



Directorate of Distance Education NALSAR University of Law, Hyderabad

Reading Material

Post-Graduate Diploma in Cyber Laws

1.1 Cyber Jurisprudence & E-Contracts

By:

Prof. (Dr.) V.C.Vivekanandan

Vice-Chancellor, HNLU, Raipur
Former, Director, DDE - NALSAR

&

Mr. Na. Vijayashankar

Privacy and Data Protection Consultant

(For private circulation only)

Contents

	<i>Page No.</i>
1. CHAPTER I	
Introduction to Law	7
2. CHAPTER II	
Cyber Jurisprudence	47
3. CHAPTER III	
Understanding Electronic Contracts	77
4. CHAPTER IV	
Types of Electronic Contracts	95
5. CHAPTER V	
Information Technology Act – An Overview	117

Introduction

“We are approaching the new era with 21st century technologies with 20th century governing processes and 19th century governance structures”

Harold A. Linstone, Professor Emeritus,
Portland University, Oregon

Cyber Space - a term coined by Novelist William Gibson

Denotes a place without physical walls or even physical dimensions has connected the globe in the shortest span of time to the extent no technology has done before in human history. It will be news to many that Internet - the nervous system of the body called cyber space is almost three decades old. Its origins in 1968 and 1969 with the initiative of the British Physical Laboratories and with the United States military project called the Advanced Research Projects Agency.¹ The basic idea of the project was to connect the defence network computers to safeguard it from attacks on the physical telephone network. The leading Universities which assisted the network later formed a sister network on the same lines, which was sponsored by the National Science Foundation, called as the NSFnet. The students involved in such development had a closed user group, as the navigation of such network is a complicated one and needed special skills. It was only in 1993, it became a tool of the masses with the invention of a browser called “Mosaic”. This browser 50% of the world population of 7.4 billion² people and back home the connectivity is estimated to have a connectivity for 627 million people³ which will be more than 50% of the Indian population.

The moot point is what does it mean to people? Can Internet provide water or food or will it eradicate Aids? Will it stop crime or wars? Do we need legislations to promote the phenomenon or we just need legislations to control and regulate it? If so what should be

¹ <https://en.wikipedia.org/wiki/ARPANET> visited 16/09/2019

² "ICT Facts and Figures 2005, 2010, 2017". Telecommunication Development Bureau, [International Telecommunication Union](#) (ITU). Retrieved 07-10-2018

³ <https://economictimes.indiatimes.com/tech/internet/internet-users-in-india-to-reach-627-million-in-2019-report/articleshow/68288868.cms?from=mdr-Retrieved> 16-09-2019

macro policy of such legislation which will not impact the phenomenon of internet as a life line? The answers are much complex than the cyber revolution itself. For optimists the cyber revolution holds a new path of prosperity, connectivity, exchange of information, trade and business and for those who are skeptical it has the potential to be taken over by Government and mega corporations to control the life of the individual and also potential destruction if it falls in the hands of cyber terrorists. . Thus this phenomenon of cyber technology revolution is not just about technology and innovation but more that of the question of governance of the human beings which it impacts that no technology in the past has encircled. This is the foundation of the emerging ‘cyber jurisprudence’ which has international dimensions and also domestic dimensions depending on the political philosophy of governance and resultant models. The students of Cyber Law have to analyse the emerging ‘Jurisprudence’ of Cyber legislations to understand the constant debate of emerging cyber space technologies, its utility and its liability in terms of individual, societal and global dimensions. This module attempts to familiarize the students with four distinct focal points of:

- a. To give an overview of ‘Law’ as a subject especially for those who do not have a law background as the programme is about the emerging field of cyber laws.
- b. Understanding the current discourse of cyber space and law.
- c. The discourse on ‘Jurisdiction’ as Internet is a global phenomenon in its core operational aspects though domestic control and legislations play a role and
- d. To discuss the convergence and divergence of contract law when dealing with cyber space transactions.

CHAPTER I

INTRODUCTION TO LAW⁴

DEFINITION, NATURE, SOURCES AND SIGNIFICANCE OF LAW

Law is a system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties. Also known as rules or regulations, code of conducts, etc. laws are essentially made and enforced by the government. They are meant to control or change our behavior and unlike moral rules, they can be enforced by the courts. It is a notional pattern of conduct to which actions do or ought to conform.

The large bodies of Laws are based mainly on general principles of justice, fair play and convenience which have been worked out by governmental bodies to regulate human activities. In broader sense, 'Law' denotes the whole process by which organized society, through government bodies and personnels (Law-makers, Courts, Tribunals, Law Enforcement Agencies and Executive, Penal and corrective Institutions etc.) attempt to apply rules and regulations to establish and maintain peaceful and orderly relations amongst the people in the society. The idea of 'Law' as guide to human conduct is as old as the existence of the civilized society. The relevance of law to human behavior has become so intimate today that every person has his or her own conception about its nature which is influenced, of course, by his/her own perspective. Not surprisingly the search for an agreed definition of 'Law' has been an endless journey.

There have been conflicting and divergent views of jurists regarding the nature, concept, basis and functions of Law. 'Law' has been regarded as a divinely ordained rule or a tradition of the old customs or recorded wisdom of the wise men or philosophically discovered system of principles which expresses the nature of things or as a body of ascertainties and declaration of an eternal and immutable moral code, or as a body of agreements of

⁴ Extracted from the Course material of Master's in Aviation Law and Transport management of DDE, NALSAR, compiled by Prof. V. Balakista Reddy

men/women in politically organized society, or as a reflection of divine reason or as a body of commands of the sovereign, or as a body of rules discovered by human experience, or a body of rules developed through juristic writings and judicial decisions or as a body of rules imposed on men/women in society by the dominant class, or as a body of rules in terms of economic and social goals of the individuals.

The meaning of law has been defined by various jurists, however there is no unanimity of opinion regarding the true definition of law. The reason for lack of unanimity on the subject is that the subject has been viewed and dealt with by different jurists so as to formulate a general theory of legal order at different times and from different points of view, that is to say, from the point of view of nature, source, function and purpose of law, to meet the needs of certain given period of legal development. Therefore, it is not practicable to give a precise and definite meaning to law which may hold good for all times to come. However, it is desirable to refer to some of the definitions given by different jurists so as to develop an understanding of the term “law”. The various definitions of law propounded by legal theorists serve to emphasize the different facets of law and build up a complete and rounded picture of the concept of law.

In the following pages we will discuss some prominent definitions and conceptions of law. For the purpose of clarity and better understanding of the nature and meaning of law, we may classify the various definitions into five broad classes:

- Idealistic,
- Positivistic,
- Historical,
- Sociological, and
- Realistic.

(a) Idealistic Definition of law: Under this class fall most of the ancient definitions given by Roman and other ancient Jurists. **Ulpine** defined Law as “the art or science of what is equitable and good.” Cicero said that Law is “the highest reason implanted in nature.” Justinian’s Digest defines Law as “the standard of what is just and unjust.” In all these

definitions, propounded by **Romans**, “justice” is the main and guiding element of law. **Ancient Hindu** view was that ‘law’ is the command of God and not of any political sovereign. Everybody including the ruler, is bound to obey it. Thus, ‘law’ is a part of “Dharma”. The idea of “justice” is always present in Hindu concept of law.

Salmond, the prominent modern idealistic thinker, defines law as “the body of principles recognized and applied by the State in the administration of justice.” In other words, the law consists of rules recognized and acted on by the courts of Justice. It may be noted that there are two main factors of the definition. First, that to understand law, one should know its purpose: Second, in order to ascertain the true nature of law, one should go to the courts and not to the legislature. **Vinogradoff** described Law as “a set of rules imposed and enforced by society with regard to the attribution and exercise of power over persons and things.”

(b) Positivistic Definition of Law: According to **Austin**, “Law is the aggregate of rules set by man as politically superior, or sovereign, to men as political subject.” In other words, law is the “command of the sovereign”. It obliges a certain course of conduct or imposes a duty and is backed by a sanction. Thus, the command, duty and sanction are the three elements of law. **Kelsen** gave a ‘pure theory of law’. According to him, law is a ‘normative science’. The legal norms are ‘Ought’ norms as distinct from ‘Is’ norms of physical and natural sciences. Law does not attempt to describe what actually occurs but only prescribes certain rules. The science of law to Kelsen is the knowledge of hierarchy of normative relations. All norms derive their power from the ultimate norm called Grundnorm.

(c) Historical Definition of Law: Savigny’s theory of law can be summarized as follows:

- i. That law is a matter of unconscious and organic growth. Therefore, law is found and not made.
- ii. Law is not universal in its nature. Like language, it varies with people and age.
- iii. Custom not only precedes legislation but it is superior to it. Law should always conform to the popular consciousness.
- iv. Legislation is the last stage of law making, and, therefore, the lawyer or the jurist is more important than the legislator.

According to **Sir Henry Maine**, “The word ‘law’ has come down to us in close association with two notions, the notion of order and the notion of force”.

(d) Sociological Definition of Law: **Duguit** defines law as “essentially and exclusively as social fact.” **Ihering** defines law as “the form of the guarantee of the conditions of life of society, assured by State’s power of constraint”. There are three essentials of this definition. First, in this definition law is treated as only one means of social control. Second, law is to serve social purpose. Third, it is coercive in character. **Roscoe Pound** analysed the term “law” in the 20th century background as predominantly an instrument of social engineering in which conflicting pulls of political philosophy, economic interests and ethical values constantly struggled for recognition against background of history, tradition and legal technique. Pound thinks of law as a social institution to satisfy social wants – the claims and demands and expectations involved in the existence of civilized society by giving effect to as much as may be satisfied or such claims given effect by ordering of human conduct through politically organized society.

(e) Realist Definition of Law: Realists define law in terms of judicial process. According to **Holmes**, “Law is a statement of the circumstances in which public force will be brought to bear upon through courts.” According to **Cardozo**, “A principle or rule of conduct so established as to justify a prediction with reasonable certainty that it will be enforced by the courts if its authority is challenged, is a principle or rule of law.” From the above definitions, it follows that law is nothing but a mechanism of regulating the human conduct in society so that the harmonious co-operation of its members increases and thereby avoid the ruin by coordinating the divergent conflicting interests of individuals and of society which would, in its turn, enhance the potentialities and viability of the society as a whole.

To summarize, following are the main characteristics of law and a definition to become universal one, must incorporate all these elements:

- (a) Law pre-supposes a State.
- (b) The State makes or authorizes to make, or recognizes or sanctions rules which are called law.

- (c) For the rules to be effective, there are sanctions behind them.
- (d) These rules (called laws) are made to serve some purpose. The purpose may be a social purpose, or it may be simply to serve some personal ends of a despot.

Separate rules and principles are known as “laws”. Such laws may be mandatory, prohibitive or permissive. A mandatory law calls for affirmative act, as in the case of law requiring the payment of taxes. A prohibitive law requires negative conduct, as in the case of law prohibiting the carrying of concealed weapon or running a lottery. A permissive law is one which neither requires nor forbids action, but allows certain conduct on the part of an individual if he desires to act.

Laws are made effective:

- (a) by requiring damages to be paid for an injury due to disobedience;
- (b) by requiring one, in some instances, to complete an obligation he has failed to perform;
- (c) by preventing disobedience; or
- (d) by administering some form of punishment.

The law, and the system through which it operates, has developed over many centuries into the present combination of statutes, judicial decisions, custom and convention. By examining the sources from which we derive our law and legal system, we gain some insight into the particular characteristics of our law. The State, in order to maintain peace and order in society, formulates certain rules of conduct to be followed by the people. These rules of conduct are called “laws”.

SOURCES OF INDIAN LAW

The expression “sources of law” has been used to convey different meanings. There are as many interpretations of the expression “sources of law” as there are schools and theories about the concept of law. The general meaning of the word “source” is origin. There is a difference of opinion among the jurists about the origin of law. Austin contends that law originates from the sovereign. Savigny traces the origin in Volkgeist (general consciousness

of the people). The sociologists find law in numerous heterogeneous factors. For theologians, law originates from God. Vedas and the Quran which are the primary sources of Hindu and Mohammedan Law respectively, are considered to have been revealed by God. Precisely, whatever source of origin may be attributed to law, it has emanated from almost similar sources in most of the societies.

The modern Indian law as administered in courts is derived from various sources and these sources fall under the following two heads:

- (A) Principal sources of Indian Law.
- (B) Secondary sources of Indian Law.

Principal Sources of Indian Law: The principal sources of Indian law are:

- (i) Customs or Customary Law.
- (ii) Judicial Decisions or Precedents.
- (iii) Statutes or Legislation.
- (iv) Personal Law e.g., Hindu and Mohammedan Law, etc.

Customs or Customary Law: Custom is the most ancient of all the sources of law and has held the most important place in the past, though its importance is now diminishing with the growth of legislation and precedent.

A study of the ancient law shows that in primitive society, the lives of the people were regulated by customs which developed spontaneously according to circumstances. It was felt that a particular way of doing things was more convenient than others. When the same thing was done again and again in a particular way, it assumed the form of custom.

Customs have played an important role in molding the ancient Hindu Law. Most of the law given in Smritis and the Commentaries had its origin in customs. The Smritis have strongly recommended that the customs should be followed and recognized. Customs worked as a re-orienting force in Hindu Law. Custom as a source of law has a very inferior place in the Mohammedan Law. However, customs which were not expressly disapproved by the Prophet

were good laws. It was on the basis of such customs that Sunnis interpreted many provisions of the law, especially the law of divorce and inheritance. In India, many sects of Mohammedans are governed by local customary law.

Classification of Customs: The customs may be divided into two classes:

- (1) Customs without sanction.
- (2) Customs having sanction.

Customs without sanction are those customs which are non-obligatory and are observed due to the pressure of public opinion. These are called as “positive morality”. Customs having sanction are those customs which are enforced by the State. It is with these customs that we are concerned here. These may be divided into two classes: (1) Legal, and (2) Conventional.

Legal Customs: These customs operate as a binding rule of law. They have been recognized and enforced by the courts and therefore, they have become a part of the law of land. Legal customs are again of two kinds: (a) Local Customs (b) General Customs. Local Customs: Local custom is the custom which prevails in some definite locality and constitutes a source of law for that place only. But there are certain sects or communities which take their customs with them wherever they go. They are also local customs. Thus, local customs may be divided into two classes: Geographical Local Customs, and Personal Local Customs. These customs are law only for a particular locality, sect or community. General Customs: A general custom is that which prevails throughout the country and constitutes one of the sources of law of the land. The Common Law in England is equated with the general customs of the realm.

Conventional Customs: These are also known as “usages”. These customs are binding due to an agreement between the parties, and not due to any legal authority independently possessed by them. Before a Court treats the conventional custom as incorporated in a contract, following conditions must be satisfied:

- (1) It must be shown that the convention is clearly established and it is fully known to the contracting parties. There is no fixed period for which a convention must have been observed before it is recognized as binding.
- (2) Convention cannot alter the general law of the land.
- (3) It must be reasonable.

Like legal customs, conventional customs may also be classified as general or local. Local conventional customs are limited either to a particular place or market or to a particular trade or transaction.

Requisites of a Valid Custom: A custom will be valid at law and will have a binding force only if it fulfills the following essential conditions, namely:

- (a) Immemorial (Antiquity): A custom to be valid must be proved to be immemorial; it must be ancient. According to Blackstone “A custom, in order that it may be legal and binding must have been used so long that the memory of man runs not to the contrary, so that, if any one can show the beginning of it, it is no good custom”. English Law places a limit to legal memory to reach back to the year of accession of Richard I in 1189 as enough to constitute the antiquity of a custom. In India, the English Law regarding legal memory is not applied. All that is required to be proved is that the alleged custom is ancient.
- (b) Certainty: The custom must be certain and definite, and must not be vague and ambiguous.
- (c) Reasonableness: A custom must be reasonable. It must be useful and convenient to the society. A custom is unreasonable if it is opposed to the principles of justice, equity and good conscience.
- (d) Compulsory observance: A custom to be valid must have been continuously observed without any interruption from times immemorial and it must have been regarded by those affected by it as an obligatory or binding rule of conduct.

- (e) Conformity with law and public morality: A custom must not be opposed to morality or public policy nor must it conflict with statute law. If a custom is expressly forbidden by legislation and abrogated by a statute, it is inapplicable.
- (f) Unanimity of opinion: The custom must be general or universal. If practice is left to individual choice, it cannot be termed as custom.
- (g) Peaceable enjoyment: The custom must have been enjoyed peaceably without any dispute in a law court or otherwise.
- (h) Consistency: There must be consistency among the customs. Custom must not come into conflict with the other established customs.

Judicial Precedents: In general use, the term “precedent” means some set pattern guiding the future conduct. In the judicial field, it means the guidance or authority of past decisions of the courts for future cases. Only such decisions which lay down some new rule or principle are called judicial precedents. Judicial precedents are an important source of law. They have enjoyed high authority at all times and in all countries. This is particularly so in the case of England and other countries which have been influenced by English jurisprudence. The principles of law expressed for the first time in court decisions become precedents to be followed as law in deciding problems and cases identical with them in future. The rule that a court decision becomes a precedent to be followed in similar cases is known as doctrine of stare decisis.

The reason why a precedent is recognized is that a judicial decision is presumed to be correct. The practice of following precedents creates confidence in the minds of the litigants. Law becomes certain and known and that in itself is a great advantage. Administration of justice becomes equitable and fair.

General Principles of Doctrine of Precedents: The first rule is that each court lower in the hierarchy is absolutely bound by the decisions of the courts above it. The second rule is that in general higher courts are bound by their own decisions. This is a special feature of the English law.

High Courts

- (1) The decisions of High Court are binding on all the subordinate courts and tribunals within its jurisdiction. The decisions of one High Court have only a persuasive value in a court which is within the jurisdiction of another High Court. But if such decision is in conflict with any decision of the High Court within whose jurisdiction that court is situated, it has no value and the decision of that High Court is binding on the court. In case of any conflict between the two decisions of co-equal Benches, generally the later decision is to be followed.
- (2) In a High Court, a single judge constitutes the smallest Bench. A Bench of two judges is known as Division Bench. Three or more judges constitute a Full Bench. A decision of such a Bench is binding on a Smaller Bench. One Bench of the same High Court cannot take a view contrary to the decision already given by another co-ordinate Bench of that High Court. Though decision of a Division Bench is wrong, it is binding on a single judge of the same High Court. Thus, a decision by a Bench of the High Court should be followed by other Benches unless they have reason to differ from it, in which case the proper course is to refer the question for decision by a Full Bench.
- (3) The High Courts are the Courts of co-ordinate jurisdiction. Therefore, the decision of one High Court is not binding on the other High Courts and have persuasive value only. Pre-constitution (1950) Privy Council decisions are binding on the High Courts unless overruled by the Supreme Court.
- (4) The Supreme Court is the highest Court and its decisions are binding on all courts and other judicial tribunals of the country. Article 141 of the Constitution makes it clear that the law declared by the Supreme Court shall be binding on all courts within the territory of India. The words “law declared” includes an obiter dictum provided it is upon a point raised and argued (*Bimladevi v. Chaturvedi*, AIR 1953 All. 613). However, it does not mean that every statement in a judgment of the Supreme Court has the binding effect. Only the statement of ratio of the judgment is having the binding force.

Supreme Court

The expression 'all courts' used in Article 141 refers only to courts other than the Supreme Court. Thus, the Supreme Court is not bound by its own decisions. However, in practice, the Supreme Court has observed that the earlier decisions of the Court cannot be departed from unless there are extraordinary or special reasons to do so (AIR 1976 SC 410). If the earlier decision is found erroneous and is thus detrimental to the general welfare of the public, the Supreme Court will not hesitate in departing from it. English decisions have only persuasive value in India. The Supreme Court is not bound by the decisions of Privy Council or Federal Court. Thus, the doctrine of precedent as it operates in India lays down the principle that decisions of higher courts must be followed by the courts subordinate to them. However, higher courts are not bound by their own decisions (as is the case in England).

Kinds of Precedents: Precedents may be classified as: (a) declaratory and original, (b) persuasive, (c) absolutely authoritative, and (d) conditionally authoritative.

