commerce into consideration, it can be said that presently, international trade is carried on in three ways:

(a) The traditional mode of conducting business transactions i.e. by physical ordering and delivery of goods and services ("**Method A**");

(b) Conducting business transactions by the electronic ordering of goods and services combined with their physical delivery ("**Method B**"); and

(c) Conducting business transactions electronically i.e. electronic ordering and electronic delivery of goods and services ("**Method C**").

Transactions in Method A represent the traditional methodology of carrying on trade. (Eg. 1: A computer store places an order for computer video games, which are delivered to the store and payment is made upon delivery. Eg. 2: An office asks for computer repair and maintenance services, which are rendered at the office site and money is paid for the services rendered). The GATT and the GATS would separately govern transactions in this mode, as the distinction between *offline supply* of goods and services can be made with relative ease.

Transactions in Method B typically consist of instances where a consumer browses the Internet and places an *online order* for an item (eg. a book) or a service (eg. computer repair). The item or the service is *supplied offline*. In this case, the application of either the GATT or the GATS would be rather simple, as the supply is done offline and not electronically.

But transactions in Method C, which comprise *online supply* ("**e-transmissions**") of goods and services, cannot be easily regulated. E-transmissions can largely be classified as either goods ("**digitised goods**") or services ("**digitised services**"). However, when an e-transmission is delivered, it is difficult to identify whether that e-transmission amounts to a digitised good or a digitised service. For eg. when a person downloads a song from the Internet, it is not easy to indicate whether the delivery of the song amounts to the purchase of a good or the consumption of a service. The main issue to be resolved is characterisation of an e-transmission as a digitised good or a digitised service, to apply the GATT or the GATS. It is important to evolve certain

basic factors that would facilitate the characterisation, and consequently bring predictability to the treatment of e-transmissions in international trade.

2. Challenges in characterising e-commerce

2.1 Can the traditional definitions of "Goods" be applied to e-transmissions?

Within the WTO framework, the GATT deals with international trade in goods. However, the GATT does not define or explain the term "goods". Therefore, it is important to understand some of the essential features of goods. There are several definitions of "goods" which can be applied depending on the circumstances.

2.1.1 *Definition #1*

Goods can be defined as all movable things, which are tangible.[20] A thing is said to be 'movable' if it can be changed in place[21] and 'tangible' if it can exist in physical form and is capable of being touched or felt.[22] However, in the context of digitised goods, this definition would not be useful as digitised goods are intangible in nature (i.e. they do not have physical form and cannot be touched or felt).

2.1.2 *Definition #2*

The Indian Sale of Goods Act, 1930 defines "goods" to include movable property, other than actionable claims and money.[23] This definition is very wide as it includes all forms of movable property except actionable claims and money. Though this definition may include digitised goods, it does not provide clear principles / factors to differentiate digitised goods from services.

2.2 Can the traditional definitions of "Services" be applied to e-transmissions?

2.2.1 Definition #1

Within the WTO framework, the GATS deals with international trade in services. GATS provides an inclusive definition of services which states that "services" includes any service in any sector except services supplied in the exercise of government authority.[24] This definition is wide enough to encompass e-commerce services.[25] However, this definition does not lay down the characteristics of a service or factors that would distinguish a service from a good.

2.2.2 Definition #2

"Service" has been considered to include any duty rendered by one person to another, the former submitting to the will and direction of the latter.[26] This definition emphasizes on the 'duty' aspect of a service. However, a service may not always mean duties performed for another (eg. broadcasting services). Moreover, sometimes the service provider may be providing mass services and in that case, it may not amount to submitting to the will and direction of the person acquiring the service (for eg. news service or radio service). The only aspect of this definition that may be used for a digitised service is that the service cannot be separated from the service provider. It has to be rendered by a service provider and cannot exist independently of the service provider.

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[20] Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 694.
[21] Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 1014.
[22] Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 1456.
[23] Section 2(7) of the Sale of Goods Act, 1930.
[24] Article 1(3), GATS.
[25] "Preparations For The 1999 Ministerial Conference: WTO Work Programme On Electronic Commerce", Communication From The European Communities And Their Member States, WT/GC/W/306, dated August 9, 1999.
[26] Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 1368.

2.2.3 Definition #3

"Services" have been defined to mean things purchased by consumers that do not have physical characteristics.[27] This is a wide definition, but qualifies a few aspects of a service:

(a) Services are purchased for the purpose of consumption i.e. they cannot be stored and utilised at a later stage, but are immediately consumed;

(b) Services are intangible in nature; and

(c) Services cannot be possessed,[28] as they do not have physical characteristics.

This definition seems wide enough to encompass digitised services. However, these factors are not conclusive, but may be taken into consideration while differentiating a good from a service.

2.3 Existing definitions are inadequate

With the advent of new technologies and future inventions, concepts such as "producticised services" and "servicised products" will become common and therefore their categorisation as goods or services would depend upon several factors. For example, as pointed out in popular analysis in "BLUR: The Speed of Change in the Connected Economy", it would be difficult to distinguish between the service and product components of what Amazon.com sells to its customers.[29]

A review of the above definitions mentioned in 2.1 and 2.2 indicates that new definitions or characterisation factors may be required for the purpose of digitised goods and services.

The WTO has held that as to whether a good is a like-product of another good would be decided upon a case-to-case basis.[30] Some of the factors that may be considered are: [31]

(a) The product's end-uses in a given market;

(b) The consumer's tastes and habits;

(c) The product's properties, nature and quality; and

(d) Whether the product in question is directly competitive or substitutable with the existing product.

For example, a digitised song in MP3 format that is downloaded from the Internet can be substituted to an audio-cassette or compact disc that can be purchased offline as it would serve the end-use of the product, namely listening to the music and would also cater to the consumers tastes and habits. Such a digitised song would thus be directly competitive with the audio-cassette or compact disc containing the same song.

Currently goods that are available in digitised form include books and print media, music and software. These digitised goods should be considered like products to books, music and software available in physical form, depending upon the manner in which they are distributed.

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[27] Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 1369.

[28] "Possess" means to have in one's actual and physical control; Blacks Law Dictionary, West Publishing Company, Minnesota, 1991, p. 1162.

[29] Stan Davis **and** Christopher Meyer, "**Blur: The Speed Of Change In The Connected Economy",** Perseus Publishing, 1998.

[30] "Why Should We Care About the World Trade Organisation or the Classification Dispute?" (2000), http://cyber.law.harvard.edu/is2000/wtoreading1.htm

[31] "Why Should We Care About the World Trade Organisation or the Classification Dispute?" 2000 http://cyber.law.harvard.edu/is2000/wtoreading1.htm

The following table outlines that e-transmissions may be characterised as digitised goods or services depending upon the form and manner in which they are distributed.

E-transmission	Digitised Goods	Digitised Services
Music	Downloadable MP3 files	Streaming of Songs
Videos	Downloadable Video files	Streaming of Movies
Printed Matter	Newsletters, Books	Website
Software	Produced / Distributed on a Mass Scale	Customised for specific business needs

3. Implications of classification as "goods" or "services"

The characterisation of an "e-transmission" as either goods or services broadly would invoke either the GATT or the GATS regime.

As discussed earlier,[32] the GATT aims at free trade, whereas the GATS aims at progressive liberalisation. If e-transmissions are characterised as goods, then the GATT regime would apply and trade in digitised goods would have to be unrestricted. However, for e-transmissions that are characterised as services, the GATS regime would apply and trade in digitised services would have to be liberalised gradually over a period of time.

Resultant implications are significant; some of the key implications are summarized below.

Implications under the GATT	Implications under the GATS
(a) Formulating a system for imposition of customs duties or (b) the extension of customs moratorium.	Conforming to present GATS commitments under relevant service sectors
Conceptualisation of imports / exports over the Internet	Adoption of regulations in a transparent manner with an opportunity to provide for public review and comment
Removal of subsidies, which favour exports and establishment of systems to prevent dumping.	Conceptualisation of what amounts to “cross-border” supply and "consumption abroad" over the Internet
Clarification on quota restrictions on cinematograph films (with reference to virtual screening)	Progressive liberalisation of restrictions in case of certain computer and related services / e-commerce services as well as infrastructural services necessary to support e-commerce.
	Removal of various market access barriers (including technical, legal, and infrastructural).