- (a) Declaratory and original precedents: According to Salmond, a declaratory precedent is one which is merely the application of an already existing rule of law. An original precedent is one which creates and applies a new rule of law. In the case of a declaratory precedent, the rule is applied because it is already a law. In the case of an original precedent, it is law for the future because it is now applied. In the case of advanced countries, declaratory precedents are more numerous. The number of original precedents is small but their importance is very great. They alone develop the law of the country. They serve as good evidence of law for the future. A declaratory precedent is as good a source of law as an original precedent. The legal authority of both is exactly the same.
- (b) Persuasive precedents: A persuasive precedent is one which the judges are not obliged to follow but which they will take into consideration and to which they will attach great weight as it seems to them to deserve. A persuasive precedent, therefore, is not a legal source of law; but is regarded as a historical source of law. Thus, in India, the decisions of one High Court are only persuasive precedents in the other High Courts. The rulings of the English and American Courts are persuasive precedents only. Obiter dicta also have only persuasive value.

- (c) Absolutely authoritative precedents: An authoritative precedent is one which judges must follow whether they approve of it or not. Its binding force is absolute and the judge's discretion is altogether excluded as he must follow it. Such a decision has a legal claim to implicit obedience, even if the judge considers it wrong. Unlike a persuasive precedent which is merely historical, an authoritative precedent is a legal source of law. Absolutely authoritative precedents in India: Every court in India is absolutely bound by the decisions of courts superior to itself. The subordinate courts are bound to follow the decisions of the High Court to which they are subordinate. A single judge of a High Court is bound by the decision of a bench of two or more judges. All courts are absolutely bound by decisions of the Supreme Court. In England decisions of the House of Lords are absolutely binding not only upon all inferior courts but even upon itself. Likewise, the decisions of the Court of Appeal are absolutely binding upon itself.
- (d) Conditionally authoritative precedents: A conditionally authoritative precedent is one which, though ordinarily binding on the court before which it is cited, is liable to be disregarded in certain circumstances. The court is entitled to disregard a decision if it is a wrong one, i.e., contrary to law and reason. In India, for instance, the decision of a single Judge of the High Court is absolutely authoritative so far as subordinate judiciary is concerned, but it is only conditionally authoritative when cited before a Division Bench of the same High Court.

Doctrine of Stare Decisis: The doctrine of stare decisis means “adhere to the decision and do not unsettle things which are established”. It is a useful doctrine intended to bring about certainty and uniformity in the law. Under the stare decisis doctrine, a principle of law which has become settled by a series of decisions generally is binding on the courts and should be followed in similar cases. In simple words, the principle means that like cases should be decided alike. This rule is based on public policy and expediency. Although generally the doctrine should be strictly adhered to by the courts, it is not universally applicable. The doctrine should not be regarded as a rigid and inevitable doctrine which must be applied at the cost of justice.

Ratio Decidendi: The underlying principle of a judicial decision, which is only authoritative, is termed as ratio decidendi. The proposition of law which is necessary for the decision or could be extracted from the decision constitutes the ratio. The concrete decision is binding between the parties to it. The abstract ratio decidendi alone has the force of law as regards the world at large. In other words, the authority of a decision as a precedent lies in its ratio decidendi. Prof. Goodhart says that ratio decidendi is nothing more than the decision based on the material facts of the case. Where an issue requires to be answered on principles, the principles which are deduced by way of abstraction of the material facts of the case eliminating the immaterial elements is known as ratio decidendi and such principle is not only applicable to that case but to other cases also which are of similar nature.

It is the ratio decidendi or the general principle which has the binding effect as a precedent, and not the obiter dictum. However, the determination or separation of ratio decidendi from obiter dictum is not so easy. It is for the judge to determine the ratio decidendi and to apply it on the case to be decided.

Obiter Dicta: The literal meaning of this Latin expression is “said by the way”. The expression is used especially to denote those judicial utterances in the course of delivering a judgment which taken by themselves, were not strictly necessary for the decision of the particular issue raised. These statements thus go beyond the requirement of the particular case and have the force of persuasive precedents only. The judges are not bound to follow them although they can take advantage of them. They some times help the cause of the reform of law.

Obiter Dicta are of different kinds and of varying degrees of weight. Some obiter dicta are deliberate expressions of opinion given after consideration on a point clearly brought and argued before the court. It is quite often too difficult for lawyers and courts to see whether an expression is the ratio of judgement or just a causal opinion by the judge. It is open, no doubt, to other judges to give a decision contrary to such obiter dicta.

Statutes or Legislation

Legislation is that source of law, which consists in the declaration, or promulgation of legal rules by an authority duly empowered by the Constitution in that behalf. It is sometimes called Jus scriptum (written law) as contrasted with the customary law or jus non-scriptum (unwritten law). Salmond prefers to call it as “enacted law”. Statute law or statutory law is what is created by legislation, for example, Acts of Parliament or of State Legislature. Legislation is either supreme or subordinate (delegated).

Supreme Legislation is that which proceeds from the sovereign power in the State or which derives its power directly from the Constitution. It cannot be repelled, annulled or controlled by any other legislative authority. Subordinate Legislation is that which proceeds from any authority other than the sovereign power. It is dependent for its continued existence and validity on some superior authority. The Parliament of India possesses the power of supreme legislation. Legislative powers have been given to the judiciary, as the superior courts are allowed to make rules for the regulation of their own procedure. The executive, whose main function is to enforce the law, is given in some cases the power to make rules. Such subordinate legislation is known as executive or delegated legislation. Municipal bodies enjoy by delegation from the legislature, a limited power of making regulations or bye-laws for the area under their jurisdiction. Sometimes, the State allows autonomous bodies like universities to make bye-laws which are recognized and enforced by courts of law.

The rule-making power of the executive is, however, hedged with limitations. The rules made by it are placed on the table of both Houses of Parliament for a stipulated period and this is taken as having been approved by the legislature. Such rules then become part of the enactment. Where a dispute arises as to the validity of the rules framed by the executive, courts have the power to sit in judgment whether any part of the rules so made is in excess of the power delegated by the parent Act.

In our legal system, Acts of Parliament and the Ordinances and other laws made by the President and Governors in so far as they are authorised to do so under the Constitution are

supreme legislation while the legislation made by various authorities like Corporations, Municipalities, etc. under the authority of the supreme legislation are subordinate legislation.

Personal Law

In many cases, the courts are required to apply the personal law of the parties where the point at issue is not covered by any statutory law or custom. In the case of Hindus, for instance, their personal law is to be found in

- (a) The Shruti which includes four Vedas.
- (b) The ‘Smritis’ which are recollections handed down by the Rishi’s or ancient teachings and precepts of God, the commentaries written by various ancient authors on these Smritis. There are three main Smritis; the Codes of Manu, Yajnavalkya and Narada.

Hindus are governed by their personal law as modified by statute law and custom in all matters relating to inheritance, succession, marriage, adoption, co-parcenary, partition of joint family property, pious obligations of sons to pay their father’s debts, guardianship, maintenance and religious and charitable endowments.

The personal law of Mohammedans is to be found in

- (a) The holy Koran.
- (b) The actions, percepts and sayings of the Prophet Mohammed which though not written during his life time were preserved by tradition and handed down by authorized persons. These are known as Hadis.
- (c) Ijmas, i.e., a concurrence of opinion of the companions of the Prophet and his disciples.
- (d) Kiyas or reasoning by analogy. These are analogical deductions derived from a comparison of the Koran, Hadis and Ijmas when none of these apply to a particular case.
- (e) Digests and Commentaries on Mohammedan law, the most important and famous of them being the Hedaya, which was composed in the 12th century, and the Fatawa

Alamgiri which was compiled by commands of the Mughal Emperor Aurangzeb Alamgiri.

Mohammedans are governed by their personal law as modified by statute law and custom in all matters relating to inheritance, wills, succession, legacies, marriage, dower, divorce, gifts, wakfs, guardianship and pre-emption.

Secondary Source of Indian Law

Justice, Equity and Good Conscience: The concept of “justice, equity and good conscience” was introduced by Impey’s Regulations of 1781. In personal law disputes, the courts are required to apply the personal law of the defendant if the point at issue is not covered by any statute or custom. In the absence of any rule of a statutory law or custom or personal law, the Indian courts apply to the decision of a case what is known as “justice, equity and good conscience”, which may mean the rules of English Law in so far as they are applicable to Indian society and circumstances.

The Ancient Hindu Law had its own versions of the doctrine of justice, equity and good conscience. In its modern version, justice, equity and good conscience as a source of law, owes its origin to the beginning of the British administration of justice in India. The Charters of the several High Courts established by the British Government directed that when the law was silent on a matter, they should decide the cases in accordance with justice, equity and good conscience. Justice, equity and good conscience have been generally interpreted to mean rules of English law on an analogous matter as modified to suit the Indian conditions and circumstances. The Supreme Court has stated that it is now well established that in the absence of any rule of Hindu Law, the courts have authority to decide cases on the principles of justice, equity and good conscience unless in doing so the decision would be repugnant to, or inconsistent with, any doctrine or theory of Hindu Law: (1951) 1 SCR

Significance and Relevance to Modern Civilized Society: Law is not static. As circumstances and conditions in a society change, laws are also changed to fit the requirements of the society. At any given point of time the prevailing law of a society must be in conformity with the general statements, customs and aspirations of its people.

Modern science and technology have unfolded vast prospects and have aroused new and big ambitions in men. Materialism and individualism are prevailing at all spheres of life. These developments and changes have tended to transform the law patently and latently. Therefore, law has undergone a vast transformation – conceptual and structural. Social justice has replaced the idea of abstract justice.

The object of law is order, which in turn provides hope of security for the future. Law is expected to provide socio-economic justice and remove the existing imbalances in the socio-economic structure and to play special role in the task of achieving the various socio-economic goals enshrined in our Constitution. It has to serve as a vehicle of social change and as a harbinger of social justice.

CLASSIFICATION OF LAWS

Civil v. Criminal Law

Civil law deals with the disputes between individuals, organizations, or between the two, in which compensation is awarded to the victim. The object of civil law is the redress of wrongs by compelling compensation or restitution: the wrongdoer is not punished; he only suffers so much harm as is necessary to make good the wrong he has done. The person who has suffered gets a definite benefit from the law, or at least he avoids a loss.

Criminal law is the body of law that deals with crime and the legal punishment of criminal offenses. In Criminal Law the main object of the law is to punish the wrongdoer; to give him and others a strong inducement not to commit same or similar crimes, to reform him if possible and perhaps to satisfy the public sense that wrongdoing ought to meet with retribution.

In civil law the cases are filed by the private party, where as in criminal law the cases are filed by the government because any offence though committed against a particular person is considered as a violation of the criminal law and hence an offence against the state.

The standard of proof in both the set of laws is also different. Where on one hand, in civil law the principle applied to determine the standard of evidence is 'Preponderance of evidence' i.e. the claimant must produce evidence beyond the balance of probabilities. On the other hand in criminal law the guilt of the accused needs to be proved beyond a reasonable doubt. Similarly the natures of punishment in both the cases are also different. In a civil matter, punishment is usually in the form of compensation i.e. monetary relief for the injuries or damages, or an injunction in nuisance. In a criminal matter, a guilty defendant is subject to custodial imprisonment or non-custodial punishment fines or community service. In exceptional cases, the death penalty may also be awarded.

There are separate court structures for civil and criminal matters which have been explained in details in the subsequent chapters.

Territorial v. Personal Laws

The people of India belong to different religions and faiths. They are governed by different sets of personal laws in respect of matters relating to family affairs, i.e., marriage, divorce, succession, etc. Personal law applies to those who profess a particular religion. Personal laws based on religion, there are also various customary rules that apply to areas of marriage, divorce and family matters.

India has two systems of law, one territorial and one personal. For example, the Special Marriage Act applies to all people in the territory of India. The fact that some persons or categories of persons are excluded from the provisions of the Act does not change its nature to personal. On the other hand, the Hindu Succession Act applies to Hindus, and is therefore personal. The fact that it is also applicable in the territory of India does not make it territorial.

Procedural v. Substantive Laws

Procedural Laws deals with the rules and regulations that govern the procedures of civil, criminal and administrative courts. The basic purpose of these laws is to ensure that the principles of due process and fundamental justice are followed in all the cases, which is brought before a court. In particular these laws lay down the procedures which are to be

followed once a case reaches the court docket. From the manner in which parties are informed to the steps that should be followed in examination of evidences to the presentation of oral arguments till the time the final decision is delivered and executed, these laws cover and govern each and every intricate details of court procedures. Procedural laws would thus include within its ambit various laws on civil and criminal procedures.

Substantive Laws refers to the written or statutory law, which governs the relationship between people, or between people and the state. It defines the rights, duties, obligations and powers of people. It lays down a rule of conduct for the people. Substantive law is the statutory, or written law, that defines rights and duties, such as crimes and punishments (in the criminal law), civil rights and responsibilities in civil law. It is codified in legislated statutes or can be enacted through the initiative process. Thus substantive law would cover the law of contracts, aviation law, space laws, international laws, corporate laws, family laws, consumer protection laws, etc.

When there is an ongoing trial, substantive law is the branch of the legal industry, which will define the crimes and punishments to which the accused will be subjected. It's also the branch of law, which defines the rights, and responsibilities of a civilian.

REMEDIES UNDER LAW

Any person whose right is violated or who has an apprehension that his right may be violated can approach the court to protect his right or to prevent its violation or for remedy provided under law for its violation.

Indian Constitution: Constitution provides following kinds of remedial measures for protection or enforcement of violated of fundamental rights. They are:

- Writ of Habeas Corpus,
- Writ of Quo Warranto,
- Writ of Mandamus,
- Writ of Certiorari,
- Writ of Prohibition.

Other Remedies under Civil Law

Damages: Every breach of contract upsets many settled expectations of the injured party. Some of such expectations may be very long drawn and endless, but a line must be drawn somewhere for ascertainment of liability. An attempt to draw a line was made in 1854 by Alderson B in *Hadley vs. Baxendale* in 1854. This decision laid down two rules regarding nature of damages:

General damages: they are those, which arise, naturally in the usual course of things from the breach itself. The defendant is held liable for all the foreseeable consequences of his breach. The basis of this rule is that everyone, as a reasonable man, is expected to know the loss which would accrue to the other party from a breach, in the ordinary course.

Special damages: They are awarded for loss which arises on account of the unusual circumstances affecting the plaintiff. They are recoverable only if the unusual circumstances are known to the defendant so that the possibility of special loss is in contemplation of both the parties. Thus it talks about knowledge of special circumstances leading to the possibility of some extra-ordinary loss.

So, the parties basing on kind of facts and circumstances of each case can claim damages.

Maintenance: If any person who is under an obligation, neglected or refused to maintain their dependent wives, children and parents, the wife and children and parents are entitled to claim maintenance against the husband, father and sons respectively. The remedy for maintenance is available under civil law and criminal law by way of S.125 Cr.P.C and Protection of women from Domestic Violence Act, 2005.

Mesne profits: If a person in wrongful possession of property received any benefits or profits out of such property is under an obligation to return the same to lawful owner with

interest and in the event failure to repay a suit for Mesne profits can be filed. However, it shall not include profits due to improvements made by the person in wrongful possession

Partition: A Coparcener of Joint Hindu family can seek allotment of share at any time by filing a suit for partition. . Earlier, only males acquired an interest in the coparcenary properties as coparceners. By virtue of a recent amendment to the Hindu Succession Act, the daughter of a coparcener has been given equal share as that of a son. As such, with effect from 09.09.2005, the daughter of a coparcener shall, by birth, become a coparcener in her own right and in the same manner as the son and will have the same rights and liabilities in the coparcenary property like a son and as such she can also file suit for partition.

- Grant of succession certificate.

Remedies under Criminal Law:

Indian Penal code and other penal laws provide followings kinds of remedial measures for violation of duties prescribed under them. It is also known as punishment.

- Death
- Imprisonment for life
- Imprisonment, which is of two descriptions, namely:—
- Rigorous, that is, with hard labour;
- Simple;
- Forfeiture of property;
- Fine.
- Court can also award compensation.

Remedies Available with an aggrieved Consumer:

Consumer courts are empowered to grant one or more of the following reliefs for the deficit services or goods by sellers:-

- Repair of defective goods.
- Replacement of defective goods.
- Refund of price paid for the defective goods or service.

- Removal of deficiency in service.
- Refund of extra money charge.
- Withdrawal of goods hazardous to life and safety.
- Compensation for the loss or injury suffered by the consumer due to negligence of the opposite party.
- Adequate cost of filing and pursuing the complaint.
- Grant of punitive damages.

FUNDAMENTAL RIGHTS

Every person by virtue of being a human is entitled to certain inalienable and exclusive rights. They are inalienable and exclusive rights as their absence would negate the very existence of human being and their presence guarantees the most basic freedoms that would ensure peaceful and purposeful life.

The following are the fundamental rights guaranteed under our constitution:

- Right to Equality,
- Freedom of speech and expression,
- Right to life and liberty,
- Right of freedom from exploitation,
- Right to practice religion,
- Cultural and educational rights
- Right to approach court

Right to Equality: Among all the basic freedoms, the right to equality stands at forefront as success of Democratic life is based upon it. In fact, in all modern constitutions it is the first fundamental right. The term equality has many connotations. They are: Protective discrimination, Rule of law, Concept of Arbitrariness, Principles of natural justice etc. All these tools ensure operation of equality in reality.

Protective discrimination: A.14 of Constitution says all are equal before law and there shall be no discrimination on any grounds whatsoever. However, equality doesn't mean equality that is measured with scale. The rights guaranteed by Articles 15 to 18 emanate from Article.14. A.15 deals with discrimination on grounds of religion, race, caste, sex or place of birth. It also permits State to undertake certain beneficial measures to Scheduled Castes, Scheduled Tribes, Socially and educationally backward classes, women and children. A.16 deals with equality of opportunity in matters of public employment and makes provision for reservation in favour of backward classes and Scheduled Castes. A.17 prohibits untouchability.

The following is the test adopted by Supreme Court to determine any measure taken by legislature or executive in the name of Protective discrimination. It is also known as Test of reasonable classification.

The classification or discrimination on any ground is permissible if following two conditions are satisfied:

- The classification must be founded upon an intelligible differentia which distinguishes person or things that are grouped together from other left out of that group.
- The differentia must have a rational relation to the object sought to be achieved by the Act in question.

The classification may be founded on different bases namely geography, occupations, persons, places etc., what is necessary is that there must be nexus between the basis of the classification and the object of the Act under consideration.

Concept of Arbitrariness: Equality encompasses fairness in state action. Therefore every action of state affecting legal or any rights of persons must be not arbitrary. In fact equality and arbitrariness are sworn enemies. Fairness in action is the theme of democracy wedded with rule of law and arbitrariness is the realm of monarchy.

The Principles of Natural Justice: In India, the principles of natural justice are firmly grounded in Article 14 & 21 of the Constitution. With the introduction of the concept of substantive and procedural due process in Article 21, fairness, which is included in the principles of natural justice, can be read into Article 21. The violation of the principles of natural justice results in arbitrariness; therefore, violation of natural justice is a violation of the equality clause of Article 14. (Discussed in detail later)

The Principles of Natural Justice is also one of the tools to ascertain absence of Arbitrariness. The Principles of Natural Justice says: No man shall be condemned unheard, Judge shall not have any bias (Whether monetary, personal or subject matter), Justice should not only be done but appears to be done, every decision of state should be based on reasons (Speaking order).

Rule of Law: This concept is popularized by British jurist A. V. Dicey. In fact this is the original idea of ancient philosophers like Aristotle who said “law should govern”. Rule of law implies that every citizen is subject to the law. In order to conclude that exist a rule of law in a country or society it must fulfill following three conditions:

- A uniform body of laws to regulate all human conduct in the State. In India we have a uniform body of laws which governs our society and regulates all human conduct within our country.
- A citizen should be able to approach courts to redress any grievance against the State like any other private individual for violation of his rights. There shall not be any prior permission of the state to sue it. This has also been provided in our Constitution by A.300.
- The determination of disputes must be by regular courts manned by independent judges. In India we have independent and integrated Judiciary with its own administrative and regulatory mechanism. The appointment of Judges is also made in consultation with the Chief Justice of the High Court concerned, the Governor of the State and the Chief Justice of India. This method of appointment guarantees that

judges appointed to the High Court would be persons of ability, integrity & independence.

A question has sometimes been asked as to what would happen if the Government—be it State or Central—did not carry out the decisions of the Court. The question has been answered by Article 144 of the Constitution which inter alia says that all civil authorities in the territory of India shall act in aid of the Supreme Court.

Freedom of Speech and Expression: Justice Brandies and Holmes, in *Whitney v. California* very firmly stated: Liberty is a means to end and vice versa. Framers of our constitution believed that freedom to think as you will and to speak as you think is means indispensable to the discovery and spread of political truth. It is the function of speech to free men from the bondage of irrational fears. To justify suppression of free speech there must be reasonable ground to fear that serious evil will result if free speech is practiced. There must be reasonable ground to believe that the danger apprehended is imminent. Constitutional framers are quite conscious of right to

Freedom of speech and expression importance in a Democratic country governed by rule of law and as such crystallized this norm in A.19 of the Constitution in variety of forms. They are:

- freedom of speech and expression
- assemble peacefully and without arms
- to form association or unions
- to move freely throughout the territory of India
- to reside and settle in any part of the territory of India
- to practice any profession, or to carry on any occupation, trade or business.

Right to Life and Personal Liberty: Article.20 to 24 of Constitution imposes certain fundamental limitations on the state in order to deprive any person his right to life or liberty. They are as follows:

- A man shall be punished only for such act or omission which is declared as an offence as on the date of occurrence offence Article.20 (1).
- A person can be punished only once for an offence committed Article.20 (2).
- Person charged can't be compelled to be a witness against himself Article.20 (3).
- The deprivation of any person's life or personal liberty shall be according to procedure established by law (A.21).
- Lawyer of his choice shall defend any Person arrested. He must be informed of the grounds of arrest Article.22 (1).
- A Person arrested must be produced before the nearest magistrate within a period of twenty-four hours excluding time of journey. This rule is not applicable to preventive of detention laws Article.22 (2).

Right to Practice Religion of One's Choice: Liberty of thought, expression, belief, faith and worship is one of its features, ideal and goal of our constitution. It means India is a secular state from its inception though 42nd amendment introduced the word Secular in the Preamble of the constitution. A.25, 26, 27 and 28 expressly deal with the rights of religion.

A.25 (1) entitles all persons equally to freedom of conscience and the right to freely profess, practice and propagate religion. However, this is subject to public order, morality, health and other provisions of part-III of the constitution.

A.26 guarantees and authorizes citizen to establish religious institution of their subject to public order, morality and health. They also have right to own and acquire movable and immovable property and to administer such property in accordance with law.

A.27 prohibits any compulsion in the matter of the payment of any tax, the proceeds of which are specifically appropriated for the promotion of any particular religion. A.28 (1) bars any religious instructions being provided in any educational institution wholly maintained out of state funds.

It is clear from A.25 that constitution wishes to address the evils of religion by imposing restrictions on right to religion on the basis of public health, morality and fundamental rights. Further, it also suggests that our secularism is not supportive in nature to any religion. However, it interferes with the religion if offends public order, morality, health. Thus, in India, the freedom of religion is guaranteed solely out of concern for the individual as an aspect of the general scheme of his liberty. For the simple reason liberty without freedom of religion is incomplete and meaningless.

Cultural and Educational rights: A.29 & 30 deal with this subject. A.29 protects the language, script and culture of minorities and whereas under A.30 minorities have got the right to establish and administer educational institutions of their choice A.30 (1) preserves culture and language of minorities and ensures equal treatment between majority and minority institutions.

DIRECTIVE PRINCIPLES OF STATE POLICY

The Directive Principles of State Policy contained in Part IV, Articles 36-51 of the Indian constitution constitute the most interesting and enchanting part of the constitution. The Directive Principles may be said to contain the philosophy of the constitution. The idea of directives being included in the constitution was borrowed from the constitution of Ireland. As the very term “Directives” indicate, the Directive principles are broad directives given to the state in accordance with which the legislative and executive powers of the state are to be exercised. As Nehru observed, the governments will ignore the directives “Only at their own peril.” As India seeks to secure an egalitarian society, the founding fathers were not satisfied with only political justice. They sought to combine political justice with economic and social justice.

FUNDAMENTAL DUTIES

Originally, the constitution of India did not contain any list of fundamental duties. In other words, enjoyment of fundamental rights was not conditional on the performance of fundamental duties. Democratic rights are based on the theory that rights are not created by the state. Individuals are born with right. It is on this theory that the Indians before

independence raised the slogan that “freedom is our birth right.” It is in this sense again that Prof. Laski asserts that the “state does not create rights, it only recognizes rights.”

The socialists on the other hand, make enjoyment of rights conditional on the fulfillment of duties. They claim that “he who does not work, neither shall he eat.” The constitution of the world’s first socialist country, that of Soviet Union contains a list of fundamental rights immediately followed by a list of fundamental duties. It is clearly asserted that the enjoyment of fundamental rights is conditional on the satisfactory performance of fundamental duties.

It was on this Soviet model that fundamental duties were added to the Indian Constitution by 42nd amendment of the constitution in 1976. The fundamental duties are contained in Art. 51A.

Art. 51A, Part IVA of the Indian Constitution, specifies the list of fundamental duties of the citizens. It says “it shall be the duty of every citizen of India:

- to abide by the constitution and respect its ideal and institutions;
- to cherish and follow the noble ideals which inspired our national struggle for freedom;
- to uphold and protect the sovereignty, unity and integrity of India;
- to defend the country and render national service when called upon to do so;
- to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional diversities, to renounce practices derogatory to the dignity of women;
- to value and preserve the rich heritage of our composite culture;
- to protect and improve the natural environment including forests, lakes, rivers, and wild-life and to have compassion for living creatures;
- to develop the scientific temper, humanism and the spirit of inquiry and reform;
- to safeguard public property and to abjure violence;
- to strive towards excellence in all spheres of individual and collective activity, so that the nation constantly rises to higher levels of endeavor and achievement.

Further, one more Fundamental duty has been added to the Indian Constitution by 86th Amendment of the constitution in 2002 i.e. who is a parent or guardian , to provide opportunities for education to his child, or as the case may be, ward between the age of six and fourteen years.

The fundamental duties however are non-justiciable in character. This means that no citizen can be punished by a court for violation of a fundamental duty. In this respect the fundamental duties are like the directive principles of the constitution in part IV. The directive principles lay down some high ideals to be followed by the state. Similarly, the fundamental duties in Art 51 A, lay down some high ideals to be followed by the citizens. In both cases, violation does not invite any punishment. It is significant that the fundamental duties are placed at the end of part IV rather than at the end of part III of the constitution. While part III containing fundamental rights is justiciable, part IV containing the directive principles is not.

However, these fundamental duties are not mere expressions of pious platitudes. Courts will certainly take cognizance of laws seeking to give effect to fundamental duties.

Further, the fundamental duties enumerated in Art. 51A constitute a constant reminder to the citizens that they have duties in building up a free, egalitarian and healthy society. These are expected to act as damper to reckless and anti-social activities on the part of some individuals. Finally, the very fact that these duties figure in the constitution, keeps the door open for the duties to be given higher constitutional status in future through constitutional amendments.

ALTERNATE MEANS OF DISPUTE RESOLUTION

Arbitration: Justice delivery institutions in most of the developing countries in the world are currently confronted with serious crises, mainly on account of delay in the resolution of the disputes particularly the delay in disposal of the commercial and other civil matters. We must admit that this situation has eroded public trust and public confidence in the justice delivery institutions. It obstructs economic growth, development and social justice to the citizens in a country. The crises therefore, call for an urgent solution. The cause for such backlog of cases

is institutional and the delay in disposal of the cases is due to procedural laws. Administrative institutions have failed to monitor the status, substance and pace of litigation in the courts.

Alternative Dispute Resolution (ADR) is a term for describing process of resolving disputes in place of litigation and includes arbitration, mediation, conciliation, expert determination and early neutral evaluation by a third person. In many important respects, arbitration is similar/common with court based litigation than the other forms of ADR. Prior to the enactment of The Arbitration and Conciliation Act, 1996, none of these forms of ADR except arbitration have any statutory basis in India. Mediation and Conciliation require an independent third party as mediator or conciliator to assist the parties to settle their disputes. The expert determination requires independent experts in the subject of disagreement of the parties to decide the case. Such expert is chosen jointly by the parties and his decision is binding.

The objective of ADR as the phrase itself suggest is to resolve disputes of all sorts outside the traditional legal mechanism i.e. courts/judicial system. There is a broad spectrum ranging from the purely consensual mode of resolution of disputes to an executive procedure like arbitration, conciliation or negotiation. Alternatively a combination of some of these techniques like negotiation, conciliation, mediation and arbitration may also be used to resolve certain disputes. ADR thus offers an alternative route for resolution of disputes. The emphasis in the ADR, which is informal and flexible, is on "helping the parties to help themselves".

Arbitration and Conciliation Act 1996 - The Act is based on the 1985 UNCITRAL Model Law on International Commercial Arbitration and the UNCITRAL Arbitration Rules 1976.

Objective - Framed to cater to the international commitments of India, the Arbitration and Conciliation Act 1996 was enacted to achieve the following objectives:

- a. to comprehensively cover international and commercial arbitration and conciliation as also domestic arbitration and conciliation;
- b. to make provision for an arbitral procedure which is fair, efficient and capable of meeting the needs of the specific arbitration;
- c. to provide that the arbitral tribunal gives reasons for its arbitral award;
- d. to ensure that the arbitral tribunal remains within the limits of its jurisdiction;
- e. to minimize the supervisory role of courts in the arbitral process;
- f. to permit an arbitral tribunal to use mediation, conciliation or other procedures during the arbitral proceedings to encourage settlement of disputes;
- g. to provide that every final arbitral award is enforced in the same manner as if it were a decree of the court;
- h. to provide that a settlement agreement reached by the parties as a result of conciliation proceedings will have the same status and effect as an arbitral award on agreed terms on the substance of the dispute rendered by an arbitral tribunal; and
- i. to provide that, for purposes of enforcement of foreign awards, every arbitral award made in a country to which one of the two International Conventions relating to foreign arbitral awards to which India is a party applies, will be treated as a foreign award.”

Scheme of the Act: The Act is a composite piece of legislation. It provides for domestic arbitration; international commercial arbitration; enforcement of foreign award and conciliation (the latter being based on the UNCITRAL Conciliation Rules of 1980).

The more significant provisions of the Act are to be found in Part I and Part II thereof. Part I contains the provisions for domestic and international commercial arbitration in India. All arbitration conducted in India would be governed by Part I, irrespective of the nationalities of the parties. Part II provides for enforcement of foreign awards. Part I is more comprehensive and contains extensive provisions based on the Model Law. It provides inter alia for arbitrability of disputes; non-intervention by courts; composition of the arbitral tribunal; jurisdiction of arbitral tribunal; conduct of the arbitration proceedings; recourse against arbitral awards and enforcement. Part II on the other hand, is largely restricted to enforcement of foreign awards governed by the New York Convention or the Geneva

Convention. Part II is thus, (by its very nature) not a complete code. This led to judicial innovation by the Supreme Court in the case of *Bhatia International v. Bulk Trading* (2002) 4 SCC 105. Here the Indian courts jurisdiction was invoked by a party seeking interim measures of protection in relation to arbitration under the ICC Rules to be conducted in Paris. The provision for interim measure (section 9) was to be found in Part I alone (which applies only to domestic arbitration). Hence the Court was faced with a situation that there was no *proprio vigore* legal provision under which it could grant interim measure of protection. Creatively interpreting the Act, the Supreme Court held that the “general provisions” of Part I would apply also to offshore arbitrations, unless the parties expressly or impliedly exclude applicability of the same. Hence by judicial innovation, the Supreme Court extended applicability of the general provisions of Part I to off-shore arbitrations as well.

Subject matter of arbitration: Any commercial matter including an action in tort if it arises out of or relates to a contract can be referred to arbitration. However, public policy would not permit matrimonial matters, criminal proceedings, insolvency matters anti-competition matters or commercial court matters to be referred to arbitration. Employment contracts cannot be referred to arbitration apart from the disputes between the directors and the company as it lacks a master-servant relationship. This rule was laid down in *Comed Chemicals Ltd. v. C.N. Ramchand* 2008 (13) SCALE 17.

Further matters covered by statutory reliefs through statutory tribunals cannot be a subject matter of arbitration.

Role of the court - One of the fundamental features of the Act is that the role of the court has been minimized. Accordingly, Section 8 provides that any matter before a judicial authority containing an arbitration agreement shall be referred to arbitration. Further, no judicial authority shall interfere, except as provided for under the Act.

In relation to arbitration proceedings, parties can approach the Court only for two purposes:

- a. for any interim measure of protection or injunction or for any appointment of receiver etc.; or
- b. for the appointment of an arbitrator in the event a party fails to appoint an arbitrator or if two appointed arbitrators fail to agree upon the third arbitrator. In such an event, in the case of domestic arbitration, the Chief Justice of a High Court may appoint an arbitrator, and in the case of international commercial arbitration, the Chief Justice of the Supreme Court of India may carry out the appointment. A court of law can also be approached if there is any controversy as to whether an arbitrator has been unable to perform his functions or has failed to act without undue delay or there is a dispute on the same. In such an event, the court may decide to terminate the mandate of the arbitrator and appoint a substitute arbitrator.

Jurisdiction of the arbitrator - The Act provides that the arbitral tribunal may rule on its own jurisdiction, including any objections with respect to the existence or validity of the arbitration agreement. The arbitration agreement shall be deemed to be independent of the contract containing the arbitration clause, and invalidity of the contract shall not render the arbitration agreement void. Hence, the arbitrators shall have jurisdiction even if the contract in which the arbitration agreement is contained is vitiated by fraud and/or any other legal infirmity. Further, any objection as to jurisdiction of the arbitrators should be raised by a party at the first instance, i.e., either prior to or along with the filing of the statement of defence. If the plea of jurisdiction is rejected, the arbitrators can proceed with the arbitration and make the arbitral award. Any party aggrieved by such an award may apply for having it set aside under Section 34 of the Act. Hence, the scheme is that, in the first instance, the objections are to be taken up by the arbitral tribunal and in the event of an adverse order; it is open to the aggrieved party to challenge the award.

Conduct of arbitration proceedings - The arbitrators are masters of their own procedure and subject to parties agreement, may conduct the proceedings “in the manner they consider appropriate.” This power includes- “the power to determine the admissibility, relevance, materiality and weight of any evidence” Section 19 (3) and (4). The only restraint on them is that they shall treat the parties with equality and each party shall be given a full opportunity to present his case, which includes sufficient advance notice of any hearing or meeting.

Neither the Code of Civil Procedure nor the Indian Evidence Act applies to arbitrations. Unless the parties agree otherwise, the tribunal shall decide whether to hold oral hearings for the presentation of evidence or for arguments or whether the proceedings shall be conducted on the basis of documents or other material alone. However the arbitral tribunal shall hold oral hearings if a party so requests (unless the parties have agreed that no oral hearing shall be held).

Arbitrators have power to proceed *ex parte* where the respondent, without sufficient cause, fails to communicate his statement of defence or appear for an oral hearing or produce evidence. However, in such situation the tribunal shall not treat the failure as an admission of the allegations by the respondent and shall decide the matter on the evidence, if any, before it. If the claimant fails to communicate his statement of the claim, the arbitral tribunal shall be entitled to terminate the proceedings.

Governing Law - In an international commercial arbitration, parties are free to designate the governing law for the substance of the dispute. If the governing law is not specified, the arbitral tribunal shall apply the rules of law it considers appropriate in view of the surrounding circumstances. For domestic arbitration, however, (i.e., between Indian parties), the tribunal is required to decide the dispute in accordance with the substantive laws of India.

Conclusion: India has in place a modern, an efficient Arbitration Act. There have been some decisions which are not in tune with the letter or spirit of the Act. Hopefully, these would be addressed by the judiciary in the near future and continuing popularity of arbitrations would be served by a truly efficient ADR mechanism.

MEDIATION

Mediation is a form of alternative dispute resolution in which a neutral third person helps the parties reaches a voluntary resolution of a dispute. Mediation is an informal, confidential, and flexible process in which the mediator helps the parties to understand the interests of everyone involved, and their practical and legal choices. It can help people resolve civil, family, juvenile and other matters in a less adversarial setting. Court mediation programs

have been shown to save the parties time and money, improve satisfaction with the court's services and reduce future disputes and offenses. Mediation, as used in law, is a form of alternative dispute resolution (ADR), a way of resolving disputes between two or more parties with concrete effects. Typically, a third party, the mediator, assists the parties to negotiate a settlement. Disputants may mediate disputes in a variety of domains, such as commercial, legal, diplomatic, workplace, community and family matters.

The term "mediation" broadly refers to any instance in which a third party helps others reach agreement. More specifically, mediation has a structure, timetable and dynamics that "ordinary" negotiation lacks. The process is private and confidential, possibly enforced by law. Participation is typically voluntary. The mediator acts as a neutral third party and facilitates rather than directs the process.

Mediators use various techniques to open, or improve, dialogue and empathy between disputants, aiming to help the parties reach an agreement. Much depends on the mediator's skill and training. As the practice gained popularity, training programs, certifications and licensing followed, producing trained, professional mediators committed to the discipline.

The mediator helps the parties to: communicate better, explore legal and practical settlement options, and reach an acceptable solution of the problem.

The mediator does not decide the solution to the dispute; the parties do. Mediation can result in a legally enforceable contract agreed to, in writing, by the parties.

OMBUDSMAN

An ombudsman or public advocate is usually appointed by the government or by parliament, but with a significant degree of independence, who is charged with representing the interests of the public by investigating and addressing complaints of maladministration or violation of rights. In some countries an Inspector General, Citizen Advocate or other official may have duties similar to those of a national ombudsman, and may also be appointed by the legislature. Below the national level an ombudsman may be appointed by a state, local or

municipal government, and unofficial ombudsmen may be appointed by, or even work for, a corporation such as a utility supplier or a newspaper, for an NGO, or for a professional regulatory body.

Whether appointed by a legislature, the executive, or an organization (or, less frequently, elected by the constituency that he or she serves), the typical duties of an ombudsman are to investigate complaints and attempt to resolve them, usually through recommendations (binding or not) or mediation. Ombudsmen sometimes also aim to identify systemic issues leading to poor service or breaches of people's rights. At the national level, most ombudsmen have a wide mandate to deal with the entire public sector, and sometimes also elements of the private sector (for example, contracted service providers). In some cases, there is a more restricted mandate, for example with particular sectors of society. More recent developments have included the creation of specialized Children's Ombudsman and Information Commissioner Agencies.

In some jurisdictions an ombudsman charged with handling concerns about national government is more formally referred to as the "Parliamentary Commissioner" (e.g. the United Kingdom Parliamentary Commissioner for Administration, and the Western Australian state Ombudsman). In many countries where the ombudsman's remit extends beyond dealing with alleged maladministration to promoting and protecting human rights, the ombudsman is recognized as the national human rights institution. The post of ombudsman had by the end of the 20th century been instituted by most governments and by some intergovernmental organizations such as the European Union.

LEGAL SERVICES

Legal Service Authority – Salient Features of Adjudicatory Process: Welfare Legislations made relating to land for the benefit of poor and laws enacted to check the atrocities against weak didn't yield desired result as promised in the Constitution. Among various reasons, it was prominently felt that Anglo-Saxon legal system which we inherited is the chief cause for this plight. To undo this situation, Indian parliament by way of 42nd Amendment to the constitution introduced Article 39A to constitution. Article 39A titled as Equal justice and

free legal aid says the state shall secure that the operation of the legal system promotes justice, on a basis of equal opportunity, and shall, in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities. Thus, tone and tenor of A.39A sought for paradigm shift in structuring legal system in a way that ensures access of justice to everyone both qualitatively and quantitatively. Taking cue from it the Parliament of India in the year 1987 enacted Legal service authority Act-1987 is enacted. If one peruses the grand goals, institutional structures and modus operandi provided under this Act gives certainty of meeting the essence of A.39A of constitution. Let us see the novel features of this Act and important schemes brought under this Act so as to show the utility and importance of this Act in the context of Indian legal system.