3.1 Key GATT Implications explained

3.1.1 Imposition of customs duties

While the GATT aims at free trade, there are certain minimal restrictions on trade that it imposes.[33] By applying the like product principles, customs duties should also be levied on digitised goods which substitute physical goods, as per Article 7 of the GATT. The valuation, imposition of custom duties and monitoring the import and export of digitised goods could be problematic due to the following reasons:

[32] See pages 15 and 16.
[33] Refer to Annexure A for the different restrictions on trade that can be imposed under the GATT framework.

(a) No territorial limitations on the Internet;
(b) Difficulty in determining the country of origin of electronic transmissions (i.e. digitised goods);[34]
(c) Difficulty in structuring customs ports over the Internet for the purpose of levying customs duties; and,
(d) Lack of technology to tag and differentiate commercial e-transactions from non-commercial e-transactions.

It has been recognised that the imposition of customs duties on e-commerce transactions seems impracticable, as is demonstrated by the adoption of the US-led proposal for suspension of all customs duties on e-transmissions. However, the fact still remains that companies must be prepared to pay customs duties if the Governments develop suitable mechanisms to levy such duties.

Customs duties would be valued on digitised goods in the same manner as they are levied on offline goods. For example, in respect of songs and other music, normally the customs duties are levied on the content in addition to the cost / value of the medium in which the content is stored i.e. the cassette or disc. However, over the Internet, since the medium of storage is difficult to value, customs duties could nevertheless be levied on the content of the music.

3.1.2 Conceptualising Import / Export with respect to the Internet

Customs duties and other restrictions are generally imposed on import and export of goods. While this may be easy to fathom in the offline world, it is difficult to understand what amounts to import and export in the borderless Internet. For example, if a consumer in India purchases music from a website, would it amount to an import of the music, if the server is located outside India. Moving a step forward, if the website owner is situated or registered in India, but the server is located in India, would it still amount to an import of music into India? Thus, unless and until these terms are not conceptualised for the Internet, it may be difficult to impose any form of restrictions.

3.1.3 Subsidies and Countervailing Measures

The GATT seeks to reduce subsidies granted by governments for purposes of export except in specified circumstances. Fiscal incentives such as tax credits are also considered subsidies. For those e-transmissions that are characterised as goods (eg. software), the incentives that are given may have to be reduced over a period of time in compliance with the GATT.

Further, Article 6 of the GATT recognises the harmful effects of dumping and accommodates provisions to prevent dumping by levying anti-dumping and countervailing duties. Any restrictions on dumping of goods imposed by a country may also have an impact on Internet sales. However the intangible nature of digitised goods coupled with the intrinsic nature of the Internet would make the adoption and enforcement of any such measures difficult. It would become virtually impossible to control the dumping of digitised goods into a country over the Internet.

[34] As per Article 9(3) of the GATT, "marks of origin" need to be affixed on goods at the time of importation. Marks of origin will facilitate, *inter alia*, in levying of customs duties. The manner in which such marks of origin can be affixed on all forms of digitised goods needs to be understood.

3.1.4 Clarification on quota restrictions on cinematographic films

The GATT provides for quota restrictions on screening of cinematographic films, based on notions of "screen time"[35]. Screen quotas that are levied on films may be extended to the Internet and online viewing of movies may be controlled.

3.2 Implications under GATS

3.2.1 Confirming to present GATS Commitments

Each member of the GATS has made certain commitments regarding progressive liberalisation of services in certain sectors, under the different Modes of supply. For example, India has made certain exemptions in the telecommunications sector when providing MFN treatment. It is generally expected that digitised services may be subject to existing commitments in traditional services made by member nations.[36] The WTO has prepared an analysis of the existing GATS commitments which would be affected by e-commerce in specific Modes 1 and 2. The same would need to be examined in detail to understand any beneficial / adverse effects on the Indian economy.

3.2.2 Transparency Obligations

WTO Members are required to ensure that any regulation is adopted in a transparent manner, with full opportunity provided for public review and comment.[37] Any e-commerce related regulation would have to comply with this requirement.

3.2.3 Conceptualisation of "cross-border" supply and "consumption abroad" over the Internet

While making commitments, India would need to carefully conceptualise the Modes of services over the Internet, especially Mode 1 i.e. consumption abroad and Mode 2 i.e. cross-border supply. For example, when a consumer gets a particular digitised service over the Internet, the mode of supply could be either Mode 1 or Mode 2. If it is considered that the consumer is the one who goes to a particular website that is situated abroad and gets the service, then the supply of service would fall under Mode 1. However, if it is considered that the website comes to the consumer and provides the service, then it could fall under Mode 2.

3.2.4 Progressive liberalisation of certain services

The United Nations Central Product Classification System ("**CPC**")[38] has been suggested as the basis for classification of services within the GATS paradigm.[39]

As a result, there may be an "e-commerce cluster" of services that may enable or provide the transactional infrastructure for the conduct of all electronic commerce. Services relevant to e-commerce may be categorised as *infrastructure services*[40] (which are needed to carry out e-commerce) and *digitised services*[41] (which are

[35] Article 4, GATT.
[36] "Preparations for the 1999 Ministerial Conference: Work Programme on Electronic Commerce; Communication from Indonesia and Singapore" July 9, 1999, http://member.nifty.ne.jp/menu/wto/md99/md99e247.htm.
[37] The European Union ("**EU**") Transparency Directive as amended in 1998, provides one model. See "WTO and Electronic Commerce: Issues for World Trade", A Microsoft White Paper, September 1999.
[38] The Central Product Classification (CPC) of the United Nations forms the basis for the Services Sectoral Classification List developed during the Uruguay Round (MTN.GNS/W/120 of 10 July 1991). This List is the recommended (but not obligatory) basis for scheduling of GATS specific commitments.
[39] "Electronic Commerce -- Existing Gats Commitments For Online Supply Of Services", Working Party Of The Trade Committee, TD/TC/WP(99)37/Final, December 7, 2000.
[40] Infrastructure services would consist of services necessary to build a strong infrastructure for e-commerce. Under the present classification of services within the GATS framework, some of the infrastructural services would be Computer and related

actually provided over the Internet). However, the amount of services that will be offered purely online may differ in different service sectors. It is expected that B2B services will reach as high as 192,000 crores and B2C will be Rs. 3,000 crores.[42] BCG estimates that in India about 15 to 20% of all consumer durable sales will be pre-researched on the Internet.[43] Further about 20% of the B2B purchase transactions and 30% of the B2B sale transactions are expected to be *online* whereas Rs.550 crores (18.33% of total B2C e-commerce transactions) will be generated from *online* B2C transactions.[44] The BCG report also estimates that in the near future, online financial services will be greatly augmented by e-commerce activities.[45]

Moreover, it may also happen that certain digitised services are not covered under the existing services classification and therefore a new classification may need to be devised for the same. For example, it can be argued that Internet Telephony should not fall within the existing classification of Telecommunications services and hence the existing GATS commitments in that sector do not apply to it.

3.2.5 Removal of Market Access Barriers

An important consequence of the "services" characterisation would be the progressive removal of market access barriers. Some of these market access barriers may need to be addressed are.

(i) Infrastructure and Interconnectivity
(ii) Spectrum Allocation
(iii) Foreign Direct Investment

4. Positions of other countries

Positions taken by some countries are summarised below.

Country / Region	Stand Taken For Characterisation Of E-commerce
United States of America[46]	(a) Characterisation of e-commerce as "goods" under GATT may be advantageous as it could provide for a more trade-liberalising outcome for e-commerce. However, moratorium on customs duties on e-transmissions should continue. (b) Reviewing present modes of delivery under GATS and considering the implications of digitised services on these modes. (c) Revisiting present market access commitments under GATS to facilitate e-commerce. (d) Existing commitments to encompass the delivery of service through electronic means, in keeping with the principle of technology neutrality.
European Union[47]	(a) Characterisation of e-transmissions as "services" and therefore, applying

services, Telecommunications Services, Banking and Financial Services. Without these services, e-commerce may not be able to flourish.