Features of the Legal service Authority Act: The special features of this Statute can be understood from three angles. First, Institutional structures created and their composition. Second, Kind and nature of services and Persons entitled for the services under this Act. Third, Powers and methods to resolve disputes by institutions created under this Act.

First, Institutional structures created and their composition. There is a National Legal Services Authority at the national level and there is State Legal Services Authority at State level and District Legal service authority at District level. Lastly, Taluk or Mandal Legal service committee at Mandal level. The National level and State level bodies lay down policies and principles for making legal services available under the provisions of the Act and to frame most effective and economical schemes for legal services including funds etc.,. The uniqueness of institutions created under this statute is that there is a conglomeration of all three wings of the state. To illustrate, at the lower where LSA is functioning one can find presence of senior most judge as Chairman and Sub-divisional Revenue officer and police officer as members of the Taluk Legal services Committee. Whereas at District level we find Principal District judge as Chairman of District legal service authority and members being District collector and superintendent of police. Further, members of non-governmental organizations and senior advocates are members of this committee. As result of this kind of conglomeration, disputes can be sorted out and remedied in a very conducive atmosphere

especially in a quick and inexpensive manner. However, in a reality there is hardly any Sub-divisional Revenue or police officers who are aware of these provisions. Though very few judicial officers are aware of this kind arrangement they hardly took any take initiative in this regard.

Thus the cursory look at kind of services LSA offers and to whom it offers, there shall be no objection any one whatsoever. However, the problem is with quality of services. In order to render legal services as defined under the Act, legal services authority has to necessarily engage lawyers with requisite skills and knowledge, but no able lawyer is coming forward to render quality services. Added to this due to poor knowledge and legal skills of young law graduates which is primarily due incompetent legal education standards, poor and needy are not getting competent free legal service authority despite structured mechanism and able machinery. It is apt mention a word about Legal literacy camps. This Act mandates conducting of legal literacy camps so to educate masses about law and its utilization. However, legal literacy camps are conducted more for the sake of statistics in many parts of the state. The reason can't solely be attributed authorities as for them legal service is only an additional duty as their main job is some other, which is tough, complex and circumscribed with targets. As a result of all these factors legal aid and legal literacy camps are not been happen in their true spirit.

Under the Act any person who wishes to receive legal service and eligible to receive legal service can give a written application before legal service committee. It is important to note that such legal assistance sought can be pertaining to pending litigation or pre-litigation. This application can be made before any legal service authority i.e., Taluk legal service committee or District legal service committee. On receipt of such application legal service committees shall refer to such matter to Lok-adalat which has jurisdiction to try the case and resolve the matter. The Taluk Legal service committee or District legal service committee can create as many Lok-Adalath Benches for the disposal of applications. In this connection it is pertinent to mention the novelty of this kind of resolution mechanism is that there is no court-fee, flexible and simplified procedure to resolve the dispute, the LoK-Adalat bench has powers of civil court so as to summon any person to attend and give evidence and produce documents.

More importantly, the award passed by Lok-adalath is as good as decree passed by civil court and as such it can be enforced like a civil court decree.

The novel features envisaged under this resolution structure are no doubt laudable. However, in reality there are very very few cases where we find resolution of disputes by way of pre-litigation method. In this connection it must also be stated that special and peculiar skills are required for the persons who are holding Lok-Aadlat benches. But manning of this bodies by judges and lawyers who are engaged with some tasks, for which they are not primarily meant, resulting them failure to give undivided and focused attention to the Lok-Adalath benches. Moreover, skills required for resolving disputes in regular court in comparison with Lok-Adalath are completely different though stream of knowledge may be same. As result, of this variation if not contradiction of skills between person holding Lok-Adalath bench and Judge coupled with other administrative inconvenience Lok-Adalat are failing to resolve disputes amicably except acting as machines to record comprises occurred elsewhere.

Lok Adalat System in India: ADR is a suitable alternative mechanism to resolve disputes in place of litigation. The Committee for implementing Legal Aid Schemes (CILAS) constituted by the Ministry of Law and Justice, Govt. of India in 1980 recommended the establishment of Lok Adalat. Consequently, Lok Adalat movement is accepted to be one of the components. It has assumed great importance and attained a statutory recognition under the Legal Services Authorities Act, 1987, which was enforced w.e.f. November 9, 1995. They are not akin to regularly constituted courts but they supplement the existing justice administration system. They provide adequate and effective means of disputes resolution at reasonable costs. Special status has been assigned to the Lok Adalat under the Legal Services Authorities Act which provides statutory base to such Lok Adalat, which are regularly organized primarily by the State Legal Aid and Advice Boards with the help of District Legal Aid and Advice Committees. Some of the Lok Adalats are being sponsored by the various voluntary legal aid agencies. The whole emphasis in the Lok Adalat proceedings is on conciliation rather than adjudication. A Lok Adalat has jurisdiction to determine and arrive at a compromise or settlement between the parties to a dispute in respect of any matter falling within the jurisdiction of any civil, criminal, or revenue courts or of any tribunal constituted

under any law for the time being in force for the area for which the Lok Adalat is being organized. In a case where a pending action or proceeding is referred to Lok Adalat by a Joint Application of the parties, the Lok Adalat is to proceed to dispose of that proceeding or matter and arrive at compromise or settle the disputes between the parties. In doing so, the Lok Adalat must be guided by legal principles and principles of justice, equity and fair play. In a case where no compromise or settlement can be arrived at, it is open to the parties to the proceeding, to request for transfer of their proceedings before the courts at a later stage from which it was transferred. Every award of the Lok Adalat is a civil decree and every award made by the Lok Adalat is deemed to be final and binding on all parties to the proceedings or disputes. No appeal lies to any court against such an award. The Lok Adalat is empowered to exercise substantive powers vested in a civil court under the Code of Civil Procedure while trying a suit or proceeding.

CHAPTER II

CYBER JURISPRUDENCE

Origin and Growth of Cyber Space

The origin of the modern Internet dates back to 1968 in the aftermath of the world war II where the supremacy among Nations hinged upon innovation and technical superiority in all fronts including space.. In the backdrop of cold war, UK and USA on both sides of Atlantic attempted to construct a large- scale network that could provide safe transmission of information. The telephone network, which allows point-to-point information, was considered unsafe and vulnerable to physical networks. Unlike the fixed pathways of the telephone network the attempt was to create a network of computers, which will send information as “packets” and these packets “bounced” over these networks. Even if a particular pathway is destroyed the “packets” will search for alternate pathways and will reach their desired destinations safely.

This experiment was a collaboration of the military establishment and some leading Universities and called as the Advanced Research Projects

Agency (ARPANET). The initial experiments of this technology were based on incompatible operating systems of the various universities and the military establishment. This could be possible only with the confidentiality and trust among the collaborating partners – a popular concept among the net called as “netiquette”- based on appropriate social behavior of using Internet. In due course of time Universities established their own sister network called as the “NSFnet” with the help of the National Foundation of Science, USA for using the technology for research and educational purpose. The students involved in the project took this technology along with them to their new employers heralding the corporate use of this technology.

In 1972 the first electronic mail programme was designed which was distributed in the ARPANET and a year later the mail became international with connections established with

UK and Norway. Soon a commercial network TELNET emerged online in 1973. These ventures were backed by software developments of which Transmission Control Programme (TCP) was a breakthrough. In 1984 'Domain name servers came into existence.

In 1989, the 'World Wide Web' – a protocol in Internet made its appearance raising hopes of wider use of this technology. In 1993 Hyper Text Transfer Protocol (HTTP) emerged along with software back up in the form of HTML- Hyper Text Marked Language. In 1993, software called 'Mosaic' was invented which is the first web browser. Mosaic and its successors Netscape, Internet Explorer heralded the Internet Revolution – the phase of human history where technology could become part of everyone directly or indirectly. This allowed mind-boggling amount of information to be stored, vested and exchanged and was aided by the development of the search engines like Google, Altavista, Infoseek and others.

Internet today is a technology used by millions of surfers connecting millions of computer worldwide; the rate of growth of this technology is quantitatively and qualitatively different than its predecessors like telephone, radio or television. Internet is a single platform where all the others can converge - information; speech and visual combined as digital information. Unlike the other technologies often referred as 'push technologies' where the process is one-way from those who produce to those who consume, users based on mutual trust and conditioning will also change in the various stages of the history of Internet. The contemporary understanding of this 'free space of the commons' is often debated on themes like 'cyber terrorism' and 'cyber crime' marking the new jurisprudence of 'cyber laws' and the great debate of 'freedom vs. regulation'.

Interface of Technology and Law

Human history in a sense is a story of technology from flint stones to that of genetic clones. The tribulations and triumph of such a journey, which will continue in the future, has one aspect, constant at its core – "the laws that govern them". Technology - if defined as 'set of refined processes' resulting in 'various application of daily use' in our lives seems to be harmless marvel in its basic construct and explanation. A deeper understanding and implications of 'technology' could lead us to other scary construct. Leading such a thought is

the ‘nuclear technology’ perfected to the core and yet a debate on how to ‘deconstruct’ the same. After 9/11 incident the focus of debate is on ‘Bio-war fare technology’. Hence the inevitable intervention of ‘Law’ on shaping, banning and encouraging ‘technology’ remains a constant. ‘Law’ as instrument of ‘governance of human behavior’ closely shadows ‘Technology’. To understand a broader perspective of the interface of ‘technology and law’ the following construct by Professor Harold A. Linstone of Portland University of Oregon⁵ :

“The pace of growth of technology and governance are not compatible raising a series of serious problems. The combination of explosive population growth and rapidly evolving technology is in effect shrinking the earth to a global village. The earth’s 5.77 billion in 1996 may swell to 9.4 billion by 2050. At the same time the widening gap between technological and organizational rates of change is producing a growing mismatch: we are approaching the new era with 21st century technologies, 20th century governance processes, and 19th century governance structures. Some view this mismatch as one between physical and social technologies. The combination of shortsightedness, irresponsibility, gullibility, human greed, and fear of change is impeding homeostatic evolution of a knowledge society. Demographics are playing a significant role in the widening gap in the developed world. Technology is serving, molding and insulating the elite, while diverting or narcotizing the masses with entertainment, and marginalizing the poor. The uncontrolled exacerbation of such patterns portends serious societal tensions and fractures, accompanies by governance dysfunction and systematic instability. These effects will impact both advanced and developing countries. It is by no means assured that democracy can survive the resulting turbulence and resist the lure of say, a majority based “friendly fascism”.

The urge to minimize the yawning technology-organization chasm suggests two possibilities:

⁵ *Extracted from Technology and Governance by Harold A Linstone, Volume 54, Issue 1, Pages 1-123 (January 1997)*

Path 1- SLOWING DOWN THE TECHNOLOGICAL PACE OF CHANGE

- This scenario is unthinkable for most people, particularly scientists and engineers. The technological pace appears unstoppable. A new Dark Age is as inconceivable as it must have seemed to the forecasters in the Golden Age of Imperial Rome.

Path 2 - ACCELERATING THE ORGANIZATION PACE OF CHANGE - There is little question that information, communication and transportation technologies permit dramatic and profound changes in organizations and governance. Industry is already showing us new forms of organization, such as downsized, “virtual”, decentralized and global corporations. Taking just one example, we see today that Information Technology makes possible as never before SIMULTANEOUS localization and globalization, fragmentation and integration, decentralization and centralization, in many societal aspects. Organizational innovation based on coordination-intensive structures is one consequence.

Rethinking Governance

Coordination-intensive structures can help to develop effective new arrangements. There is a growing recognition that governance is possible without formal government. Social institutions and informal organizations can be created to deal collectively with specific issues, developing rules of the game and settling conflicts. There are physical and biological systems that lie outside the jurisdiction of any one national government, such as Antarctica, the oceans, the electromagnetic spectrum, and the global climate system. Such “International commons” may be managed by regional or global forms of governance. A characteristic of this restructuring is maximum flexibility and coordination: an aim is UNITY IN DIVERSITY. An overhaul and streamlining of governance is an essential task in adapting the society to the fluid information-intensive environment of the 21st century. Technology now offers us individually and collectively a remarkably powerful prosthesis of human brain. It makes “unity in diversity” and well-being in the global village realizable objectives, but their achievement demands innovative leadership and unprecedented institutional flexibility.”

The above excerpt will give one interesting perspective on the interface of technology and—governance and the link to laws, which are instruments of regulating, and directing to such desired goals. The subject of ‘technology’ has been audited from various perspectives—

appropriate technology vs. technology for the chosen few, dangerous technologies vs. useful ones, technology as a trading tool in the division of haves and have-nots vs. people oriented and people owned technologies- the debate goes on. Information Technology has added a new dimension of a new matrix of haves and have-nots combined with know and know-nots often termed as digital divide.

These debates underline one important, inevitable inescapable fact that technology is there to stay and most importantly method and manner of its regulation through law will be the crux of the issue. Technology and Law in the last few decades dominates the substantive and procedural part of the evolution of legal system. Technology impacts Law and in turn Law shapes up the contours of future technologies and their appropriate use in the society.

Defining Cyber Laws

The term Cyber Laws has gained a wide recognition often spoke about in seminars, workshops and symposiums. Literature has been published using words Cyber Laws, Law of the Internet, Law relating to Computers. In Academic settings, there are Centres for Computer and the Law, Cyber Law and research and so for and so forth. The important question is whether these terms are used to denote a specific branch of study, or just a popular usage without coming to grips with what exactly is this branch of law, is it still evolving or is it a generic usage of dealing with varied existing laws on a glamorous pre-fix or suffix?

The fact is that it has gained currency and popularity in usage, yet an uncharted territory without clear consensus on the boundaries, overlaps and interfaces it has with conventional branches of law. To understand this first one needs to question what exactly necessities the segregation of a separate branch of study –the cyber laws? This will lead us to the question if computers and Internet are mere technological processes like many in the history of technologies, what is the need of segregating a special branch of law? It is a fact that in the evolution of technologies, some have impacted the human life with their reach and applications leading to new sets of laws like - Press laws, broadcasting laws, and telecommunication laws. In these developments the laws enacted took into account how

these processes affected human behavior and evolved the rules of the game where the various stakeholders will benefit by them and also the methods by which conflicts can be resolved. It is in the same breadth the need for comprehensive sets of Laws called as those who support such a branch advocate 'cyber laws'. The votaries also argue that unlike other technologies like radio, telephone or television the impact of the Internet is phenomenal not just in numbers but the complexity in which it has impacted the society and human behavior.

One such argument also rests on the fundamental challenge to the way hitherto functioning of the legal systems. Various legal systems in the world finally operate through the prism of territory. It is thus referred as the 'law of the land'. The legal system operates in the matrix of the sovereignty; a customary norm evolved in such territory and has finality about them decided by the justice delivery system accepted as part of the constitution of the country. In this context the breakthrough technologies of the past are relatively easier to regulate and operated on national and international boundaries. In the case of the Cyber space, the fundamental concept itself is one that of a character of international presence and not distinguishable as national and international operations. The underlying utility and its construct itself such that it has to be global to be called as cyber space and at the same time the challenge is to regulate on the basis of the 'law of the land'. It is a catch 22 situation where one wants keep the cake and eat it too.

In such scenario it can be concluded that the branch of "cyber laws" is an evolving one which interfaces with all the constitutional provisions, various statutes of other traditional branches of law, various other cases involving individuals, corporates and institutions who transact through the 'Internet' using the emerging technology of hardware and software. Such a sketch will include interfacing technology processes like telecom, Internet services, educational services, cable & broadcasting services, media services, regulatory services, law & order agencies, intelligence services, entertainment services, health services, financial services, judicial services and others which may become part of this future revolution. In short it encompasses all services and players of such services who use and consume 'internet'.

Having widened the scope of subject matter of “cyber laws” it is essential to concentrate on core issues in the immediate vicinity of its operation. Such core areas of focus can be grouped as:

- (a) Jurisdiction in cyberspace
- (b) Contracts in cyber age
- (c) Intellectual Property Rights regime in cyber space
- (d) E-commerce & Taxation issues in cyber space and
- (e) Cyber Crimes.

There is no hard and fast rule of the above demarcation or chronology of its importance but just an entry point to cover some areas due to the importance based on the current usage of Internet in certain focused areas and keeping in view of this short term course and its time frame in tune with the syllabi prepared. Learners are encouraged to go beyond this coverage and specialize an area of their choice of this expanding field of study and its uncharted territory and legal issues involved in them.

The Internet Corporation for Assigned Names and Numbers (ICANN)

Internet governance in the world in terms of namespaces, numerical spaces, stability, security and management of databases is carried out by the non-profit corporation called ‘The Internet Corporation for Assigned Names and Numbers called as ICANN. ICANN got incorporated on September 30th 1998 at California, US and currently headquartered at the Los Angeles area of Playa Vista. It was originally operating from Marina Del Rey located with the University of Southern California Information Sciences Institute.

Historical evolution of ICANN

ICANN today is an offshoot of the Advanced Research Projects Agency Network (ARPANET) which was founded by Advanced Research Projects Agency (ARPA) of the Defence Department of US. The ARPANET was developed by Jon Pastel at University of California, Los Angeles and later shifted to University of Southern California – Information Sciences Institute (ISI). An organization named Internet Assigned Numbers Authority (IANA) was responsible for these operations. Since the formation of ARPANET in 1960’s

the exponential growth of the technical aspects and user base of Internet, the US Department of Commerce contemplated a new structure to regulate and advance the process of internet operations and issued a green paper which received a huge response. On deliberations of the various inputs from public comment, the National Telecommunications and Information Administration (NTIA) proposed the new structure of ICANN (Internet Corporation of Assigned Names and Numbers) a private not for profit corporation to spear head the Internet governance.

Post formation of ICANN, IANA served as the intermediary between ICANN and the National Telecommunications and Information Administration (NTIA) of the Department of Commerce of United States of America. The oversight function of IANA ended on October 1 2016 transforming ICANN fully into a global multistakeholder organization. In its evolution since 1998, ICANN apart from governing the Global Domain Name System also was responsible for the policy formulation and implementation of the generic top level domains known as TLDs along with the operation of the root name servers. ICANN technically is responsible for the maintenance of the Central Internet Address pools and Domain Name System (DNS) root zone. The corporation also is responsible of the governance of the Internet Protocol (IP) addresses of IPv4 and IPv6. Also additionally it manages the off shoot of regional Internet registries and Internet Protocol identifiers. ICANN is evolving as a major multi-stakeholder organization connecting the users, technical service providers, Governmental policy wonks and International organizations. ICANN as a private entity was incorporated by an Entrepreneur -Philonthropist Esther Dyson who also served as its first Chair Woman with Jon Pastel as its first Chief Technology Officer.

Mandate of ICANN

ICANN registered as a non profit corporation under the California law of Non Profit Public Benefit Corporation has a 16 member board of Directors. Among these eight members are selected by the nominating Committee (NOMCOM) which is again composed with elected members from various constituencies of ICANN. A six member representation goes to the Supporting Organisations (SOs and sub groups), with a President and CEO. The Supporting organizations under the current dispensation comprises of

- a) The Generic Names Supporting Organization (GNSO),
- b) Country Code Names Supporting Organization (ccNSO) and
- c) Address Supporting Organization (ASO).

The GNSO is mandated with the policy formulation for generic top-level domains (gTLDs), where as the ccNSO deals with the country -code top level domains known as ccTLDs and the ASO mandated with the policy formulation of the Internet Protocol(IP) addresses.

Apart from the three supporting organizations, ICANN has other constituencies known as the Governmental Advisory Committee (GAC) and At-Large Advisory Committee (ALAC), Nominating Committee (NOMCOM), Root Server System Advisory Committee, Security and Stability Advisory Committee (SSAC) and Technilcal Advisory Group (TLG)

The GAC comprises of the representatives of National Governments numbering 111 countries and 108 UN members, whereas ALAC is an elected body from five regions of Asia-Pacific, Europe, Africa, North America and Latin America including Caribbean countries. They are structured as Regional At Large Organization (RALOs) which has internet societies and individual users as its base. The Root Server System Advisory Committee advices on the operations of the DNS root server system, whereas the Security and stability Advisory Committee deals with the operation of the DNS root server system and the Security and Stability Advisory Committee is mandated to deal the security issues. The Technical Liaison Group (TLG) deals with international organisations relating to internet operations.