[41] These services refer to those that will actually be rendered or performed over the Internet. Under the existing GATS framework, such services could fall under the following categories: Professional Services, Business Services such as advertising and marketing, Telecommunications Services, Audio-Visual Services, Distribution services, Business to Business and Business to Consumer Services, Banking and other Financial Services, Tourism and travel related services and Other services not included elsewhere.

[42] "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 8.

[43] "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 24.

[44] "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 43.

[45] "E-commerce Opportunities for India Inc." NASSCOM-BCG Report on E-commerce (June 2001), p. 63-64.

[46] WT/G/16; G/C/2; S/C/7; IP/C/16; WTCOMTD/17 dated February 12, 1999.

	GATS framework. (b) Moratorium on customs duties on e-transmissions should continue.
Singapore and Indonesia[48]	(a) Electronic transmissions could be classified as services or intangible intellectual property rights. (b) Existing commitments under services should be revisited due to advent of e-commerce services. (c) Moratorium on customs duties should continue. Tariff barriers on physical goods should be brought down.
Japan	(a) GATS disciplines should be applied to the acts of supplying digital contents by electronic means (b) However, it is not clear what disciplines should be applied to the digital contents themselves, and therefore consideration should also be directed so that GATT principles apply to digital contents. (c) Moratorium on customs duties should continue.

5. Choices Available to India

From the above discussions, four broad positions clearly emerge:

(a) E-commerce can be characterised as "goods" and the GATT regime could be followed.

(b) E-commerce can be characterised as "services" and the GATS regime could be followed.

(c) Specific e-transmissions could be characterised as "goods" or “services” based on details, rather than characterising e-commerce totally as "goods" or "services".

(d) A new *sui-generis* system could be developed to govern e-commerce, ignoring the present GATT / GATS frameworks.

6. Recommendation to Indian Government

6.1 E-commerce is nether "goods" nor "services" in entirety; specific e-transmissions could be either "goods" or "services"

Although, traditionally speaking, international trade could be bifurcated into trade in goods (which is regulated by the GATT), and trade in services (which is regulated by the GATS), the advent of e-commerce has blurred this distinction. Various e-commerce opportunities exist, both for the supply of goods and the provision of services. In the backdrop of the *fundamental WTO principle of technology neutrality*, it may not be appropriate to classify all e-commerce as either trade in goods or trade in services. Specific e-transmissions would have to be examined on a case-to-case basis for categorisation as goods or services.

It has been suggested that goods can be considered as commodities that have some value which can be owned, which exist independently of their owners and which can be traded.[49] This definition would be suitable as it outlines certain important characteristics of goods that would be applicable to digitised goods also. For example, a digitised book can be owned by the person who has downloaded it, it can exist independently of the owner and it can also be traded to another person (by e-mail, for instance).

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[47] WT/GC/W/306 dated August 9, 1999.
[48] WT/GC/W/247 dated July 9, 1999.
[49] "Why Should We Care About the World Trade Organisation or the Classification Dispute?" (2000), http://cyber.law.harvard.edu/is2000/wtoreading1.htm

In addition, special factors may be relevant for certain sectors. For example, mass production[50] or customisation may be a distinguishing factor between software goods and services. In the software sector, it has been considered that if there is about 33% of customization in a software transaction, the transaction could be classified as a supply of software service.[51] In the case of *Tata Consultancy Services vs. State of Andhra Pradesh*,[52] it was held that an important aspect of a service (especially software services) that differentiates it from a good is that the service can be customized based upon the consumer's needs. However, the matter has been referred to a larger bench of the Supreme Court and is pending.

Another alternative to characterise e-transmissions, could be to consider the predominant characteristic of the transmission, i.e whether the service is incidental to the product or whether the product is incidental to the service. In the former case, the transaction would be that in "goods" whereas the latter transaction would be a supply of "services".

As there is no single rule to classify all of e-commerce as "goods" or "services", the analysis for characterisation would have to take into account, the value or the significance of the e-transmission in the hands of the consumer and the supplier.

A distinct set of factors needs to be considered while characterising e-transmissions as goods or services. Some of the factors that have been earlier discussed are:

Characterisation Factors for Digitised Goods	Characterisation Factors for Digitised Services
Possess Value	Duties rendered by one person to another
Can be possessed and traded	Cannot be possessed
Exist independently of the owner or provider	Cannot exist independently of the service provider
Directly competitive or substitutable with the offline form of goods	Do not possess physical characteristics
Mass manufacture capability	High customisation quotient

6.2 Extension of customs moratorium or changing definition of import / export

Since the meaning of "export / import" are not clear with respect to digitised goods, India should urge the WTO to conceptualise the same. An approach in this regard could be to shift the incidence of the taxation measures from the point of import / export to the place of business / incorporation of the seller. This may be relatively easier to monitor and enforce.

Another alternative is to extend the moratorium on present tariff barriers that are dependent on border controls until the next WTO Ministerial Round.[53] Although this may discriminate digitised goods from physical goods

[50] This may particularly be relevant for classifying software transmissions into "goods". If the software is sold or marketed to certain classes of persons as a product having a particular function, it may be considered to be a good, rather than a service.
[51] Informal discussions with BCG representatives
[52] 2001 Supreme Court Online, Case no. 173.
[53] Projections indicate that even if all the products that can be traded physically today are provided electronically (and hence, within the scope of the moratorium), it is estimated that the overall revenue loss that the Government may suffer will be minimal. For example, it has been estimated that India would lose 0.4% of tariff revenue and 0.1% of the total revenue. See Ludger Schuknecht and Rosa Perez Esteve, "A Quantitative Assessment of Electronic Commerce", WTO, Staff Working Paper ERAD - 99-01 September, 1999.

and hence violate the fundamental principles of GATT, this discrimination could be overcome by expanding and accelerating the implementation of the Information Technology Agreement, 1997, which provides for reduction of customs duties on information technology goods including software.[54] By further persuasion and negotiation, a duty-free treatment for software and e-goods could be arrived at[55].

6.3 Revisiting classification of "goods" and "services" under various classification systems

Classification of products is generally based on the physical characteristics of goods or on the nature of the services rendered. Classification provides a framework for collection and international comparison of the various kinds of statistics dealing with goods and services.[56] At present, there are three widely accepted systems of classification for goods and services in international trade:

(a) The UN Central Product Classification ("**CPC**")[57]

(b) The Services Sectoral Classification List ("**SSCL**")[58]

(c) The Harmonised System of Nomenclature ("**HSN**")

Any one of these systems may not completely address the different kinds of goods / services. However, while no one system is appropriate, the use of all three systems, by different countries, may also be counter-productive. The appropriate classification would need to be agreed upon.

The issue of commitments on Internet access services and networks needs to be further clarified, in the light of the fact that many delegations regarded their commitments on basic or value-added telecommunications services as covering Internet access and others did not.[59] Prior to taking a decision in this regard, it would be necessary for the Indian Government to seek appropriate clarifications from the WTO as regards various definitions. For example, whether Internet Telephony would include varieties of communication between Phone-Computer, Computer-Computer and Computer-Phone.

6.4 Clarifying notions of "cross-border supply" and "consumption abroad" under the GATS.

Since the meaning of "cross-border supply" and "consumption abroad" under the GATS are not clear with respect to digitised services, India should urge the Council for Trade in Services to conceptualise the same.

6.5 Negotiating removal of market access barriers in key e-commerce markets

India should study market access barriers in its key markets and negotiate the removal of market access barriers by the Governments of such countries.

6.6 Facilitating removal of "non-tariff barriers" and "market access barriers" in India

6.6.1 *Licensing liberalisation*: India should take appropriate market access commitments to increase liberalisation in certain sectors (eg. telecommunications), which could further help India to argue for reciprocal

[54] Preparations for the 1999 Ministerial Conference: Work Programme on Electronic Commerce; Communication from Indonesia and Singapore, July 9, 1999; http://member.nifty.ne.jp/menu/wto/md99/md99e247.htm

[55] This proposal has been accepted at the Doha Interministerial Round. See Figure 3, p.18.