Uniform Domain Name Dispute Resolution Policy (UDRP)⁶

The Uniform Domain Name Dispute Resolution Policy (the UDRP Policy) sets out the legal framework for the resolution of disputes between a domain name registrant and a third party (i.e., a party other than the registrar) over the abusive registration and use of an Internet

⁶ (<https://www.wipo.int/amc/en/domains/guide/>- browsed 3/10/2019)

domain name in the generic top level domains or gTLDs (e.g., .biz, .com, .info, .mobi, .name, .net, .org), and those country code top level domains or ccTLDs that have adopted the UDRP Policy on a voluntary basis. At its meetings on August 25 and 26, 1999 in Santiago, Chile, the ICANN Board of Directors adopted the UDRP Policy, based largely on the recommendations contained in the Report of the WIPO Internet Domain Name Process, as well as comments submitted by registrars and other interested parties. All ICANN-accredited registrars that are authorized to register names in the gTLDs and the ccTLDs that have adopted the Policy have agreed to abide by and implement it for those domains. Any person or entity wishing to register a domain name in the gTLDs and ccTLDs in question is required to consent to the terms and conditions of the UDRP Policy.

On October 24, 1999, the ICANN Board adopted a set of Rules for Uniform Domain Name Dispute Resolution Policy (the UDRP Rules) setting out the procedures and other requirements for each stage of the dispute resolution administrative procedure. The procedure is administered by dispute resolution service providers accredited by ICANN. The WIPO Arbitration and Mediation Center (WIPO Center) is such a dispute resolution service provider.

The WIPO Center acted as technical advisors to the ICANN drafting committee charged with finalizing the UDRP Policy and Rules. It has developed WIPO Supplemental Rules for Uniform Domain Name Dispute Resolution Policy which supplement the UDRP Policy and Rules.

INDRP⁷

The dispute resolution policy of the country code TLD (ccTLD) for India is governed by .IN Dispute resolution Policy (INDRP) and governed by the National Internet Exchange of India (NIXI). Though INDRP is based on UDRP it is different in these aspects:

- (i) The domain name must be similar to the complainant's trademark;
- (ii) The registrant must not have rights or legitimate interests in respect of the domain name;

⁷ <https://www.trademarksandbrandsonline.com/article/domain-name-dispute-resolution-an-indian-perspective-browsed-on-3/10/2019>

(iii) The domain name must be registered and/or used in bad faith.

It must be kept in mind that the object of the INDRP is to counter cybersquatting, for which it is imperative that a complainant satisfies all three elements while seeking a remedy under the INDRP. Therefore, it is vital that the elements are interpreted conjunctively.

The second difference is that under the UDRP, a complainant must prove that the domain name is registered and being used in bad faith. However, under the INDRP by virtue of the disjunctive requirement of the phrase “or”, the complainant is required to prove that the domain name has been registered or is being used in bad faith. The significance of this is that if a complainant proves that the domain name was registered but not used in bad faith or vice-versa, the complainant will be unable to obtain a remedy under the UDRP, but can do so under the INDRP.

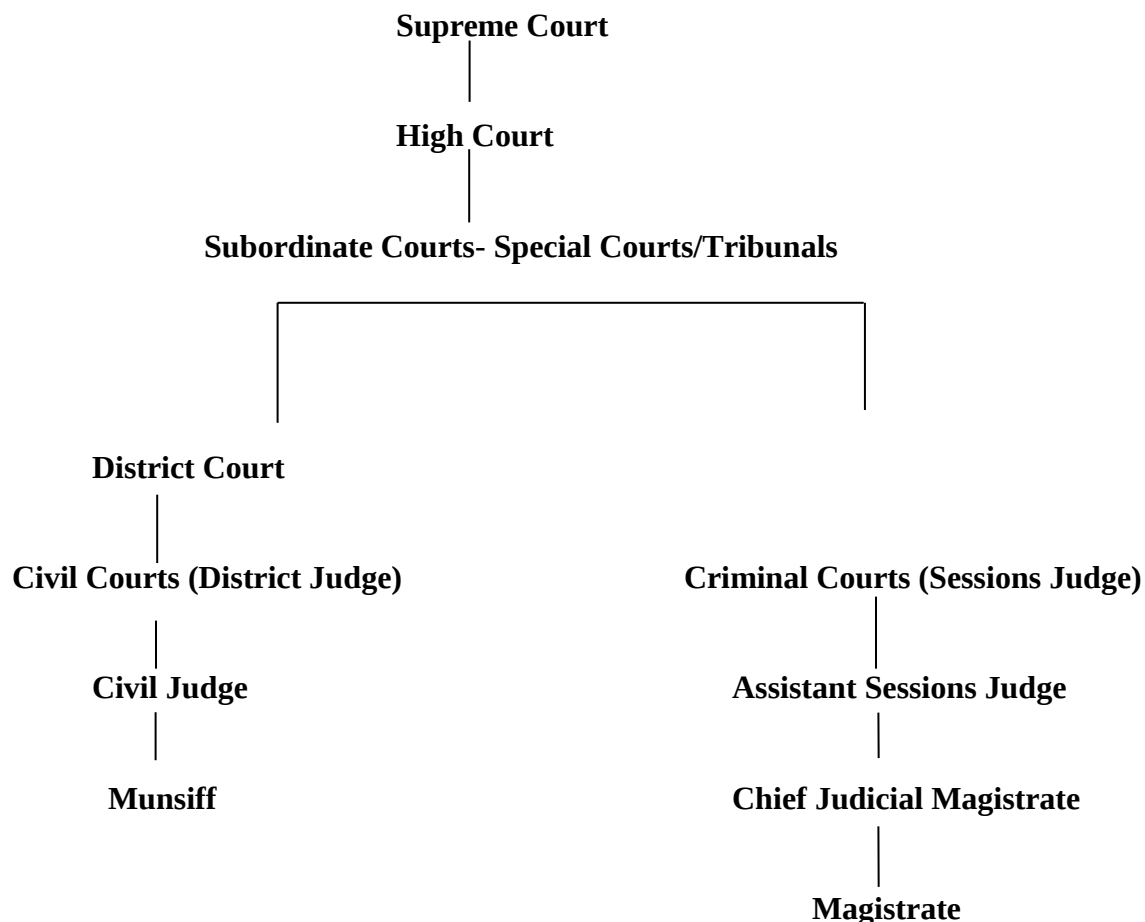
Jurisdiction in Cyber Space

Concept of Jurisdiction

‘Jurisdiction’ is the concept whereby in any legal system, the power to hear or determine a case is vested in an appropriate court. The justice delivery system of any legal system operates through structures called ‘courts’ and the starting point of such functionality is that of ‘jurisdiction’ by which the verdict of the court becomes validated as a proper ‘judgment’ to be carried in accordance with law. The system

of ‘Courts of Law’ needs to be understood to understand the principle of jurisdiction. Statutes create the institutions of Courts, which clothes them with appropriate power and jurisdiction. The Courts adjudicate and administer justice based on such powers conferred on them. In Indian context, the Constitution has provided for the creation of Supreme Court - the apex court for the country and a High Court in each State. Such institutions are conferred with original and appellate jurisdiction to adjudicate on any issue arising between citizen and the State, State and other States or between a State and the Union. The Courts are structured as civil and criminal on the basis of Jurisdiction, territory and monetary parameters. The Criminal Procedure Code provides for the creation of the Magistrate Courts - First Class, Second Class - above them Sessions Court in the district level. These courts have specific

powers of punishment. These courts are subordinate to the High Court of the State. The State Laws and Civil Procedure Code or Criminal Procedure Code will determine the setting up of the subordinate courts of Munisifs Court, the Sub-Divisional Court, and the District Court. Here again the pecuniary and territorial jurisdiction will vary based on the hierarchy of the courts. Apart from these civil and criminal court set up there can be special courts for specific categories of adjudication like the Sales Tax Tribunals, Central Administrative Tribunal, State Administrative Tribunal, Motor Vehicles Compensation Tribunal and like others. The High Courts and Supreme Court have civil, criminal and writ jurisdiction. The President with the advice of the council of ministers makes the appointments to the higher judiciary.



In this system the Civil Procedure Code determines the jurisdiction of the various court structures based on the nature of the claim, value of the subject matter and the territorial limits where the dispute arose. Such jurisdiction is clearly spelled out by specific laws and also expressly prohibits jurisdictions by specific laws. One such example is that of the Income Tax Tribunal are the only forums to decide about the disputes of income tax and hence special jurisdiction in that regard. The High Court of the State assumes jurisdiction over the entire State and the hierarchy of courts like the District Sessions Court in criminal side and the Civil Courts – District Judge on the civil side and the lower courts of Munsiff and Chief Judicial magistrate in respective civil and criminal sides will exercise jurisdiction based on the territories. The Courts also exercise jurisdiction based on the value of the suit decided by the Suits Valuation Act.

On the special courts or the tribunals, there could be formation new tribunals where the pending cases in the regular courts will be transferred if they are found fit to be adjudicated under the tribunal. These tribunals have judges and also subject specialists designated as ‘judges’ and are not bound by the procedures and technical requirements of the regular courts. On the criminal side, the jurisdiction operates on the basis of the authority and territorial demarcation conferred on the various courts by the Criminal Procedure Code. Certain judgments like the death penalty have to be confirmed by the High Court if passed by the Sessions court.

Within a country the legal system operates through the process of jurisdiction, which can be classified as

- (a) Pecuniary jurisdiction
- (b) Subject matter jurisdiction
- (c) Territorial matter jurisdiction

Here the pecuniary jurisdiction denotes to the monetary limits involved in the dispute. Here the jurisdiction operates on a set monetary limit of the value of dispute and accordingly courts have to be approached. If the dispute is for a set amount the court to be approached will be the district courts and above such limits it will be the High Court of the State.

The subject matter jurisdiction specifies the nature of the jurisdiction based on the type of disputes that are involved. A company winding up procedure can be dealt only in the High Court and not a district court is an example. A family court will be the place for initiating a dispute on divorce.

The territorial matter of jurisdiction involves the geographical factor where the dispute can be brought before a particular type of court.

Such criteria is based on the hierarchy of court structures of a legal system clothing power based on territory in its initial stages of contention of a dispute with rights of appeal gradually moving upwards towards the apex disputes to approach appropriate courts. Even if a court by oversight or wrong interpretation admits a contention to be dealt by the court there are provisions to challenge the same and render such a verdict null and void based on the principle of 'jurisdiction'? In essence immaterial of the merits of a case, the process of resolving the dispute and enforcing the same will depend on the correct 'jurisdiction'.

Having explained the concept of jurisdiction, in the context of 'cyber space' the territorial jurisdiction assumes the importance in terms of challenges posed by Internet operations. Such jurisdiction is determined by the relevant civil procedure code where various possibilities depending the subject matter in which the issue of 'jurisdiction' has to be decided. For example if it is a property issue, what jurisdiction will apply will be part of the civil procedure code enumerating the various options of courts to be approached based on the complexity of the property involved in terms of its location. Similarly the issue of 'jurisdiction' of a contract drawn can be decided on the options of: (a). particular choice of legal action decided by the parties themselves or (b). based on the principles of 'cause of action' or where the plaintiff resides.

Here 'cause of action' means of a bundle of rights to the plaintiff to prove the place where the 'cause of action' arose for him or her to seek judicial remedy on which the courts can assume jurisdiction. On the other hand if the plaintiff proves no such fact however partial, the defendant will succeed in the judgment on the grounds of jurisdiction of such effort by the plaintiff. Such 'cause of action' to be proved is based on the facts of the individual case.

Here again such concept of 'jurisdiction' assumes greater importance on the fate of the case in the legal system like United States where each state has its own sets of laws itself complicating the efforts of the plaintiff and whereas Indian context it is less cumbersome as the laws are uniform through the length and breadth of the country and only issue being approaching the appropriate courts. The issue of jurisdiction will assume complex proportions in case of multiple parties as part of the plaintiff with multiple defendants and the dispute involving different places of operations.

Here the courts will have to look carefully to assume jurisdiction or to abandon the same.

Uniform and Varied Jurisdiction

In Indian context, the jurisdiction issue is uniform as the statutes are enacted for the entire country and for all states. But in countries like United States of America which is also a federal set up like India, each state has its own laws and hence jurisdiction assumes importance. In situation of conflict on the issue of jurisdiction, United States Courts apply various principles based on the claim of property, tort, contract etc. In case of the tort cases the courts apply the principle of *lex loci delicti* or the "the law of the place of the wrong". In case of the claim for a property - the jurisdiction issue is approached based on the first restatement principle of *lex situs* - "the law of the physical location" later enlarged by the principle of second restatement of law in 1971 – "when faced with the choice between jurisdictions court should apply the law of the jurisdiction with the significant relationship to the litigation." On contractual claims the courts apply the principle of "minimum contacts" for corporations as well as individuals. This principle is based on the obligations arising out fair play and substantial justice on the transaction and its relationship to the forum state. Thus the issue of jurisdiction has varied interpretations and expansions based on developments in industrial transactions affected by the technological revolution.

Internet Jurisdiction

In the context of internet or cyber transactions, jurisdictions pose a major challenge in interpretations in countries like United States where there is a conflict of laws as it is not uniform throughout the country and States having their own laws. As we already saw

“Internet” and transactions happening through the Internet has multiple parties residing in various territories. Let us take an example of simple transaction in Internet of ordering a book. A orders a book advertised for a price X in a website B. Y who resides in another country C operates the Website. The website is launched through a server located in country D operated by Z. A finds his credit card statement showing money paid but did not receive the book and now decides to take action. In this case Y who operates the site is in a neighboring country and implicates the server provider Z for faulty configuration, which has caused the problem to A. How, does A proceed to sue for his losses? Or in another example the Police in Hyderabad come across objectionable material in a website which is launched by someone in Pakistan but hoisted from Italy through a server? Under which jurisdiction can the offence be brought?

Those who argue that jurisdiction as a major issue in the Cyber Space and Internet argue that the traditional method of assessing such jurisdiction is complicated in Internet transactions. In a traditional contract, the jurisdiction is arrived at 1. The place the defendant resides and 2. Where the cause of action arose? In illustrations as above they argue it is complex to understand jurisdiction. Especially for those who run in commerce through Internet may land up in different jurisdictions when sued by the consumers around the world. On the other hand it is also argued that the hapless consumer will also be left without any defense in cases where the service providers and intermediaries in cyberspace are spread out in various jurisdictions.

Against this argument, many jurists and cyber law experts argue that the complications of jurisdictions are blown out of proportions and can be resolved by simpler yardsticks of existing principles of jurisdiction. They argue that issue of jurisdiction is either mistakenly or mischievously exaggerated, as whatever transactions are taking place it takes place on physical locations with physical sellers and buyers and only the links are more in such transactions. They argue that firstly, most complications are avoided if there are explicit provisions among the contracting parties on their choice of law governing such contracts; secondly, in cases of contracts which are silent in respect of the choice of the law, the courts

have come to grips with the situation and thus the intent, purpose and other factors of the websites will decide the jurisdiction rather than anywhere or everywhere jurisdiction phobia.

Countering this others argue that it is finally left to the pattern of judgments of the courts which will decide the issue of jurisdiction where the private international law cannot play any meaningful and constructive role. In this background the international efforts of jurisdiction assumes significance in cyberspace, which will be dealt in the subsequent modules.

Jurisdiction - Indian Context

As discussed earlier the jurisdiction of Civil Courts in India is based on pecuniary, subject matter and territorial aspects where the pecuniary aspect is based on the valuation of the dispute in terms of money, subject matter deals with specified disputes allocated to specified courts and territorial aspect is based on the 'residence' and 'cause of action' but again subject to the pecuniary and subject matter parameters of the dispute to be adjudicated. In this context due to the unitary and uniform structure of laws throughout the country one can easily dismiss the complexity of Internet Jurisdiction issues as it is dealt in United States. However, Internet being a global phenomenon the jurisdiction issues of those who reside outside India and vice versa of those who reside in India will assume importance in case of adjudication and effectiveness of the same.

Let us look at some important provisions in this regard to understand the Jurisdiction issues and its operation in the Indian legal system:

1. S.13 of Civil Procedure Code (CPC) - this section deals on foreign judgments-

A foreign judgment shall be conclusive as to any matter thereby directly adjudicated upon between the same parties or between parties under whom they or any of them claim litigating under the same title except-

- a. Where it has been pronounced by a court of competent jurisdiction;
- b. Where it has been given on the merits of the case;

- c. Where it appears on the face of the proceedings to be founded on an incorrect view of international law or a refusal to recognize the law of India in cases in which such law is applicable;
- d. Where proceedings in which the judgment was obtained are opposed to the natural justice;
- e. Where it has been obtained by fraud;
- f. Where it sustains a claim founded on a breach of any law in force in India.

By these provisions it is implied that foreign judgments are binding if the above exceptions are taken care in the adjudication. Here again any explicit acceptance of the jurisdiction of any foreign court by an Indian citizen or a corporation is bound by that as the individual or corporation has taken.

Jurisdiction by Consent

If the contracting parties consent specifically to have a jurisdiction of a particular country, it would be binding on the parties and cannot later turn the argument that the court has no jurisdiction on general grounds. Connected to this is the general principle that the court cannot pass an ex- parte decree against a party who did not appear or contest in such litigation. This often leads to the notion that mere non-appearance will allow the defendant to get away with the proceedings. But there are various instances where Indian Courts have interpreted S 13(d) of CPC to uphold natural justice and thus mere procedural loopholes cannot be taken as excuse for violation of substantial aspects of natural justice to let the offender to get away and has enforced jurisdiction in such cases.

Added to this S 13 CPC states that a judgment of a foreign court is in violation of the Indian Law it cannot be sustained, in substance it can be stated that any judgment of the foreign court on an Indian citizen if it satisfies S 13 of the CPC can be upheld in Indian Courts. Such an analysis leads to the conclusion that any legal transaction carried out in Internet has the potential of litigation in the country where such services are provided and are subject to the

legal regime of such country. It can take effect in Indian jurisdiction as long as they meet the requirements stipulated in S 13 of the CPC.

On the flip side, of the jurisdiction of the Indian Courts over Foreign residents or citizens again, can be dealt under the section 19 of the CPC. It is understood that in cyber transactions the damage or injury is caused to the movable property. Here under S 19 of CPC, allows for filing a suit for the compensation of the wrong done to the person or to the movable property. Such a suit is instituted either at the place of residence or the place of business activity of the defendant or at the place of the wrong committed. The specific clause of such suit and its jurisdictions is spelled out in S 20 of CPC, which is as follows:

20. Other suits to be instituted where the defendant resides or cause of action arises: -

Subject to the limitations aforesaid, every suit shall be instituted in a Court within the local limits of whose jurisdiction –

- a) The defendant, or each of the defendants where there are more than one, at the time of the commencement of the suit, actually and voluntarily resides, or carries on business, or personally works for gain; or
- b) Any of the defendants, where there are more than one, at the time of the commencement of the suit, actually and voluntarily resides, or carries on business, or personally works for gain, provided that in such case either the leave of the Court is given, or the defendants who do not reside, or carry on business, or personally work for gain, as aforesaid, acquiesce in such institution; or
- c) Where the cause of action, wholly or in part, arises.

In interpreting the above three components of the section, the first and second components are much clearer and in case of the Internet specially, the third component of the ‘cause of action’ needs to be analyzed. A cause of action whether wholly or partly will determine the validity of the suit under s 20 (c) of the Code of Civil Procedure. If interpreted the following points will emerge:

1. Cause of action as a complete bundle of material facts for the plaintiff to institute a suit and failure to produce such facts will fail the case of the plaintiff.
2. Cause of action will constitute even the smallest fact constituting such an action and not necessarily any defined portion of the cause of action.
3. Cause of action will constitute the facts and circumstances of each case.
4. Cause of action if arises partially in different places, the plaintiff is vested with the choice to initiate and claim for jurisdiction
5. Cause of action based on the principle of some part of it arising in India will lead to the jurisdiction of Indian Courts over a non-resident foreigner.