[56] http://esa.un.org/unsd/cr/family2.asp?Cl=3

[57] http://esa.un.org/unsd/cr/registry/regcst.asp?Cl=3&Lg=1

[58] http://www.ita.doc.gov/td/sif/GATS/W120.htm; The CPC forms the basis of the SSCL developed during the Uruguay Rounds. The SSCL is a recommended, but not obligatory basis, for scheduling GATS specific commitments.

[59] Preparations for the 1999 Ministerial Conference: Work Programme on Electronic Commerce; Communication from Indonesia and Singapore, July, 9 1999; http://member.nifty.ne.jp/menu/wto/md99/md99e247.htm

liberalisation commitments by other countries, such as the US or EU countries, whose markets, the Indian industry may wish to enter.

6.6.2 *FDI liberalisation*: The Indian Government should revisit foreign direct investment limited, especially in relation to Business to Consumer ("**B2C**") and Consumer to Consumer ("**C2C**") e-commerce, which is currently prohibited. Please refer to **Annexure B** for the details on FDI regulations in different service sectors. Further, India should also increase the FDI limit in Computer and Related Services sub-sector "Data processing services" in line with India's growing options to become a key outsourcing center.[60]

6.6.3 *Interconnectivity and infrastructure*: The directives which are related to telecommunications or internet liberalization should be made technology proof so as to keep pace with changing technology. [61]

6.6.4 *Enabling legislation*: India should establish a consolidated legislative and regulatory framework for different technologies. The process of enacting the Communications Convergence Bill should be accelerated. Further, India should urge for the adoption of appropriate and standard regulations within the WTO framework to ensure the absence of divergent principles and thereby minimise market access barriers.

6.6.5 *Harmonisation of e-commerce law*: India should urge that WTO member nations adopt a legal framework for e-commerce issues to cope with WTO obligations in the event e-commerce is included within the purview of GATT / GATS. While dealing with harmonisation of e-commerce laws, certain issues concerning security and authentication, privacy and data protection, the Internet management structure, intellectual property protection, taxation of e-commerce, and content regulation must be kept in mind. Chapter C deals with these issues.

(This space has been left intentionally blank.)

[60] India has only made limited liberalisation in respect of "computer and related services" under Mode 3, by permitting foreign equity only to the extent of 51%.

[61] Recent interconnection controversies include the dispute between BSNL and basic telecom operators regarding the hike in revenue shares.

CHAPTER C

HARMONISATION OF E-COMMERCE LAWS

C. HARMONISATION OF E-COMMERCE LAWS

Electronic commerce accelerates global economic integration. Unfortunately, there is no similar initiative by national governments to integrate governance models. The most significant public policy threats to the growth of e-commerce will come from this mismatch of global economies and governance.[62]

The issue of harmonisation is of immense significance with respect to the Internet due to the following reasons:

- Dissimilarities in Internet laws of different countries may lead to confusion as it may be difficult to establish a specific location for a particular business over the Internet which is inherently a borderless universe
- Doing business over the Internet would mean doing business across different countries and the laws of these countries must also be interoperable in order to facilitate e-commerce.
- Since several international organisations have been working towards formulating e-commerce laws, sometimes these organisations may be at cross-purposes.

While the scope for harmonisation is enormous, surely, all of it cannot be achieved given that present-day legal systems are entrenched in notions of sovereignty, nation-state and territoriality. Therefore, in an initial effort to promote harmonisation, some issues that can be tackled are:

- Taxation of E-Commerce;
- The Internet Management Structure;
- Intellectual Property Protection;
- Privacy and Data Protection;
- Content Regulation; and
- Security and Authentication.

1. Taxation of E-commerce

Taxation of e-commerce has been one of the most controversial issues that the international forum has faced in the recent past. While one school of thought was of the view that e-commerce should not be taxed to enable it to develop, another school sought to tax e-commerce transactions on the ground that non-taxation of e-commerce would create an uneven playing field which would discriminate against business models based on traditional commerce.

Multilateral forums such as the Organisation for Economic Co-operation and Development ("**OECD**") and WTO have been at the forefront of initiating proposals in pursuit of international consensus on the taxation of e-commerce. The Technical Advisory Group ("**TAG**") set up by the OECD has given their report in respect of taxation of e-commerce.[63]

1.1 Issues

1.1.1 *Consistency between domestic and transborder taxation:* Taxation of e-commerce can be viewed at two levels - domestic (taxation of commercial transactions where the persons providing goods/services and

[62] "EU Committee Letter on the WTO Electronic Commerce Work Programme", April 27, 2000.
[63] http://www.oecd.org/daf/fa/e_com/publlic_release.htm

the recipients are in the same country) and transborder (taxation of transactions between persons in different jurisdictions). The interaction of domestic law and the treaty provisions of a tax treaty entered into between the two countries determine the taxability in case of trans-border transactions. While harmonising e-commerce taxation laws, uniformity and consistency must be maintained between domestic and treaty law provisions. For example, if e-commerce transactions are to be taxed based upon the 'location' of the business enterprise, the meaning given to the term 'location' must be uniform in domestic law and treaty law provisions.

1.1.2 *Permanent Establishment ("**PE**"):* The concept of PE is important in determining the tax liability of an entity, which is resident in one jurisdiction and carries on economic or income generating activities in another jurisdiction. The basic tenet of PE emanates from substantial presence test i.e. a person who is not a resident of a country would not be liable to tax in that country unless he has a PE in that country. The conduct of business via the Internet challenges the whole concept of PE and therefore the question of how the business income of an enterprise of one jurisdiction is considered taxable in another jurisdiction could become a debatable issue. In the context of e-commerce a person may not have a physical presence in countries other than his own but would have computer equipment located in a country through which electronic commerce operations are carried on in that country. The issue that arises for consideration is whether the mere presence of such computer equipment would constitute a PE. Recent trends seem to indicate that the OECD is re-examining the issue of whether a server can constitute a PE given the practical difficulties in determining the same.

1.1.3 *Characterisation of the income that is generated by e-commerce transaction:* The tax treatment of an income would depend on the character of the income. Would it be construed as royalty, business profits or as fees for technical services? If an income is treated as royalty it would normally be taxed on a gross basis if the person deriving the income does not have a PE in the country where the income arises. However, if the person has a PE and the income which is characterised as royalty is effectively connected to the PE, the income would be treated as business profits and would be taxed on net basis at higher rates. There are various types of e-commerce transactions – they vary from downloads of software, providing data and services to selling goods online. The various issues that could arise while characterising the income arising from the e-commerce have been addressed in the TAG Report on the "*Tax Treaty Characterisation Issues Arising From E-commerce*", dated February 2001 wherein 27 different e-commerce transactions have been analysed in detail for the purpose of their direct tax treatment. As there is a need to harmonise the laws in different jurisdictions on the taxation of e-commerce, it would be necessary to consider the issues addressed and discussed in this report in relation to the taxation of e-commerce.[64]

1.2 Alternatives available to India

1.2.1 India should urge the WTO to co-ordinate with the OECD to ensure that there is no discrimination in taxing income using traditional business model vis-à-vis the e-commerce business model. The WTO and OECD should also articulate distinguishing factors for digitised products and digitised services, so that there is

[64] Recently, the High Powered Committee on "Electronic Commerce and Taxation" that was set up by the Central Board of Direct Taxes, India ("**CBDT**") has submitted a detailed report on e-commerce taxation and the CBDT has invited suggestions and comments on the same. Nishith Desai Associates has formed a cross-functional "e-Com Taxpert Group" consisting of lawyers, Indian and international industry professionals, academicians, economists and representatives of various countries. The main objectives of the group are to study the report submitted by the High Powered Committee and submit its recommendations to the CBDT. We shall forward a copy of this report to the Government as soon as it is completed.

no conflict between the direct and indirect taxation laws and there is clarity in characterising the income from the trade in digitised goods and services..

2. Issues Concerning Access to Internet Management Structure

The Internet evolved out of the Advanced Research Projects Agency ("**ARPA**"), formed by the United States to establish a network of computers, which would be able to survive a nuclear war and enable US authorities to communicate with each other. ARPA envisioned a data network that would connect several computers together and thereby enable the use of a smaller number of computers. The ARPA's original standard for communication was known as Network Control Protocol ("**NCP**") and was eventually replaced by two initial protocols, the Transmission Control Protocol ("**TCP**") and Internet Protocol ("**IP**") jointly known TCP/IP Protocol Suite ("**TCP/IP**").[65] The spread of the Internet outside the technical community to the lay person also led to the growth of the Domain Name System ("**DNS**") by which exact numerical IP addresses are mapped to recognisable domain names.

The rapid growth of the Internet led to an increased need for co-ordination mechanisms for the development of data communication standards.[66] The management of the Internet really takes place at several levels:

(a) *Development of the standards:* These functions are carried out by an interlocking set of private bodies (Internet Society ("**ISOC**"), Internet Architecture Board, ("**IAB**"), Internet Engineering Task Force ("**IETF**") etc.) (Attached as **Annexure C** is a brief overview of the different organisations involved in development of standards).

(b) *Management of DNS*: A series of bodies (including Internet Assigned Numbers Authority ("**IANA**") Internet Network Information Center ("**InterNIC**") and Internet Corporation for Assigned Names and Numbers ("**ICANN**")) have been involved in the management of DNS Server.[67] The IANA was the initial organization established to oversee the allocation of IP addresses. Due to the increasing commercial use of the net, the management of the DNS later passed into the hands of Network Solutions, Inc, (a private entity which created InterNIC), which administered the domain names ".com," ".net," and ".org. As Internet usage expanded beyond all expectations, ICANN was constituted as an international policy-making board to oversee the Internet, with extensive private participation. Please refer to **Annexure D** for an overview of the ICANN.

2.1 Issues

2.2.1 *Need for centralised governing body:* Though the technical development of the Internet has been guided by protocols established through participatory decision-making processes by bodies such as the IETF and its subcommittees, there is a need for a central rule-making entity that has exercised comprehensive legislative authority over the Internet. Further, there must be a structured, co-ordinated and well-defined approach within the various international bodies towards developing adequate standards for the Internet

2.2.2 *Membership:* The US has a tremendous influence on the working of a majority of the existing Internet organisations, since they have been formed under the guidance or control of the US Government and

[65] "TCP/IP Basics", http://www.brother.com/european/networking/chapter12/chapter12_tcpip.html
[66] In data communications, a standard specifies a set of procedures. A specification typically pertains to computer-to-computer interaction but might be more limited, such as describing only the format of data, rather than all of the rules for passing that data back and forth; http://www.isoc.org/Internet/standards/papers/crocker-on-standards.html
[67] http://www.icann.org

because of the sheer magnitude of Internet users in the US. However, with the Internet becoming a global marketplace, such a monopolistic approach to Internet management is undesirable.

2.2 Alternatives available to India

2.2.1 *Participation in International Bodies:* India should urge the WTO to collaborate with the various international bodies to formulate adequate standards for the Internet. The WTO must also encourage participation of various member nations in Internet Management.

2.2.2 *International Co-operation:* India should actively co-operate with various international organisations, private parties and governments of WTO member nations to help establish communication standards and a policy framework for the Internet.

3. Intellectual Property Rights

Traditional lines between business sectors, founded on different physical manifestations for the goods or services offered and the different physical means for their distribution (e.g., books, films, CDs, television, radio and web broadcasts) have become less clear. New technologies such as peer-to-peer network sharing devices, morphing software, broadband communication channels, have necessitated a re-examination of core issues of intellectual property (eg. identification / defining the "works", determining what amounts to "reproduction" and "communication to the public", determination the place of infringement, etc). These issues also create the need to establish effective systems to manage and administer intellectual property rights, in the new era. Like with other legal regimes, physical border controls alone are now inadequate to meet the challenges of speed, detection, and anonymity. There have been several efforts in the past to harmonise various territorial systems to harmonise different territorial principles of intellectual property rights. Apart from the TRIPS, there exist several international arrangements outside the WTO framework. India is a signatory to atleast 4 of them: The Paris Convention, The Berne Convention, The Universal Copyright Convention and the Patent Co-operation Treaty. The WTO has established a co-operation agreement with WIPO in 1996, to ensure that the requirements and any issues of concern relating to intellectual property that arise within the WTO framework, are also addressed by the WIPO appropriately.[68]

Copyright

- The "Internet Treaties"[69] were concluded in 1996. These Treaties deal primarily with copyright aspects of the Internet. (a) They reaffirm that reproduction of works on the Internet would amount to copyright infringement. However, these Treaties do not settle the question whether transient, temporary copies made in the RAM are infringing copies (although the US[70] and the European Commission in a draft Directive[71] have made exceptions for temporary copies). (b) They make a distinction between Internet transmissions and broadcasting, based on the fact that Internet transmissions occur interactively (i.e. on demand from the individual users, at a time and place of their choosing). (c) The Internet Treaties require that an exclusive right be granted to control such acts of “making available”. However, the exact scope of this exclusive right is left to individual countries.[72] (d) The Internet Treaties contain an “anti-circumvention” provision[73] which (i) recognises

[68] Articles 4 and 5, WTO-WIPO Co-operation Agreement, 1996.
[69] WIPO Copyright Treaty, 1996 ("**WCT**") and the WIPO Performances and Phonograms Treaty, 1996 ("**WPPT**").
[70] Digital Millennium Copyright Act, Title IIV (“**DCMA**”).
[71] Article 5(1) of Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 97/0359 (COD) (1997).
[72] Article 10, WCT; Article 16, WPPT.
[73] Article 11, WCT; Article 18,WPPT.

the need for rightsholders to rely on technological measures to protect their works against infringement on the Internet, and (ii) requires member States to provide adequate legal protection and effective legal remedies against the circumvention of technological measures used by rightsholders to restrict unlawful and unauthorised acts. (e) The Internet Treaties also protect "rights management information," providing legal support to network-based rights management systems[74], which operate based on electronic data attached to the works and objects of related rights.

- An Agreed Statement to the WCT provides that "mere provision of physical facilities for enabling or making a communication" does not amount to infringing communication[75]. But a number of activities that service providers are not dealt with and so are concepts of contributory liability for infringement. There have been a number of approaches at the national level: The European approach has been essentially a "horizontal approach" (i.e. a rule governing liability of service providers regardless of the grounds for illegality of the transmitted material)[76], the US has adopted copyright-specific legislation as part of the Digital Millennium Copyright Act, 1998 ("**DMCA**").

- The WIPO is leading a discussion as regards the appropriate protection for certain new subject matter: audiovisual performers' rights, broadcasters' rights and *sui generis*, non-copyright protection for databases.[77]

- The EC has adopted a directive requiring its member States to provide a separate *sui generis* form of protection for databases.[78]

Patents

- The TRIPs has mandated that (subject to certain exceptions), patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Controversial patents have recently been granted to certain inventions concerning financial services, electronic sales and advertising methods, business methods, including business methods consisting of processes to be performed on the Internet, and telephone exchange and billing methods.[79] Opinion against these patents has rested on the grounds that these patents reflect familiar ways of doing business which are not new or novel: the only aspect that is different is that they occur in cyberspace.[80]

- These patents have been primarily granted in the US. While the European Convention does not contemplate the patenting of computer programs "as such", decisions have interpreted that computer programs are patentable provided that the "invention" shall have a "technical character"[81]. The European

[74] Article 12, WCT; Article 19, WPPT.
[75] Agreed Statement Concerning Article 8, WCT.
[76] The national legislations of Germany and Sweden; the EU Directive on Electronic Commerce.
[77] "Primer on Electronic Commerce and Intellectual Property Issues", WIPO, Geneva, 2000.
[78] Please refer to discussion on privacy on page 46.
[79] *State Street Bank & Trust v. Signature Financial Group*, 47 USPQ 2d 1596 (CAFC 1998); *A&T Corp. v. Excel Communications, Inc.*, No. 98-1338, 1999, WL 216234, F.3d (Fed. Cir. April 14, 1999).
[80] "Barnesandnoble.com faces suit by Amazon Over Patent," New York Times: Technology (October 23, 1999); http://www.nytimes.com/library/tech99/10/biztecharticles/23amazon.html. The United States Patent and Trademark Office has developed an action plan to respond to the new issues concern business method patents; http://www.uspto.gov/web/offices/com/sol/actionplan.html.
[81] Guidelines for Examination in the European Patent Office, Part C, Chapter IV, 1. General.