We shall discuss the application of such jurisdictions in the chapter on Contracts in detail. Further to the above provisions such executions of decrees outside India assumes importance and the following sections have to be borne in mind:

S 45. Execution of decrees outside India. - So much of the foregoing sections of this Part as empowers a court to send a decree for execution to another Court shall be construed as empowering a Court in any State to send a decree for execution to any Court established by authority of the Central Government outside India to which the State Government has by notification in the Official Gazette declared this Section to apply.

S 44A. Execution of decrees passed by Courts in reciprocating territories.-

- (1) Where a certified copy of a decree of any of the superior Courts of any reciprocating territory has been filed in a District Court, the decree may be executed in India as it had been passed by the District Court.
- (2) Together with the certified copy of the decree shall be filed a certificate from such superior Court stating the extent, if any, to which the decree has been satisfied or adjusted and such certificate shall, for the purposes of proceedings under this section, be conclusive proof of the extent of such satisfaction or adjustment.
- (3) The provisions of S 47 shall as from the filing of the certified copy of the decree apply to the proceedings of a District Court shall refuse execution of any such decree, if it is shown to the satisfaction of the Court that the decree falls within any of the exceptions specified in clauses (a) to (f) of S 13.

Explanation 1 - 'Reciprocating Territory' means any country or territory outside India which the Central Government may by notification in the Official Gazette, declare to be a reciprocating territory for the purpose of this section; and 'Superior Courts' with reference to any such territory, means such courts as may be specified in the said notification.

Explanation 2 - 'Decree' with reference to a superior Court means any decree or judgment of such Court under which a sum of money is payable, not being a sum payable in respect of taxes or other charges of a like nature or in respect of a fine or other penalty, but shall in no case include an arbitration award, even if such an award is enforceable as a decree or judgment.

On the criminal side of jurisdiction the following sections are pertinent to analyze the implications of cyber crimes, which will be dealt in detail in the fourth module. The important sections to be kept in mind at this stage are:

1. Section 177 of Criminal Procedure Code: Ordinary place of inquiry and trial- Every offence shall ordinarily be inquired into and tried by a court whose local jurisdiction it was committed.
2. Section 178 of Criminal Procedure Code: Place of Inquiry or trial:
 - (a) When it is uncertain in which of several local areas an offence is committed, or
 - (b) Where an offence is committed partly in one local area and partly in another, or
 - (c) Where an offence is a continuing one, and continues to be committed in more local areas than one, or
 - (d) Where it consists of several acts done in several different local areas, it may be inquired into or tried by a Court having jurisdiction over any of such local areas.

3. Section 179 of Criminal Procedure Code: Offence triable where act is done or consequence ensues. - When an act is done by reason of anything, which has been done, and of a consequence, which has ensued, the offence may be inquired into and tried by a court within whose local jurisdiction, such thing has been done or such consequence has ensued.
4. Section 182. -Offence committed by letters. - (1) Any offence which includes cheating may, if the deception is practiced by means of letters or telecommunication messages, be inquired into or tried by any Court within whose local jurisdiction such letters or messages were sent or were received: and any offence of cheating and dishonestly inducing delivery of property may be inquired into or tried by a Court within whose local jurisdiction the property was delivered by the person deceived or was received by the accused person.

Jurisdiction and IT Act 2000

On the jurisdiction of the Internet or cyberspace IT Act of 2000 section 13 is of relevance. The sub-sections (3), (4) and (5) deal with the cause of action clause, which is of significance in Internet transactions to determine the jurisdiction.

- S 13(3) – Save as otherwise agreed to between the originator and the addressee, an electronic record is deemed to be dispatched at the place where the originator has his place of business, and is deemed to be received at the place where the addressee has his place of business.
- S 13(4) – The provisions of sub-section (2) shall apply notwithstanding that the place where the computer resource is located may be different from the place where the electronic record is deemed to have been received under the sub-section (3)
- S 13(5) - For the purposes of this section: -
 - a. If the originator or the addressee has more than one place of business, the principal place of business shall be the place of business;
 - b. If the originator or the addressee does not have a place of business, his usual place of residence shall be deemed to be the place of business;

- c. "Usual place of residence" in relation to a body corporate, means the place where it is registered."

Jurisdiction Issues in International Perspective

Interpreting these clauses it is abundantly clear that it is not mere jurisdiction the issue, the effect of such jurisdiction and enforcing the decrees needs reciprocal arrangements. Apart from this on the issue of arbitration in Internet, the Foreign Awards (Recognition and Enforcement) Act of 1961 based on the New York Convention of 1958, by India allows arbitration and recognition of foreign awards.

The issue of jurisdiction in international private law currently is addressed by the Hague Convention on jurisdiction.

The general framework for the convention is as follows.

1. Countries which sign the convention agree to follow a set of rules regarding jurisdiction for cross-border litigation. Nearly all civil and commercial litigation is included.
2. So long as these jurisdiction rules are followed, every country agrees to enforce nearly all of the member country judgments and injunctive orders, subject only to a narrow exception for judgments that are "manifestly incompatible with public policy," or to specific treaty exceptions, such as the one for certain antitrust claims.
3. A judgment in one country is enforced in all Hague convention member countries, even if the country has no connection to a particular dispute.
4. There are no requirements to harmonize national laws on any topic, except for jurisdiction rules, and save the narrow Article 28(f) public policy exception, there are no restrictions on the types of national laws that to be enforced.

5. All "business to business" choice of forum contracts are enforced under the convention. This is true even for non-negotiated mass-market contracts. Under the most recent drafts of the convention, many consumer transactions, such as the purchase of a work related airline ticket from a web site, the sale of software to a school or the sale of a book to a library, is defined as a business to business transaction, which means that vendors of goods or services or publishers can eliminate the right to sue or be sued in the country where a person lives, and often engage in extensive forum shopping for the rules most favorable to the seller or publisher.
6. There are currently 49 members of the Hague Conference, and it is growing. They include: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Chile, China, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Republic of Korea, Latvia, Luxembourg, Malta, Mexico, Monaco, Morocco, Netherlands, Norway, Peru, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Suriname, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay and Venezuela.

James Love of the CPT (Consumer Protection Technology) addresses certain issues on the efforts of the Hague Convention and the following excerpts are reproduced highlighting the salient features of the convention "negotiations for a new treaty that seeks to strengthen the global enforcement of private judgments and injunctive relief in commercial litigation. While the convention would clearly have some benefits, in terms of stricter enforcement of civil judgments, it would also greatly undermine national sovereignty and inflict far-reaching and profound harm on the public in a wide range of issues.

The treaty is called the Hague Convention on Jurisdiction and Foreign Judgments in Civil and Commercial Matters, and is being negotiated under the little known Hague Conference

on Private International Law. The treaty is complex and far reaching, but is effectively unknown to the general public.

The Consequences of Global Enforcement of Non Harmonized Laws

The early discussions on the current convention began in 1992, largely in the context of judgments where businesses would be the defendants, for disputes involving physical goods or traditional services. Only recently has there been recognition of the far-reaching consequences of using the treaty framework for addressing disputes involving the Internet, or litigation involving intellectual property claims or information in general.

The Internet issues deserve special attention. The treaty gives nearly every member country jurisdiction over anything that is published on or distributed over the Internet. If the treaty (as written) is widely adopted, it will cripple the Internet. The reason is fairly straightforward. The Hague framework begins with the notion that there will not be harmonization of substantive law, only harmonization of rules regarding jurisdiction and enforcement of laws. So it is a fundamental part of the Hague treaty that laws that are very different from each other will be enforced, across borders.

For example, under the treaty, different national laws concerning libel or slander will give rise to judgments and injunctions, as will different national laws regarding copyright, patents, trademarks, trade secrets, unsolicited email, unfair competition, comparative advertising, parallel imports of goods, and countless other items. As a consequence, people will find that activities that are legal where they live are considered illegal in a different country and that under the treaty, the foreign country will likely have jurisdiction, and their laws will be enforceable in all Hague member countries.

To be more concrete, note that under different national copyright laws, authors can liberally use quotations from other authors in some countries, but not in others. Software engineers can decompile or use other reverse engineering techniques to find out how to make software programs work together (be interoperable) in some countries, but not in others. In some countries school teachers can distribute newspaper stories and other copyrighted materials in

class rooms as a fair use, but such distribution would be illegal in other countries. Some countries allow the use of parody as an exception to copyright or trademark laws, while other countries do not. In some countries it is permissible to disparage products or publish comparative price advertisements, while in other countries it is not. In some countries it is permitted to publish leaked memorandums and documents that embarrass governments or corporations, but in other countries this would be considered a violation of copyright laws (as in the UK David Shayler case), or a wrongful disclosure of proprietary business information. Rap music that legally uses "sampling" of music under US law will violate certain European copyright regimes where this is illegal. In some countries a failure to obtain permission to hyper-link to a web page or use a meta-tag with the name of a business is considered an infringement of intellectual property, while in other countries it is not. This list of examples could go on and on.

There are fundamental problems with enforcing every country's national trademark laws on the Internet, because different firms sometimes claim the same mark in different countries, and what may be a generic term in one country is a proprietary mark in another country. These are important and difficult conflicts and it is useful for policy makers to seek solutions to these jurisdictional disputes, but a "solution" that simply enforces everyone's laws on everyone is really no solution at all.

In the patent area, the Hague convention would force European governments to begin enforcing judgments and injunctive relief from US software and business methods patents, even though software and business methods cannot be patented in many European countries. As the rest of the world is forced to pay for US software and business methods patents, they will enact their own anti-competitive and poorly managed software and business method patent systems, and US citizens will have to pay for those too.

The Internet related cases are the most obvious areas where the Hague Convention will cause problems, but hardly the only cases.

As noted above, under all current drafts of the convention, "business to business" choice of court clauses must be enforced, even those involving mass marketed non-negotiated contracts. In the Edinburgh drafts, business to business contracts are defined as everything that does not involve personal household use, and so every library, every university and school, and every work related purchase, will be considered business to business transactions, and even click on or shrink wrapped licenses with choice of court clauses must be honored. This is spelled out in Article 4 of the proposed Convention.

In an earlier attempt to negotiate a treaty on jurisdiction, this choice of court provision was not mandatory in all contracts, and in particular, there was good language to exempt contracts that were abusive or unfair. The 1965 text, which has **NOT** been used in the current treaty negotiations, read: "The agreement on the choice of court shall be void or voidable if it has been obtained by an abuse of economic power or other unfair means." With the elimination of the safeguards against unfair and abusive contracts, you now have a mandatory choice of court clause in Article 4. This will have a huge effect on national sovereignty, because any publisher or seller of any product can simply shift jurisdiction, by contract, to a different country.

One effect will be in the area of books or videos, where publishers can use contracts to shift jurisdiction to countries (there are many in Europe) that do not recognize the "first sale" doctrine which permits zero royalty lending by libraries or video stores. The South Africa victory over the pharmaceutical companies for parallel imports of medicines could be undermined by choice of forum contracts that select courts that did not recognize the first sale doctrine. Airlines, banks and any number of institutions can use this choice of court agreements to change the country where disputes are heard. Any seller can use Article 4 to shop for favorable national laws, and also to deny the public the opportunity to seek redress or defend actions in the countries where they live, which is a huge burden for most people and small businesses and non-profit organizations.

The contracts can also shift jurisdiction on software to countries that do not permit reverse engineering. Web pages that have terms of service agreements on such issues as hypertext linking or use of company or brand names in meta-tags, or that require prior approval for

reviews of products, or any number of other clauses, all of which exist today, would be much stronger because companies could simply point the choice of court to the jurisdiction most likely to actually enforce these provisions. The free software movement would be particularly vulnerable to these provisions, as well as the expanded reach of overly broad national laws on software patents and trade secrets.

The Significance of Mandatory Enforcement

Sui generis systems for protecting intellectual property are those that are special systems - one of a kind - that fall outside of traditional IPR regimes like copyright, patents or trademarks. For example, the US has a sui-generis regime to protect data from clinical trials on pharmaceutical drugs, Europe is implementing national sui generis legislation on databases, and several African, Asian and Latin American countries have sui generis regimes on traditional learning and culture, and there are quite a few efforts to create sui generis regimes on genetic and biological resources, to mention only a few areas where sui generis regimes are being discussed.

There is no doubt about the status of sui-generis IPR regimes in the Hague convention -- they are all enforceable, regardless of what they are. At present these laws are often controversial, because they push protections into new areas that would otherwise be in the public domain. But under the convention, countries could get enforcement of judgments globally, even if no other country had a similar regime.

For example, if Cuba enacted a sui generis regime and declared that the Cuban "beat" was intellectual property, it could get a judgment in Cuba against US record companies that were engaged in cultural "piracy," and demand for example, 5 percent of the revenues from global sales of music that use the Cuban beat. Other countries could do the same thing. These judgments would be enforceable globally, under the Convention. So too would bio-piracy judgments against US and European biotechnology and pharmaceutical companies, for "stealing" traditional knowledge, or exploiting without benefit sharing a variety of biological and genetic resources. The motion picture industry could be hit with new sui generis IPR liabilities by countries that give rights in history. Countries like China, which is a member of

the Hague Conference, could use this to limit who could actually make films about China. The Hague convention would instantly create a legal framework to legitimize all of these new IPR claims, and it would not even matter if the "infringing" party did business in the country at all, since the judgments would be enforceable globally, in any Hague member country, and the claims could be based upon shares to global (rather than local) revenues of products.

Some would consider this a positive feature of the Convention, because it would give the developing countries opportunities to "tax" the rich countries, under new and controversial IPR regimes. But of course, the rich countries could and will also enforce their own regimes, including, for example, the European Union sui generis regime on database protection. The US and EU would probably modify their sui generis regimes on pharmaceutical registration data to make it illegal for developing countries to rely upon those data for registration of generic products in poor countries, an approach already included in the new US-Jordan "Free Trade" agreement. And in general, what one observes is a new dynamic of everyone trying to create their own "rights" in everything, until the public domain shrinks if not disappears altogether.

.

CHAPTER III

Understanding Electronic Contracts

The Indian Law of Contract

Introduction

To understand electronic contracts, it is essential to understand the general principles of contract and also the law governing contracts in Indian context. Contracts are in essence an agreement between two or more parties to conduct any business transaction. Such a contract has to be valid and legally binding on the parties to mutually benefit their interest and transactions. Such contract can be oral or written as may be required by law in specific cases and is validated by the law. Before the evolution of the complex legal systems, agreements were oral and carried out by mutual trust. In community settings any breach of contract is settled through community adjudication system, which inquired into the breach and set right things. As the society grew complex and so were the complexities of the transactions. With the evolution of the legal system, contracts came to be governed by specific laws under the respective legal systems.

It can be stated that ‘a contract is an agreement for a specified transaction between two or more parties for a specified consideration and is binding upon on the transacting parties.’ The Contract, which could be oral or written, is arrived through a process of negotiation with offers/ proposals, counter offer/counter proposals towards acceptance by the contracting parties. Such an acceptance gives rise to an agreement. Indian Contracts Act 2(h) states that ‘an agreement enforceable by law is a contract.’

Contract enforceable by Law

The Indian Contract Act, 1872- Sec.10 states:

S 10. What agreements are contracts: All agreements are contracts if they are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object, and are not hereby expressly declared to be void.

Nothing herein contained shall affect any law in force in India, and not hereby expressly repealed, by which any contract is required to be made in writing or in the presence of witnesses, or any law relating to the registration of documents.

Interpreting the section 10 of the Act the positive aspects can be enlisted as:

1. **Free and conscious consent of the parties to the contract:** In other words there should not be any coercion, undue influence, fraud, misrepresentation or mistake which will not be considered as free consent and will be considered as void.
2. **Persons entering to the contract should be competent:** In other words persons who are minors by law, persons with unsound mind are not competent and any contract entered with them is non-enforceable.
3. **Lawful Consideration :** In other words any contract which is violative of any other law or considerations which not legal will not be valid and will be void
4. **Lawful Object:** The purpose of any such contract has to be lawful in its object or else will be rendered as void.

From this one can infer that a contract enforceable by law is a process, which has a vital significance in any transaction whether it is manufacturing, trading or service. The significance of the contract assumes importance in the cyber world where anonymity and speed of transactions are key elements.

E-Commerce can succeed only on these strengths and if ignored could turn out to be a huge liability. In order to understand the electronic contracts and its special position let us look into the fundamentals of the contract in the Indian Contract Act.

Proper Law of Contract

The Indian Contract Act section 1 deals with the proper law of contract to create legally binding contract based on the agreement and such an agreement and the proper law takes its validity on the following:

- a) The place of contracting
- b) The place of performance
- c) The place of residence
- d) The subject Matter of Contract
- e) All other facts

Section 2 of the Act enumerates the following:

S 2 (a) - When one person signifies to another his willingness to do or abstain from doing anything, with a view to obtaining the assent of that other to such act or abstinence, he is said to be making a proposal.

S 2 (b) when the person to whom the proposal is made signifies his assent thereto, the proposal is said to be accepted. A proposal, when accepted, becomes a promise.

S 2 (c) The person making the proposal is called the 'promisor' and the person accepting the proposal is called the 'promisee'

S 2 (d) When, at the desire of the promisor, the promisee or any other person has done or abstained from doing, or does or abstains from doing, or promises to do or to abstain from doing, something, such act or abstinence or promise is called a consideration for the promise.

S 2 (e) every promise and every set of promises, forming the consideration for each other, is an agreement.

S 2(f) Promises, which form the consideration or part of the consideration for each other, are called reciprocal promises.

S 2(g) an agreement not enforceable by law is said to be void

S 2(h) an agreement enforceable by law is a contract

S 2 (I) An agreement that are enforceable by law at the option of one or more of the parties thereto, but not at the option of the other or others, is a voidable contract.

S 2(j) a contract that ceases to be enforceable by law becomes void when it ceases to be enforceable.

Communication and Acceptance in Contract

Section 4 of the act pertains to the communication in the contract and is as follows:

The communication of a proposal is complete when it comes to the knowledge of the person to whom it is made.

The Communication of an acceptance is complete-

- As against the proposer, when it is put in a course of transmission to him so as to be out of the power of the acceptor, as against the acceptor, when it comes to the knowledge of the proposer.

The Communication of a revocation is complete-

- As against the person who makes it, when it is put into a course of transmission to the person to whom it is made, so as to be out of the power of the person who makes it;
- As against the person to whom it is made, when it comes to his knowledge.

Section 5 - Revocation of Proposals and Acceptance:

A proposal may be revoked at any time before the communication of its acceptance is complete as against the proposer, but not afterwards.

An acceptance may be revoked at any time before the communication of the acceptance is complete as against the acceptor, but not afterwards.”

The essence of the above sections is that of the binding force of the contract. It denotes the effect of the binding nature of the contract on acceptance in the mode prescribed by the offer and is deemed as accepted only on receipt where as it complete as for as the acceptance is done through post or telegram. It is in this context the internet is different in the sense the offer or acceptance depending on the position is instantaneous there is no scope for second thought of revocation which is possible by a telegram before a post reaches or by personal letter before a telegram reaches.

Competence to Contract

S 11- every person is competent to contract:

Who is of age to majority according to the law to which he is subject; and Who is of sound mind and is not disqualified from contracting by any law to which he is subject

S 12- a person who is usually of unsound mind, but occasionally of sound mind, make a contract when he is of sound mind. A person, who is usually of sound mind, but occasionally of unsound mind, may not make a contract when he is unsound mind.

Consenting parties

S 13 Two or more parties are said to consent when they agree upon the same thing in the same sense. The mutual understanding is based on

- a) subject matter of the agreement
- b) the nature of transaction
- c) the language or expression used in recording the understanding

S 14- free consent is defined as one, which is not done through

S 15 coercion

S16 undue influence

S17 fraud

S 18 misrepresentation

S 20 mistake

Void Voidable agreements

S 19 - This section deals with the instance of an agreement which is concluded by coercion, fraud, or misrepresentation, the contract does not become void automatically but is voidable at the option of the party whose consent was caused by those listed in section 14- 20.

To illustrate that A enters into an agreement with B to sell his business with misrepresenting the facts of profit and goodwill and later when B finds about the same, B has the choice to make the contract void or can still proceed with the contract for other extraneous reasons and thus the contract is not void but had the choice to be made voidable by B who chose not to do so.