Commission has recently proposed a draft Directive to harmonise the conditions for the patentability of inventions related to computer programs.

- The draft Patent Law Treaty ("**PLT**") and the accompanying Regulations, contain proposals for harmonisation of the formal requirements concerning patent applications and patents. The draft PLT also provide rules relating to filing of communications in electronic form or by electronic means using digital signatures.

- The WIPO is determining whether technical disclosures on the Internet should be considered as "prior art", to evaluate the novelty of any patent application. Atleast one country (Japan) has attempted to address the issue in its national legislation, by amending its patent law to provide that an invention which was made publicly available online, prior to the filing of an application would constitute a novelty defeating bar[82].

Trademarks, geographical indications and other distinctive signs:
The Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications ("**SCT"**) has commenced a study on the desirability and feasibility of harmonising national rules concerning the circumstances in which use of a trademark on the Internet constitutes use of a trademark or trademark infringement.[83]

Domain Names:

- The WIPO has concluded a public consultation process on the approach to be taken with regard to the outstanding issues not covered in the earlier domain name process[84] (particularly, issues with regard to use of distinctive signs other than trademarks, such as geographical indications, personal names, names of places, etc.). The results of the process and recommendations are expected to be released shortly[85].

- WIPO is also providing advice to registrars of certain country code TLDs ("**ccTLDs**") in relation to the possible adoption by them of the uniform dispute-resolution policy recommended in the WIPO Report.

3.1 Issues

3.1.1 *Subject matter of protection:* The existing forms of protection and timeframes prove inadequate to provide appropriate protection to newer technological inventions, keeping in mind the speed at which technology inventions are produced, used and made obsolete. For example, the copyright protection does not appropriately protect the inventions contained in a particular software. Although a few jurisdictions permit the patenting of software, there are restrictions. Usually, pure software "claims" are not permitted unless coupled with some physical objects. It would also be pertinent to examine whether a patent monopoly right of 20 years would be the appropriate time frame.

[82] The Japanese Patent Law, as amended by Law No. 41, May 1999 as cited in "Primer on Electronic Commerce and Intellectual Property Issues", WIPO Geneva, 2000.
[83] WIPO documents SCT/2/9 and SCT/2/10.
[84] In July 1998, an extensive international process of consultations – "the WIPO Internet Domain Name Process"[84], commenced, to make recommendations to ICANN on issues relating to domain names and intellectual property rights.
[85] http://www.wipo.int

3.1.2 *Prior use / originality criteria*: Most forms of intellectual property protection rely on factors of novelty/originality, albeit in varying degrees. Here, the issue is whether the publication of information / a work or use of a particular invention / distinctive sign on the Internet would amount to "prior art" in a particular country, and thus, whether it can be applied to undermine the novelty of an invention. Relevant concerns that have to be addressed in this context include, authenticity, veracity, integrity, timing of the disclosure, accessibility of disclosed information to public, etc. For example, use of a trademark on the Internet may or may not qualify as "genuine use" for the purposes of use requirements[86], depending on the actual presence of the trademark in that market (e.g. actual sales or other commercial relationships with customers in a country[87]).

3.1.3 *Challenges in enforcement*: The strength of the legal framework vests in its effective enforcement; and any mechanism of enforcement has to cope with atleast three significant aspects of infringement, apart from speed:

(a) Detection of the infringement, given that existing technologies allow users to duplicate, manipulate and morph content in ways and timeframes that may be largely undetectable. Instantaneous and worldwide dissemination directly increases opportunities for infringement.
(b) Identification of infringer in the anonymous environment of the Internet. It may be virtually impossible (or at the very least, impossible in a timely manner) to detect the source of a particular infringement. The needs of identification for better enforcement also clash with the privacy concerns and confidentiality concerns.
(c) Multijurisdictional activity as infringing material may be available at a particular location for only a very short period of time[88]. As intellectual property remedies are presently local, Internet infringements also turn most intellectual property issues relating to e-commerce, into a tangled web of multiple local enforcement proceedings, each of which when taken singularly, would not effectuate the enforcement. It would be easy to move infringing material from one territory to another, to escape any territorial remedial action.

3.14 *Intermediary service providers' liability*: This issue has several dimensions involved: (a) are the service providers exercising the exclusive right of reproduction of the copyright holder, while making transient copies? (b) what should be nature of "temporariness" that a copy should exhibit, to be considered a non-infringing copy? (c) who are the service providers who can be excused from liability? (d) can service providers be held legally responsible for the unauthorised exercise of those rights by individuals using their services, where the services make the transmission possible? Different national laws deal with this issue differently[89].

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[86] WIPO document SCT/2/9, paras.60-61.
[87] This view is supported by the responses to the WIPO Questionnaire "Hypothetical Cases Concerning the Use of Trademarks on the Internet" to which 36 States replied. The responses are summarized in "Use of Trademarks on the Internet. Summary of Responses to Questionnaire," WIPO document SCT/3/2 (1999). See, in particular, paras.14-15 with regard to maintenance of rights. See further the factors for establishing a relationship with a particular country listed in WIPO document SCT/2/9, paras.31-34.
[88] "Hosts" and web page creators can delete files within a matter of hours or days after their posting.
[89] Copyright laws of various countries contain concepts of liability for contributing to the infringing activities of another. Generally, the determination of liability will depend on the degree of participation and knowledge of the party that is contributing to the infringement. For discussion of various approaches to this issue, including the United States Digital Millennium Copyright Act and European Union E-commerce Directive, see presentations of T. Casey, Senior VP Technology Law Group, MCI Worldcom, M. Fröhlinger, Head of Unit, Media, Commercial Communications and Unfair Competition, DG XV, European Commission and S. Perlmutter, Consultant, WIPO, WIPO International Conference on Electronic Commerce and Intellectual Property, September 1999; http://ecommerce.wipo.int/meetings/1999/index.html

While the approaches need not be identical, they must be interoperable if global networks and electronic commerce are to develop smoothly.

3.1.5 *Domain Names*: The tension between domain names and intellectual property rights has led to numerous problems that raise challenging policy questions. Although currently, the ICANN UDRP provides some respite, the increase in domain names would be a tougher challenge. Outstanding issues regarding the domain names that violate intellectual property rights other than trademarks or service marks are geographical indications, personality rights, names and acronyms of international inter-governmental organizations, international nonproprietary names (for eg. global pharmaceutical names identified by the World Health Organization).

3.2 Alternatives available to India

3.2.1 *Increased subject matter of protection:* At the international level, India could consider becoming a member of the WCT ad WPPT, in order to gain advantages of the increased scope of subject matter. In addition, India could propose that the scope of patentable subject matter under Article 27.1 should include software and information technology inventions, since India is primarily an exporter of software and cinematograph films and these need to be protected in the key consumption markets.

3.2.2 *Prior use:* At the international level, India could consider increased participation in the WIPO process through the relevant Standing Committees, to resolve the international issues. In the meanwhile, India at the national level, could consider issuing guidelines with regard to the effect of prior use or disclosure on the Internet, on various aspects of trademark, copyright and patent law.

3.2.3 *Challenges of enforcement*: The challenges presented by the Internet are essentially international in character. However, India could consider evolving innovative methods to provide alternate methods of enforcement. One such method is the method of shared liability and "take down" provisions under the American DMCA.

3.2.4 *Territoriality of laws*: This issue needs to be resolved at the international level, by providing rules based on which countries would recognise each other's laws and provide remedies. The TRIPS provisions could be amended to provide for greater co-operation in enforcement mechanisms.

3.2.5 *Infringing use of trademarks*: India could consider proposing appropriate amendments to the TRIPS to ensure that all countries enact appropriate laws to clarify the rules of infringement as regards the use of trademarks on the Internet. This could be an extensive concept (which is based on mere ability to view the sign from a location in a particular country) or a restrictive concept (which requires a link between the use of the trademark on the Internet and some actual activity in the particular country). [90] Some of the factors could be (a) the context of the usage on the web (b) the degree of interactivity and (c) foreseeability of use in a particular country. Principles of concurrent use on the Internet may also be established by agreement of various countries within the WTO. In determining “bad faith”, it might be possible to draw on Article 4(5)(c) of

[90] See generally, “Primer on Electronic Commerce and Intellectual Property Issues”, WIPO, Geneva, 2000.

the Joint Recommendation Concerning Provisions on the Protection of Well-Known Marks, according to which knowledge or reason to know of the conflicting mark is to be taken into account.[91]

3.2.6 *Domain Names:* At present, the NCST is administering the country level domains (".co.in"). With respect to atleast these domain names, India could consider proposing that all member States of the WTO adopt the Best Practices Recommendations of the WIPO in this regard, subject to appropriate modification. This would dissuade any "forum shopping" in country code registrations. Further, with respect to the WTO framework, India could consider seeking a clarification whether domain names constitute intellectual property for the purposes of TRIPS obligations, or alternatively seek definitive provisions as to the treatment of domain names.

4. Privacy and Data Protection on the Internet

The proliferation of e-commerce and new digital economies has resulted in the free flow of personal data[92] over the Internet, and has threatened the right of privacy. Privacy protection is widely understood as the right of individuals to control the (a) collection, (b) use and (c) dissemination of their personal information that is held by others.[93] Privacy on the Internet is an important ethical issue because most organisations engaging in e-commerce have not yet developed policies and codes of conduct to encourage responsible behavior. Moreover, technology enables marketers to collect information about a consumer's Internet usage patterns and purchasing habits, without their consent.

The growth of new technologies, have led to varied mechanisms of collection of information such as use of cookies[94], Internet browsers[95], Internet service forms[96] and e-mail[97]. Privacy concerns focus significantly, on the method of collection of information and the purpose of collection.

Based on the needs of the collecting party, different kinds of details are collected about the individual. These could range from basic personal details (such as the name, address, phone number et al) to financial information[98] (such as credit card details while making an online purchase) or medical information[99] (while using an online health service). Popular uses of information collected have included spam[100] or unsolicited e-

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[91] "In determining bad faith for the purposes of this paragraph, the competent authority shall take into consideration whether the person who obtained the registration of or used the mark which is in conflict with a well-known mark had, at the time when the mark was used or registered, or the application for its registration was filed, knowledge of or reason to know of, the well-known mark."

[92] "Personal data" means any information relating to an identified or identifiable individual (data subject); http://www.oecd.org/dsti/sti/it/secur/prod/PRIV-EN.HTM

[93] Refer to the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data.

[94] A cookie is a message given to a Web browser by a Web server. The information placed in a cookie tracks the activities of users and are therefore a source of concern relating to privacy on the Internet; Refer to the 'Unofficial Cookie FAQ', http://www.cookiecentral.com/faq/

[95] Browsers often contain bugs, which could result in the leakage of information such as the e-mail address or username of the Internet user. To understand how browsers leak information to http servers; http://www.cen.uiuc.edu/~ejk/WWW-privacy.html

[96] While subscribing to most Internet services, users are almost always required to give their name, address, telephone number, e-mail address, products bought etc. However, consumers are not informed how this information will be used.

[97] Internet providers and network administrators store incoming and outgoing mail on a computer disk for six months or more an Internet user has deleted his/her mail. An e-mail may also be intercepted while it is in the stage of transmission between a sender and the receiver. Refer to "The E-Mail Privacy FAQ"; http://www.andrebacard.com/e-mail.html

[98] Jim Van Dyke, "Jupiter Media Metrix report on e-commerce fraud"

[99] With the creation of electronic records and large databases of medical information, the number of health care professionals and organisations with access to medical records has increased. "US Report to Congressional Requesters on Medical Records Privacy", http://www.epic.org/privacy/medical/gao-medical-privacy-399.pdf

[100] Spam is also referred to as unsolicited e-mail and they are sent by companies who use programs to generate bulk e-mail messages that are intended to advertise or promote a business, website or product.

mail, sale of databases, et al. Further concerns arise due to the fact that Governments may also have access to confidential details about an individual.

International developments have been largely carried on within the OECD and the EU.

The OECD Guidelines on Privacy attempt to balance the protection of privacy and individual liberties and the advancement of free flows of personal data through eight privacy principles which, if observed, are supposed to guarantee a free flow of personal information from other OECD countries. (Attached as **Annexure E** are the OECD Basic Principles for National Application). Critics of the OECD Guidelines have suggested that additional data protection principles are needed such as the right not to be indexed and a right to encrypt personal information effectively.[101] Although the OECD Guidelines were developed in 1980, they continue to represent an international standard for privacy protection.

The EC Directive on Data Protection was passed by the European Parliament and the Council of the EU with an aim to establish a regulatory framework to protect privacy.[102] The Directive facilitates the development of e-commerce by fostering consumer confidence and minimising differences between member states' data protection rules. Privacy is treated as a fundamental human right and the Directive requires EU member states to adopt national legislation ensuring its protection if they wish to participate in the free flow of information within the EU. Under the Directive, data subjects[103] are granted a number of important rights and may appeal to independent national authorities if they consider their rights are not being respected. (Attached as **Annexure E** are the EU Principles relating to Data Quality). One provision of the Directive, which caused much uncertainty in the international business community, especially the US was that data should only be transferred to a non-EU country if data would be adequately protected there.[104] However, the Directive failed to define "adequate" and provided for adequacy determinations on a case-by-case basis. This eventually resulted in the much-publicised "Safe Harbour" principles agreed between EU and US.

Within the US, there is no explicit right to privacy in the US Constitution. There is a patchwork of legislation to cover various different aspects of privacy (The Electronic Communications Privacy Act ("**ECPA**")[105] and the Children's Online Privacy Protection Act ("**COPPA**")[106]).

The WTO framework has so far not taken into account, any action relating to internet privacy, except in terms of a limited exception available to members under the GATS.

4.2 Issues

4.2.1 *Absence of Privacy Regulation:* Lack of concrete legislation and inconsistency in privacy principles[107] and standards for the Internet has endangered consumers' faith over the Internet. No Indian legislation

[101] Michael D Kirby, "*Privacy Protection – a New Beginning*" 21st International Conference on Privacy and Personal Data Protection - Conference Proceedings, 199 5; http://www.pco.org.hk/conproceed.html.
[102] Refer to the European Community Directive on Data Protection, 1995; http://www.doc.gov/ecommerce/eudir.htm
[103] Article 2 (a) 'personal data' shall mean any information relating to an identified natural person ('data subject'); an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity.
[104] Chapter IV- Article 25, European Community Directive on Data Protection, 1995.
[105] http://www.epic.org/privacy/laws/privacy_act.html
[106] http://www.cdt.org/legislation/105th/speech/copa.htm
[107] "A Report to the 22nd International Conference of Data Protection Commissioners"; http://www.ipc.on.ca/english/pubpres/sum_pap/papers/oecd.htm

protects privacy rights, which can be interpreted in the realm of e-transactions between private parties[108]. So far, Indian courts[109] have addressed the right to privacy only in the context of fundamental rights, (freedom of speech and expression under Article 19 (1)(a) and right to life and personal liberty under Article 21) which seek to impose limitations on State action and not private parties. Further, common law does not provide direct action for invasion of privacy. It seeks to provide protection by the use of civil wrongs such as defamation and breach of confidence.

4.2.2 *Modes of Regulation:* Different modes of privacy regulation are followed by different countries. While the EU requires its member states to provide comprehensive statutory protections for citizens and centralised enforcement mechanisms,[110] the US has shown a strong preference for self-regulatory, market-dominated policy for the protection of personal information and provides limited statutory protection at state and federal level on a sectoral basis. However, trade on the Internet is not restricted to the borders of nations and self-regulation cannot provide long-term solutions to privacy concerns. Privacy on the Internet is a global problem, and thus there is a need to work towards a global solution.

4.3 Alternatives Available to India

4.3.1 At the WTO Ministerial Rounds, the Indian Government should address the incumbent need for privacy regulation to promote international trade in e-commerce. The Indian Government should urge the WTO to outline certain basic criteria for the protection of privacy rights that must be kept in mind while conducting trade, particularly over the Internet. These criteria could be similar to those in the Safe Harbour approach between the EU and the US. Please refer to **Annexure F** for an overview of the International Safe Harbour principles.