Void Agreement

1. S. 20 Both parties are under mistake as to the matter of facts
2. S. 24 Consideration and objects are unlawful in part
3. S. 25 Absence of consideration, except under certain cases
4. S. 26 The agreement in restraint of marriage
5. S. 27 The agreement in restraint of trade
6. S. 28 The agreement in restraint of legal proceedings
7. S. 29 The agreement in restraint of uncertainty
8. S. 30 Agreement based on wager/gambling
9. S. 56 Agreement becomes impossible to perform

Contingent Contract

S31- 36- speaks about the type of contracts entered which has to be performed or not to be performed based on the eventuality of an event to happen or not to happen and is enforceable accordingly. However the contingent contract would be void if the event becomes impossible to happen.

Breach of Contract

Section 73. - speaks about the breach of contract and appropriate remedies. This section enforces the binding nature of the contract and its legal validity. This section enumerates the loss or damage occurred to one party by the breach of contract of the other party, which is due to such breach of contract or prior knowledge of such consequence when the contract was entered to be compensated by the party who has breached it. In such calculation of loss or damage, the means of such consequence resulting from the non-performance of such contract has to be taken into account.

CONSTRUCTION OF ELECTRONIC CONTRACTS

Contracts in the traditional information technology prior to the Internet age pertained to

1. Manufacturing contracts of hardware products, accessories and peripherals
2. Contracts for software products
3. Contracts for service and maintenance and post- online era brought in the
4. Electronic Contracts or Online contracts

With the emergence of internet and electronic commerce the contract of e-commerce in terms of Business to Business (B to B), Business to Consumer (B to C) and Consumer to Consumer (C to C) has assumed importance in terms of its complexity and reach. Electronic Banking, . Com ventures, Music download, E-books have spanned the usage of Internet and online - contracts have assumed significance.

Among these contracts the manufacturing contract of hardware is that of any other type of contract in manufacturing industry except that of the latest issue of monopoly or anti-trust where browsing software is bundled with that of the hardware to keep up the market share, which shall be dealt latter in module 3

On the software contracts the contracts assumed significance based on the type of software as

- a. Standard package software
- b. Bespoke software and
- c. Customized software

The standard software is the type of software written and produced to address mass consumers around the world. Microsoft Windows and its different versions fall under this category.

Bespoke software is the type of software specially commissioned and written to meet the needs of specific needs of varied clients. Many Indian software firms are involved in bespoke software production. E.g. an airline company may want bespoke software, which will suit its operations. Infosys in the early nineties did software for retailing Reebok shoes.

Customised software is a standard software package, which is altered to the needs of the clients. Many hospital and hotel administration software packages are standard software packages often modified to meet the variations of the customers. There are many networking packages, which are tinkered and tailored to meet client specific needs.

The contract of these software are dealt as manufacturing contracts where hardware manufacturers can bundle as standard software packages and the others like customized and bespoke software are dealt as contracts between parties based on the functionalities and thereby the terms of the contract. It is in this area care has to be taken in construction of contracts which will include offshore and on-site issues involved in developing such packages. On-site contracts need to take into account of not merely the technical aspects and

delivery of the software but also labour laws, gender laws and other accounting aspects of the country where the firm intends to operate in drawing up the contracts.

Electronic Contracts

Electronic contracts facilitate transactions and agreements electronically without the parties meeting each other. This means that the traditional contract process of offer, acceptance and agreement to transact through electronic mode than physical mode of paper. E-Commerce to succeed such contracts needs to be validated legally as alternate mode of transaction through online using the latest technological developments. This is aimed at:

1. To create a secure atmosphere of transacting online with alternate mode to paper and writing.
2. To create an electronic documentation system which will safeguard the contracting parties on par with the traditional mode of contracts
3. To create statutory status and monitoring/verifying authorities for such electronic transaction
4. To check frauds intentional or unintentional transactions to promote and build confidence in genuine online transactions
5. To create necessary legal structures to oversee such transactions
6. To establish standard rules and regulation for smooth functioning of online transactions
7. To make Digital signature legally valid and incorporating the same with the existing legal regime of contracts, sale of goods, evidence and consumer acts.

Such electronic transactions will depend on the appropriate legal framework, which recognizes 'electronic records' or 'writings' or 'digital signatures'. It should facilitate for a secure system of such transactions and should create evidentiary value of such records.

The Indian IT Act 2000, section 2 deals with various definitions involved in internet transaction and Chapter II and section 3 deals with the definition of digital signature and its authentication for legal purposes.

Section 4 of the IT Act 2000 reads as follows:

4. Legal recognition of electronic records - Where any law provides that information or any other matter shall be in writing or in the typewritten or printed form, then notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied if such information or matter is-

- (a) Rendered or made available in an electronic form; and
- (b) Accessible so as to be usable for a subsequent reference

If any information or matter is rendered or made available in an electronic form, and accessible so as to be usable for a subsequent reference shall be deemed to have satisfied the requirement of the law, which provides that information or any other matter shall be in writing or in the typewritten form.

S5. Legal recognition of digital signatures - Where any law provides that information or any other matter shall be authenticated by affixing the signature or any document should be signed or bear the signature of any person, then, notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied, if such information or matter is authenticated by means of digital signature affixed in such manner as may be prescribed by the Central Government.

Explanation - For the purposes of this section, “signed”, with its grammatical variations and cognate expressions, shall, with reference to a person, mean affixing of his hand written signature or any mark on any document and the expression “signature” shall be construed accordingly.

COMMENTS

If any information or any other matter is required by law to be authenticating by affixing the signature then such requirement shall be deemed to have been satisfied if such information or matter is authenticated by means of digital signature affixed in the prescribed manner.

Thus with the IT Act 2000 the necessary legal validity for electronics has been established. In this context the earlier Indian Contract Act has been supplemented with the online transaction as a valid form of contract. In electronic contracts the twin aspects of time and place of dispatch assumes importance between the contracting parties. Online contracts whether it is B to B or B to C to be validated, the place of the dispatch and time factors are crucial. IT Act by section 11.

11. Attribution of electronic records. -

An electronic record shall be attributed to the originator-

- a) If it was sent by the originator himself;
- b) By a person who had the authority to act on behalf of the originator in
- c) Respect of that electronic record; or
- d) By an information system programmed by or on behalf of the originator to operate automatically.

12. Acknowledgment of receipt. -

(1) Where the originator has not agreed with the addressee that the acknowledgement of receipt of electronic record be given in a particular form or by a particular method, an acknowledgment may be given by-

- (a) any communication by the addressee, automated or otherwise; or
- (b) any conduct of the addressee, sufficient to indicate to the originator that the electronic record has been received.

- (2) Where the originator has stipulated that the electronic record shall be binding only on receipt of an acknowledgment of such electronic record by him, then unless acknowledgment has been so received, the electronic record shall be deemed to have been never sent by the originator.
- (3) Where the originator has not stipulated that the electronic record shall be binding only on receipt of such acknowledgment, and the acknowledgment has not been received by the originator within the time specified or agreed or, if no time has been specified or agreed to within a reasonable time, then the originator may give notice to the addressee stating that no acknowledgment has been received by him and specifying a reasonable time by which the acknowledgment must be received by him and if no acknowledgment is received within the aforesaid time limit he may after giving notice to the addressee, treat the electronic record as though it has never been sent.

In internet transactions the time and place of dispatch and receipt of electronic records will play a crucial role in the aspects of territorial jurisdiction, applicable laws, evidentiary issues, period of limitation on initiation of litigations and other issues. To validate such contracts, section 13 of the IT Act has enabling provisions.

S 13. Time and place of dispatch and receipt of electronic record. –

- (1) Save as otherwise agreed to between the originator and the addressee, the dispatch of an electronic record occurs when it enters a computer resource outside the control of the originator.
- (2) Save as otherwise agreed between the originator and the addressee, the time of receipt of an electronic record shall be determined as follows, namely: -
- (a) If the addressee has designated a computer resource for the purpose of receiving electronic records, -

(i) Receipt occurs at the time when the electronic, record enters the designated computer resource; or

(ii) If the electronic record is sent to a computer resource of the addressee that is not the designated computer resource, receipt occurs at the time when the electronic record is retrieved by the addressee;

(b) If the addressee has not designated a computer resource along with specified timings, if any, receipt occurs when the electronic record enters the computer resource of the addressee.

(3) Save as otherwise agreed to between the originator and the addressee, an electronic record is deemed to be dispatched at the place where the originator has his place of business, and is deemed to be received at the place where the addressee has his place of business.

(4) The provisions of sub-section (2) shall apply notwithstanding that the place where the computer resource is located may be different from the place where the electronic record is deemed to have been received under sub-section (3).

(5) For the purposes of this section, -

If the originator or the addressee has more than one place of business, the principal place of business, shall be the place of business;

If the originator or the addressee does not have a place of business, his usual place of residence shall be deemed to be the place of business;

“Usual place of residence”, in relation to a body corporate, means the place where it is registered.

Section 12 and 13 read together is the online equivalent to the traditional contract act transaction aspects of offer and acceptance.

Issues of Security

In electronic commerce the issue of security and a statutory monitoring agency become crucial factors and the same will become crucial aspects of electronic contracts for the consumers to protect their interests and for the business establishments to conduct their business without costly legal battles. The essential security aspects of e-commerce, which need to be taken care in contracts, are:

- a) Entity authentication (identifying with whom you are transacting)
- b) Message integrity
- c) Payment non-repudiation
- d) Effective audit
- e) Privacy

Such security requirements should also be affordable and the process requires uniform platforms in terms of scalability and transaction models backed by technology. These issues are crucial in drawing up the contracts, which are not part of the physical transaction contracts existing hitherto. As E-commerce means global business in volume and transactions anywhere at any time with customers not known prior to transactions, it is crucial these aspects are taken care. The current IT Act provides for the security aspects through sections 14, 15 and 16.

14. Secure electronic records. -

Where any security procedure has been applied to an electronic record at a specific point of time, then such record shall be deemed to be a secure electronic record from such point of time to the time of verification.

15. Secure digital signature. -

If, by application of a security procedure agreed to by the parties concerned, it can be verified that a digital signature, at the time it was affixed, was-

- (a) unique to the subscriber affixing it;

(b) capable of identifying such subscriber;

(c) created in a manner or using a means under the exclusive control of the subscriber and is linked to the electronic record to which it relates in such a manner that if the electronic record was altered the digital signature would be invalidated, then such digital signature shall be deemed to be a secure digital signature.

16. Security procedure. -

The Central Government shall for the purposes of this Act prescribe the security procedure having regard to commercial circumstances prevailing at the time when the procedure was used, including-

- (a) the nature of the transaction;
- (b) the level of sophistication of the parties with reference to their technological capacity;
- (c) the volume of similar transactions engaged in by other parties;
- (d) the availability of alternatives offered to but rejected by any party;
- (e) the cost of alternative procedures; and
- (f) the procedures in general use for similar types of transactions or communications.

Apart from these issues, the Act enables for a certifying authority and officers and functions in section 17 and they're from section 18 to 34 on the various aspects of security and privacy issues.

17. Appointment of Controller and other officers. -

- 1) The Central Government may, by notification in the Official Gazette, appoint a Controller of Certifying Authorities for the purposes of this Act and may also by the same or subsequent notification appoint such number of Deputy Controllers and Assistant Controllers as it deems fit.

- 2) The Controller shall discharge his functions under this Act subject to the general control and directions of the Central Government.
- 3) The Deputy Controllers and Assistant Controllers shall perform the functions assigned to them by the Controller under the general superintendence and control of the Controller.
- 4) The qualifications, experience and terms and conditions of service of Controller, Deputy Controllers and Assistant Controllers shall be such as may be prescribed by the Central Government.
- 5) The Head Office and Branch Office of the office of the Controller shall be at such places as the Central Government may specify, and these may be established at such places as the Central Government may think fit.
- 6) There shall be a seal of the Office of the Controller.

Issues of Privacy

In Internet transactions, e-commerce to succeed the issue of privacy plays a crucial role. Apart from consumer transaction in terms of personal data, the application of internet in banking, privacy is very crucial if not maintained can lead to major financial loss and there of huge litigation costs both to establishments as well as the clients. Hence privacy plays strategic as well as other non-monetary aspects of business in e-commerce.

Contracts drawn in cyber world need to take care of the mutual interest of the establishments and the clients. This needs an adequate legal framework and the IT Act section 35- 39 deals on the digital signature and its various aspects which will be dealt in length in module 3 on e-banking. However the Act also specifies duties of subscribers which are of importance in contracts drawn from the point of the establishments under Chapter VIII as:

DUTIES OF SUBSCRIBERS

40. Generating key pair.

Where any Digital Signature Certificate, the public key of which corresponds to the private key of that subscriber which is to be listed in the Digital Signature Certificate has been accepted by a subscriber, then, the subscriber shall generate the key pair by applying the security procedure.

41. Acceptance of Digital Signature Certificate.

(1) A subscriber shall be deemed to have accepted a Digital Signature Certificate if he Publishes or authorises the publication of a Digital Signature Certificate-

- (a) to one or more persons;
- (b) in a repository, or otherwise demonstrates his approval of the Digital Signature Certificate in any manner.

(2) By accepting a Digital Signature Certificate the subscriber certifies to all who reasonably rely on the information contained in the Digital Signature Certificate that-

- (a) the subscriber holds the private key corresponding to the public key listed in the Digital Signature Certificate and is entitled to hold the same;
- (b) all representations made by the subscriber to the Certifying Authority and all material relevant to the information contained in the Digital Signature Certificate are true;
- (c) all information in the Digital Signature Certificate that is within the knowledge of the subscriber is true.

42. Control of private key.

(1) Every subscriber shall exercise reasonable care to retain control of the private key corresponding to the public key listed in his Digital Signature Certificate and takes all steps to prevent its disclosure to a person not authorised to affix the digital signature of the subscriber.

- (2) If the private key corresponding to the public key listed in the Digital Signature Certificate has been compromised, then, the subscriber shall communicate the same without any delay to the Certifying Authority in such manner as may be specified by the regulations.

Explanation -

For the removal of doubts, it is hereby declared that the subscriber shall be liable till he has informed the Certifying Authority that the private key has been compromised.

CHAPTER IV

Types of Electronic Contracts

Employment Contracts

The Information Technology is driven by manpower in Indian context and thus employment contracts are crucial. With a high attrition rate as well as the confidentiality involved in the work, employment contracts become crucial. Apart from that Indian Labor practices are based on strong labor laws and not the hire and fire processes of the first world. In this context copyright issue of software development assumes crucial importance. This is dealt in detail in module II but however due care should be taken on the aspect of restraint of trade which could be void in any contract. Apart from that contracts for on-site development and sending the workforce abroad and indemnity clauses will play a crucial role in employment contracts. Firms hiring personnel abroad apart from their personnel need to incorporate the relevant employment contract of the place of operation.

Consultant Agreements

The normal provisions of Indian Contracts Act of 1872 will apply on any consultant agreement. But especially in Information Technology industry where the infrastructure to operate is low and connectivity is very high consultancy with experience in marketing and business development and technology development is a very prevalent mode of Confidentiality will play a key role. If care is not taken it may lead to loss of business and loss of clients.

Contractor Agreements

As manufacturing companies outsource their business, Information Technology also outsource their work due to fluctuating orders and would like to cut on the cost of regular workforce and attendant legal and financial problems. At the same time in manufacturing industry strong labor laws like the Contract Labor (Abolition and Regulation) Act of 1970 in force could lead to a different type of legal tangle. However if care is taken to outsource keeping the provisions of the contract Act and the Contract Labor abolition act the desired

objectives could be met. Here again confidentiality, consumer liability and copy right issues assume great importance and care to be taken in drawing such contracts.

Sales, Re-Seller and Distributor Agreements

In software and Internet transactions though the hierarchy of middle men are done away with, it still requires a distribution network and hence contractual issues come into play in that aspect of business. In first place one needs to see whether software is a good under the Sale of Goods Act.

Software is a code of instructions, which operate the system or hardware to function in an intended manner. Hence there arises a difficulty to classify and define in legal terms of the intangible nature of software in comparison with other products. The code and its source can be interpreted as information organized in a way to operate the system leading to the conclusion it is not a property and not a good in the legal sense. In *Aerodynamics Systems Product v General Automation limited*, the argument raised by the defendants that although software can be a subject matter of sale, software itself is pure information, and the transfer of software is a service and not sale of goods. There is another interpretation of Software to be considered as Goods where it is compared to that of a book containing information, which is considered as goods under the Sale of Goods Act. As the value of the book is not the mere value of the cover jacket, paper and materials used in its production, but one that of the value of the information contained in it, software is also a product -a floppy, or a CD-Rom or simply stored in hard disc but the value is much higher than the simple storage device.

Hence software due its high value in terms of application is considered as goods for the purpose of legal classification. Having established it as good the distribution, reseller agreement should take care of the aspect of Monopoly Restrictive Trade Practices (in future the competition law) territorial jurisdiction and other tax mechanisms.

Non-Disclosure Agreements

Non-Disclosure Agreements are part of IT contracts, which specify binding agreements with employees apart from the standard confidentiality agreements. The Indian Contract Act 1872

has provisions for the same and it assumes importance in an industry which is purely knowledge based and one which can be easily duplicated ruining the business.

Software Development and Licensing Agreements

A license is a permission given to do a specific manufacture/sales/ marketing/distribution, which is lawful. License plays a prevalent form of contract in mass marketing activity of any kind including Information Technology. Software licensing has a historical background where originally it was bundled with the hardware and was given free and its use and application was limited to that of operating the system and few other features. Later in late 60's and early 70's hardware manufacturers in Europe marketed software separately. Later software manufacturers resorted to license their products separately from that of the hardware. In normal ownership the product sold becomes the exclusive property of the buyer who can do whatever he wants. In case of software, the product can be copied easily and will adversely affect the manufacturer of his sale and thus the entire investment- return processes and future incentive to invest in producing software.

Thus software business became a business of license regime. These licenses are issued in perpetuation or for a limited period. Licensing agreement normally prohibits reverse-engineering, de-compiling or any other location with a provision for backup in the same machine in case of a crash or defective functioning. Multiple machine licenses are also given. The license agreement also indemnifies the user from any copyright or other intellectual property violation of the manufacturer. The licensing agreements become crucial in Cyber Contracts.

Similarly software development is another agreement between joint ventures of companies or for awarding development of software to multiple parties, which assume crucial importance in contracts of cyber world.

Shrink Wrap Contracts

A Shrink Wrap contract is the prior license agreement enforced upon the buyer when he buys software. Before he or she tears the pack to use it, he or she is made aware by tearing the cover or the wrap that they are bound by the license agreement of the manufacture.

This is done as earlier discussed to protect the interests of the manufacturer where the consumer cannot reproduce the package, copy it or sell it or donate it to others affecting the sale of the software. The license, which is shrunk and wrapped in the product, becomes enforceable and taken as consent before the buyer tears the package. The usual clauses that are part of the shrink-wrap license are that of

- a. prohibiting unauthorized creation of copies
- b. prohibiting rentals of the software
- c. prohibition of reverse engineering, de-compilation or modification
- d. prohibition of usage in more than one computer specified for that purpose
- e. disclaimer of warranties in respect of the product sold
- f. limitations of liability

The logic and business sense is that to protect the manufacturer of the package, as it is easy to copy, manipulates and duplicate under other brand name. Critiques argue that shrink-wrap license agreement is against the basic principle of contract of offer, consideration and acceptance as the licensee is debatable. Several cases to this effect have been dealt in US courts.

Source Code Escrow Agreements

In software development many principal firms who invest in development are keen to guard the source code of the software, which is the most valuable and secretive part of the computer programme. Copyright holders of such source code may have to disclose this to various developers who will be developing specified software based on the source code. In these circumstances the copyright owner will deposit the source code to specified source code escrow agents who will disclose the code on the development of the product upon

agreed terms. In cyber contracts such agreements and also the terms and conditions to deal with the escrow agents becomes crucial.

Cyber Contracts and Indian Legal Position

Legal issues in Cyber Contracts

The Intellectual Property Rights plays a crucial part in Information Technology and thereby in the contract formation of software development and Internet business. In Indian context software is categorized under copyrights of the IPR regime where as in United States software comes under patents regime. This difference has to be borne in mind in formation of contracts depending on domestic and international operations. Here again the IPR differs with the type of software classification. In case of bespoke software the intellectual property rights are vested in the software user. The copyright aspect is very crucial in the bespoke software compared to that of the confidential aspect of information. Mere commissioning of a software development itself need not vest the copyright with a firm if the clauses in the contract are not specific.