5. Content Regulation Issues

Unrestricted flow of information over the Internet has raised concern in different jurisdictions around the globe. The regulation of content has been particularly linked to the cultural, social and political ethos of each country and cannot be easily applied to the Internet, given its multi-jurisdictional context.

Several countries have passed laws pertaining to content regulation on the Internet. Transmission of data on the Internet has also been equated with the broadcast industry by countries such as US, France, Australia and Singapore. US has passed the Communications Decency Act, for protecting children from offensive material and making the transmission and availability of such material to children punishable. The Singapore Broadcasting authority has also passed regulations providing for a licensing framework and censoring the broadcasting of certain content over the Internet. Germany recently drafted the Multimedia law censoring pornography and anti-Semitic propaganda. The Communications and Multimedia Act, 1998 of Malaysia also provides a licensing framework for content applications service providers. Recently international policy makers ended a round of discussions concerning the Hague Convention on Jurisdiction and Foreign Judgements to formulate rules for online commerce. Though this treaty has been criticised as a threat to freedom of speech

[108] Section 69 of the ITA empowers the Controller to direct any agency of the Government to intercept any information transmitted through any computer resource. Section 72 on the other hand is the only express provision in the ITA connected with privacy and breach of confidentiality. However, both the provisions in the ITA deal specifically with the powers of the Government in connection with the privacy of individuals.

[109] Refer to *Unni Krishnan, J.P. v. State of AP* (1993) 1 SCC 645, *Kharak Singh v/s State of U.P* AIR 1963 SC 1295, *Gobind V. State of Madhya Pradesh* (1975) SCC (Cri) 468. & *People's Union of Civil Liberties V/s the Union of India* (1997) 1 SCC 318.

[110] Joel R Reidenberg, "Resolving Conflicting International Data Privacy Rules in Cyberspace", Stanford Law Review, Vol 52, May 2000, page 1318.

and a measure that will force ISPs to become global content police, if the treaty is accepted, it could have broad implications on e-commerce.[111]

5.2 Issues

5.2.1 *Different standards for content regulation:* The borderless nature of the Internet makes it difficult to regulate its content in line with different content regulations of various countries. In such a scenario, it is necessary to provide broad parameters within which content of transmission over the Internet can be regulated keeping in mind cultural issues, religious sentiments of different communities, diverse standards of decency and morality, national interests and security, friendly relations amongst different nations and the economic security of different countries.

5.2.2 *Imposition of Liability:* In the event that content regulations are not abided by, different countries would hold different parties liable. Depending upon the liability provisions in different countries, the following parties may be held liable:

a. The Network Service Provider
b. The Business Enterprise
c. The User / Consumer

There may be instances where more than one party is held liable for an act or one party is liable in more than two countries for the same act.

5.3 Alternatives available to India

5.3.1 India should propose that the WTO devise certain key norms that must be followed for publishing or transmitting content for the purpose of trade on the Internet and that it also articulate the basic principles that must be kept in mind while determining any form of liability. These key norms should include certain minimum protection standards to prevent publishing of child pornography and hate content.

6. Security and Authentication

Encryption technology finds various uses to ensure confidentiality as well as authenticity. While these needs are essential for the success of the Internet as an inexpensive and efficient communications tool, encryption issues are controversial as governments are often suspicious about the uses desired by the industry and other interest groups interested in confidential communications.

International efforts with regard to encryption policy have spanned different organisations such as the Coordinating Committee for Multilateral Export Controls ("**COCOM**")[112] and the Organisation for Economic Co-operation and Development ("**OECD**"). The COCOM was dissolved in 1994 and presently, trade in cryptography products is governed by the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, 1995 ("**the Arrangement**").[113] The Arrangement permits free export of certain cryptography products (hardware and software)[114] while imposing a licencing requirement for export of all other cryptography products. The Arrangement is silent about electronic exports (e.g., via the Internet),

[111] Lisa M. Bowman, "Hague Convention to rewrite Web content norms" Financial Express, June 26, 2001 at p. 3.
[112] COCOM was an international organisation for the control of the export of cryptography technology to "dangerous" countries - usually, the countries thought to maintain friendly ties with terrorist organisations, such as Libya, Iraq, Iran, and North Korea. Exporting to other countries is usually allowed, although states often require a licence to be granted.
[113] There are 31 countries that are signatories to this Arrangement. See: http:// www.wassenaar.org/docs/IE96.html
[114] Article 3, Wassenaar Arrangement.

which consequently remain unclear. In addition to the Arrangement, the OECD guidelines also address the issues of cryptography and recommend member states to cooperate to coordinate their crypto policies.

The past five years have also seen several initiatives by national governments to promote the use of electronic records and authentication technologies. The major development in this area was the model law proposed by the United Nations Commission on International Trade Law ("**UNCITRAL**"). Also please refer to **Annexure G** that provides a brief overview of legislation in different countries relating to authentication technologies. These laws are also based on particular encryption technologies.

6.1 Issues

6.1.1 *Lack of clear cryptography policy and monitoring of import and export of cryptography products:* E-commerce in cryptography products may involve online supply of encryption software or offline supply of encryption hardware. India does not impose any restrictions on the export of cryptography software, except software for encrypted telemetry systems.[115] It appears that controls in import regulations would be enforced by the Customs Department in conjunction with the DoT, at entry/exit points into Indian territory.[116] However, the controls do not yet regulate non-physical imports. This would have a significant impact on national security interests as well as the methods to meet confidentiality requirements of various businesses.

6.1.2 *Different Authentication Standards:* Laws of different countries provide different authentication standards, sometimes specifying a clear technology bias. There are two issues involved in this regard: Firstly, the different authentication standards need to be inter-operable so as to facilitate cross-border transactions. This would need a high degree of co-operation between countries and the technology providers. Secondly, the particular authentication standard adopted in a country may lead to the development of only a limited industry sector.

6.2 Alternatives available to India

6.2.1 *Clear Encryption Policy:* India could consider establishing a clear policy on encryption. Further, the import/export restrictions on use of cryptography would need to be addressed. Since this is an issue of international implication, India should either urge the WTO to take up the issue or alternatively, become a member of the Wassenaar Arrangement.

6.2.2 *Authentication standards:* The Government should consider limited commitments with regard to removing restrictions caused due to technology bias, in different Modes. While making these commitments, India should also ensure that reciprocal commitments are made with respect by other countries, which are key markets for the Indian industry.

7. Conclusion

[115] State Department New Delhi Cables 8364, May 24, 1994 and 5852, May 3, 1995.
[116] Based on discussions with the Directorate General of Foreign Trade ("**DGFT**").

There are several issues that need to be considered with respect to harmonisation of e-commerce. While we have outlined some of the issues in relation to harmonizing e-commerce, there are several others which need further debate and discussion. The future years and growth of technology would only increase the complexity of international trade; issues of internet currency, financial regulations, jurisdiction, choice of law, etc would become increasingly important. It is premature to determine whether the WTO is the proper forum to address many of these issues, given the various socio-political dimensions that the WTO is shrouded in. Yet, India needs to evolve its stance on these issues that would soon need to be addressed globally, by pro-actively encouraging internal debate and discussion.

We acknowledge that this report has been issued by us for discussion purposes only for the benefit of the Government of India (in particular, the Ministry of Commerce and the Ministry of Information Technology), ISPAI, NASSCOM, FICCI and MAIT. It should not to be construed as a legal opinion. The report may also not be construed as the final recommendation of Nishith Desai Associates with respect to the subject hereof and Nishith Desai Associates reserves the right to modify this report, in light of further developments.

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ANNEXURES

1. Annexure A – Table comparing GATT & GATS.
2. Annexure B – Foreign Direct Investments ("FDI")
3. Annexure C- Organisations involved in development of standards
4. Annexure D – Overview of ICANN
5. Annexure E – Principles under OECD Guidelines and European Community Directive on Data Protection
6. Annexure F - Overview of International Safe Harbour Principles
7. Annexure G – Overview of Legislation relating to Authentication Technologies

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