In U.K. the standard conditions of contract published by Government for information systems have provided for ownership of copyright and other rights in bespoke software to vest in the software house, and not in the government. Even if the ownership of the rights in the software vests in the software house, the customers competitive edge can be preserved by imposing a restriction on the ability of the software house to market the software to the competition of the customer.

Contract liability

Contract liability is another crucial area to be taken care in cyber contracts. One of the general distinctions in contract liability is based on the classification of the utility of the software in transaction.

- (a) License of Intellectual property.

- (b) Development and / or supply of a copy of the software.

In the licensing aspect of the software the usual contractual risk arises in the third party possessing the Intellectual property rights which is overriding that of the rights of the licensee. The phrase software contracts connote a valid and a legally binding relationship created by the parties to enrich their interest. Parties to such software contracts generally include the consultant (a company or a partnership or a sole proprietor represented through business manager or technical manager or finance manager) and the customer who seeks software related services from the consultant company. The nature of the services may include sale of software products or software maintenance services either in the form of fixed priced project or time in maintenance.

Online Contracts

It is a common practice that transactions of many goods and services depend and use standard form of contract of terms and conditions, which are quite often hidden from the user or not prominently displayed. As the going is good there is no problem on such practices but in a business where the volume and risks are high such fine print or hidden terms may prove too costly when someone decides to act. Simply 'I agree' button displayed in front without reasonable and adequate display of the terms and conditions displayed to the buyer or user could lead to costly litigations in online transactions especially in B to C business. This necessitates effective and clear drafting of the terms of contract where the drafting language has to be clear, transparent, to place across the business proposition or offer without jeopardizing the interest of the business where the language could lead to multiple interpretations and running the risk in a court battle. Such drafting requires the drafter to understand the fundamentals of

1. The relevant law in operation;
2. The practical implications of such law
3. The purpose and goal of the firm intends to achieve by such offer

4. How to use the relevant law and its implications to the maximum advantage
5. How to minimize the liability risks in unforeseen circumstances

Drafting of Cyber Contracts

Description of the Parties

In all but the shortest of documents it is obviously more convenient and clearer to refer to the various parties by such descriptive terms as vendor purchaser, guarantor, franchisee, etc. These terms are so basic to the agreement that they are invariably set out at the head of the document as part of the descriptions of its registered office or (particularly in the case of foreign companies which may not have a registered office) its principal place of business. Although it is not strictly necessary to cite the company's registration number, it is sometimes useful to do this, as it may facilitate any search which has to be carried out and may avoid confusion where companies in a group with similar names are involved in the transaction.

Language of the Agreement

In International contracts particularly, specifying the language of the agreement can have a number of advantages, including:

- (a) If the agreement has been drawn up in versions in different languages, it will be desirable to state which is the authoritative versions in different languages, it will be desirable to state which is the authoritative version, in the event of a difference in meaning between different versions.
- (b) It may also be desirable to state that any amendments to the agreement should be in the same language as the original. In some jurisdictions the language of the agreement may influence the court when deciding under which country laws the agreement is made, and which country's courts should have jurisdiction. Ideally the agreement should state these matters specifically.

Recitals

After the description of the parties to a document, come the recitals. Recitals in a document are synonymous to the preamble of a statute. The recitals make out the state the preliminary ground or introduction for the execution of the Agreement. They constitute a brief history of the facts and events leading to the execution of the Agreement. Recital in a document means a statement in an agreement or other formal instrument introduced to explain or lead up to the operative part of the agreement. Recitals are of two types i.e. narrative and introductory.

Definitions and Interpretation

Particularly in long or complex agreements it is good practice to group all defined terms, together with their definitions, in a separate 'Definitions' clause, and to indicate elsewhere in the text of a document that a term has been so defined by starting the word or words defined with a capital letter. This will signal to anyone reading a clause in the body of the agreement that particular term has a special defined meaning in that agreement. It is essential using this method, for all defined terms to be capitalized on every occasion they are used, and that any term which is used in a wider sense than the one which is defined should not be capitalized. Whichever style is used, care must be taken when preparing a document to distinguish defined terms from terms of non - specific application.

It is convenient to list the defined terms in alphabetical order, in a clear, easily assimilated layout. Where the meaning of a term will involve a lengthy description or list, the details can be assigned to a schedule or exhibit. In drafting practice, interpretation provisions are often combined with the definitions of terms used in the agreement under the heading 'Definitions and Interpretation'. The usual interpretation provisions deal with the following:

- Amendment/replacement of statutes;
- Persons/singular/plural: For the sake of brevity and to avoid any confusion;
- Reference to clauses: To ensure a clear economical style of drafting;
- Headings

Conditions and Assurances

(1) Commencement

Unless it is otherwise provided, an agreement takes effect immediately it has been signed by all parties or, in the case of an agreement executed as a deed, upon delivery of the deed. Sometimes parties will wish to provide for a different commencement date. This should be done by including a clause and not by misstating the date of the agreement (i.e. the date of the last signature) as this can amount to a forgery.

(2) Conditions precedent

Sometimes an agreement is stated not to come into effect until the happening of an event (this might refer, e.g., to finance being raised or government approvals being obtained or facilitating of base materials by the concerned contracting party. Such terms are known as conditions precedent. The clause does not need to use the phrase condition precedent' but the consequences of the condition not being met should be clearly stated. In particular, does the agreement as a whole automatically come to an end or do certain provisions continue? Is there a time limit for conditions to be met? All these details should be specified in the agreement to avoid confusion.

(3) Further action required after completion

In contracts of the single transaction type, in particular sale agreements, mortgages, intellectual property assignments and licenses etc., it is likely that after completion of the transaction further action will be required by one or both parties to perfect title or conform to statutory rules or in some other way to finish off the transaction satisfactorily. In order to avoid argument or delay in respect of such matters it is usual to provide exp of attorney must be expressly stated to be irrevocable.

Force Majeure

Where a contract becomes impossible to perform, or is capable of performance only in a manner substantially different from that originally envisaged, then in the absence of express provision by the parties further performance is excused under the common law doctrine of frustration. This doctrine only operates where the frustrating circumstances are not due to the

fault of either party (See *Denmark productions Ltd. v Boscobel Productions Ltd.* (1969) QB 699 at 725. (1968) 3 All ER 513, 533 CA), but it does not follow that in all contracts any act of negligence will deprive a party of the smelting Corn Ltd (1942) AC 154 at 166, 179,195, 205 (1941)) All ER 165 at 173, 182,193,199,200 HL)

To avoid bringing the contract to an end under the law of frustration, a 'Force majeure' clause is frequently incorporated into Indian law contracts, under which the parties expressly agree to exempt each other from performance of the contract or liability for breach of contract where the failure to perform is due to factors beyond that party's control. Thus where force majeure or an event of force majeure is deferred to in the agreement, it should be clearly defined.

Warranties and Indemnities / Guarantees

Many commercial contracts contain warranties by one or both parties. These may include warranties as to matters which are central to due performance of the contracts but which cannot easily be verified by the other party. The exact nature of these warranties will depend on the transaction being entered into. Whereas some types of warranties are specific to the individual transaction, others are found in many types of commercial agreement.

Warranties as to a party's ability to enter into an agreement of the type in question, and as to the good standing of each party, are sometimes inserted in commercial agreement. In the longer type of agreement, it is frequent for the numerous detailed warranties to be given by, say, a vendor to be set out in a schedule to the agreement and for that party to give in the agreement an overall warranty as to the truth and accuracy of the scheduled warranties. A party giving warranties will commonly seek to limit the warranties to matters, which are within its knowledge.

An indemnity clause, often of a general and all-embracing nature, is frequently included in agreements and contracts for services and the documents. Such a clause, whereby one party undertakes a separate and independent obligation to make good on request any loss or damage suffered by the other party as a result of breach of a contract term, is wide in effect.

Where an indemnity clause extends to cover losses suffered by the indemnifying party as well as third parties, it is in effect a kind of exclusion clause.

Typically, contracting party where the other party is a subsidiary company within a group, and where the first party is concerned that the subsidiary might not be able to meet its contractual commitments or might be liquidated by the parent if problems were to arise under the contract will demand a parent company guarantee. Alternatively, the first party may have entered into the contract on the basis that the other party is part of a large and reputable group and may wish to avoid the risk of the other party being sold, e.g., to its management.

Ascertainment of Price and Payment terms

The price of the goods may be fixed by the contract, (If the price is to be fixed by an agreement, and no such agreement is in fact come to, the contract will be void: see *May and Butcher Ltd. v R* (1934) 2 KB 17n HL) or may be determined by the course of dealing between the parties. If the price is not determined, the buyer must pay a reasonable price, and what is a reasonable price is a question of fact dependent on the circumstances of each particular case.

Where there is an agreement to sell goods on the terms that the price is to be fixed by the valuation of a third party, and that third party cannot or does not make such valuation, the agreement is avoided, provided that, if the goods, or any part of them have been delivered to and appropriated by the buyer, he must pay a reasonable price for them. Even in the absence of bad faith, a valuer brought in to fix a term in a contract is liable to be sued damages (See *Arenson v Casson Beckman Rutley & Co.* (1977) AC 405 (1975) 3 All ER 901, HL, where it was held that an auditor of a private company who on request had valued shares in the knowledge that his valuation would determine the price to be paid for them under a contractor sale was liable to be sued by the buyer or the seller if his valuation was carried out negligently. See also *Burgess v Purchase & Sons (Farms) Ltd* (1983) Ch 216 (1983) 2 All ER 4).

fault of the seller or buyer, the party not in fault may maintain an action for damages against the party in fault.

Where the contract is for the manufacture of particular goods, or for the supply of goods over a period of time, the price is commonly made subject to variation by reference to increases in the cost, for example, of raw materials and labor.

Sometimes contracts will state a price or rate for the undertaking of the contractual obligations, but will fail to state when or how that price is to be paid. Whilst the court may be prepared to interpret such a contract as requiring payment within a reasonable period, it is generally better to state specifically what the payment terms are to be.

Retention of Title

The question of retention of title on of has been the subject of much discussion (See e.g. *Aluminum Industries Vassen BV v. Romalpa Aluminium Ltd* (1976) 2 All ER 552, (1976) 1 WLR 676, CA (the Romalpa case) and R. Bradgate *Commercial Law* (2nd Edn) para 18.4). The limits on the efficacy of such provisions may need to be carefully explained to the seller, proceeding from basic principles.

Firstly, what is retention of title and what is its significance? It is the right of the seller to retain ownership of the goods sold until payment, notwithstanding that he has parted with possession of the goods to the buyer. It is vital to bear in mind that, as a general rule, where a contract for the sale of goods has been entered into between the parties for goods in a deliverable state then, under the Sale of goods Act ownership of the goods will pass to the buyer at the time the contract is made, irrespective of whether the goods have been paid for or delivered.

It will therefore be obvious that retaining ownership in goods delivered to the buyer but not paid for will be an extremely important right in the event of the buyer becoming bankrupt or going into liquidation. In the event of an insolvency practitioner disposing of the goods or

interfering with them, the seller could bring legal proceedings against the practitioner for wrongful interference with the goods and claim damages for their market value.

There are, however, a number of practical problems. In particular, retention of title clause creates a charge over the goods and (in the case of a corporate buyer) that charge will be void unless registered at the Registrar of Companies. Registration is often considered not practical.

So far as the effectiveness of the retention of title), a typical clause will provide further extension on the rights of the seller.

Intellectual Property

A significant asset of most businesses is the value of various intellectual property rights, which it owns. These can range from patents to copyright and design rights to protection through registered designs and trademarks to the existence of know-how (both technological and commercial) and other confidential information. If the business is in the high technology market or in a research based industry, these rights are likely to be of substantial value. E.G., if what is being acquired is a pharmaceutical business, patent protection may be vital to the profitability of the business. If the business is a computer software company, the copyright position will be relevant in that it will be important to ensure that the company does in fact have the right to license, use, exploit, etc., the software that it produces. If the business is based substantially on a franchise operation, trademarks and brand names will be fundamental.

Confidentiality

The need for and the scope of, a clause imposing an obligation on one or both parties to keep all matters connected with their agreement confidential will depend on the subject matter and the relationship between the parties. In many cases a short general clause will suffice. Where, however, as part of the agreement sensitive information is supplied by one party to the other (e.g. in a software license, or a company takeover or merger), then more detailed provision is called for. The need for secrecy may, for commercial reasons, be so strong that a party, e.g. a

vendor of a business, may be advised to insist that the other give a separate detailed confidentiality undertaking before negotiations over the deal are commenced.

Usually, the recipient of confidential information is required by the agreement to take certain steps to prevent it becoming public knowledge, for example, to keep in it a secure place when it is not in use, to take all reasonably practicable measures to prevent the information falling into the hands of unauthorized their parties and to limit access to the information to those of his employees who need to know or use it (and who sign a written undertaking to maintain it in confidence). The interests of the recipient are often safeguarded by a proviso that the confidentiality obligation does not extend to such information as it is already a part of the domain of public knowledge when it is disclosed to him or a s afterwards may become a part of the same through its publication by the discloser of a third party.

Parties sometimes forget to include restrictions on use of the confidential information. Such a restriction may be just as important as an obligation of nondisclosure. The duration of the confidentiality obligations, and in particular whether they survive termination of the agreement, should be stated.

Announcements

Companies may often wish to control the issue of public announcements about agreements they have made or are negotiating. Sometimes public statements are required, e.g., if a contracting party is listed on a Stock exchange and is required to notify significant transactions to the Exchange. The wording of the announcement may have an effect on the share price. Contracting parties sometimes agree to the text of a joint press release in the course of the contractual negotiations and attach the final form as a schedule to the contract.

Costs and Stamp duty

The language stating that each party is to bear its own legal costs is probably most useful in situations where there is a long established practice that one party bear all costs, as e.g., in the case of property leases. In many types of contract such a clause may be thought unnecessary.

In transactions in which stamp duty may have to be paid, e.g., conveyances of property and intellectual property assignments, it may be useful to state which party is responsible for having the relevant documents stamped and for paying the duty. This matter for commercial negotiation, but as it will more often than not be the purchaser who wishes to rely on the stampable document in court; he will more typically be the party, which pays the duty. The court will not admit in evidence documents, which are stampable but have not been duly stamped.

Taxation

An international sale will attract any applicable exchange controls or customs duties. A sale of goods will constitute a disposal of assets for the purposes of tax on capital gains. It goes without saying that any business transaction must be made to work satisfactorily from a tax point of view, and this will be a major consideration in devising a suitable structure.

Insurance

Contracts sometimes include warranties as to the level and scope of insurance cover held by a contracting party and / or obligations on a party to insure against specified risks and / or to arrange for the other party to be added as a named party under the first party's insurance policy.

Parties to commercial contracts sometimes misconstrue an obligation on a party to insure against a risk as a statement that party is liable for any losses associated with that risk. Insurance clauses should not be used as a substitute for statements as to which of the contracting parties bears the risk of a particular event happening. The ability of a party to insure against a risk is a factor to be taken into account by the court when assessing whether an exemption clause is reasonable.

Termination

Sometimes agreements are stated to have a fixed term. In such cases the parties will often intend that the agreement will terminate automatically by expiry at the end of that period and

it is better to state this rather than assume that this is implicit from the fixed term. If the agreement may terminate earlier, e.g., under another clause allowing for termination in the event of breach or insolvency, the clause providing for the fixed term should be stated to be subject to earlier termination as provided elsewhere in the agreement. Sometimes agreements allow a party to terminate the agreement on notice to the other party (i.e. without specifying a cause, such as for breach or insolvency). If the agreement is silent as to its term, it may (in some situations) be interpreted as being terminable by either party on giving reasonable notice. To avoid such uncertainties it is desirable to specify the term of the contract.

(1) Termination for insolvency

It is customary to provide that certain specified kinds of default will entitle the innocent party to terminate the agreement. The description of the particular events, which will constitute such a breach, will vary from contract to contract. The insolvency of a party is almost always stipulated as an event entitling the other party to terminate the agreement. In the absence of such a provision, the bankruptcy or winding up of one party may of itself be insufficient to terminate the contract. It is always advisable to be specific when framing such a provision.

(2) Termination for breach

The innocent party may be entitled to terminate a contract *de futuro* (i.e. terminate the contract or bring it to an end as to the future, or rescind it *de futuro*. Distinguish rescission *ab initio* for misrepresentation) on any of the following grounds.

(3) An express provision in the contract allows the innocent party to terminate the contract either on the grounds i.e. terminate the contract or bring it to an end as to the future, or rescind it *de futuro*. Distinguish rescission *ab initio* for misrepresentation that the other party has committed a breach listed in the contract as having such an effect or because the happening of some event (including performance by the other party) is a condition precedent to his liability.

(4) In any agreement containing obligations of a continuing nature one party will wish to be able to terminate the agreement if the other party is in serious default. At common law, one

party may rescind the contract where the other party has committed a serious or fundamental breach by defective performance or has repudiated the contract. It is always advisable to provide expressly for the circumstances in which either party may treat the contract as at an end. In the absence of such provision it is not always clear whether a particular breach would entitle the innocent party to rescission, each contract will be construed on a case-by-case basis.

Remedies

Rescission for misrepresentation

Wherever a party is induced to enter into a contract by a material misrepresentation, whether innocent or fraudulent, he has a prima facie right to rescind ab initio, although the contract will normally continue to force unless he so elects. Where a person has entered into contract after a misrepresentation has been made to him, notwithstanding that the misrepresentation has become a term of the contract or the contract has been performed, then, if that person would otherwise be entitled to rescind the contract without alleging fraud, he is entitled to rescind the contract. This right is subject, however, to the power of a court or arbitrator to award damages in lieu of rescission if of the opinion that it would be equitable to do so, having regard to the nature of the misrepresenting and the loss that would be caused if the contract were upheld as well as to the loss to the other party if rescission was permitted.

Repudiation

Any unequivocal refusal by a contracting party to perform his contractual obligation (including self-induced frustration. As to frustration including self induced frustration) may amount to a repudiation (See further 9 Halsbury's Laws (4th Edn) Para 546 et seq. But repudiation is a serious matter and not to be lightly inferred, see *Ross T Smyth & Co Ltd. v T.D. Bailey, Son & Co.* (1940) 3 All ER 60 at 71 HL per Lord Wright). The repudiation may be express, or it may be implied, the implication may be made by statute, or in law, as where a party incapacitates himself from performing his contractual obligations, (As by a supplier wrongfully reselling goods) or completely fails to perform his side of the bargain. (E.g. Gill

& Duffus SA v Berger & Co. Inc (1984) 1 All ER 438, HL, Eg Gill & Duffus SA v Berger & Co. Inc. (1984) AC

382 (1984) AC 382 (1984) if he elects to keep the contract alive, each must perform his own side of the contract, but the innocent party may claim damages by reason of the breach. However, if he elects to rescind, the effect is to discharge both parties from any duty of further performance of the primary promises made under the contract but, whilst the guilty party remains liable for damages for past and future breaches, the innocent party is liable for damages only for past breaches.

Damages

An action for damages may lie at the suit of the buyer for breach of contract, tort of misrepresentation.

1. Specific enforcement

Two equitable and discretionary remedies may be available. First, in an action for breach of contract to deliver unique, specific or ascertained goods the court may, if it thinks fit, on the plaintiff's application, by its judgment direct that the contract shall be performed specifically, without giving the defendant the option of retaining the goods on payment of damages. Second, the buyer may obtain an injunction preventing the supplier disposing of those goods to a third party.

2. Damages for breach

This paragraph deals with the situation where a buyer has an action in damages for breach of the sale contract against his seller. The rules here will differ according to whether or not the breach by the seller amounts in law to a failure to deliver the goods.

3. Damages for non-deliver

This category covers not only the situation where no goods are delivered at all, but also where the goods tendered by the seller are lawfully rejected and the contract discharged on the grounds that they do not conform to the contract in quantity or quality. The Sale of Goods Act provides that where the seller wrongfully neglects or refuses to deliver the goods to the

buyer, the buyer may maintain an action against the seller for damages for non- delivery. Subject to the ordinary rule of remoteness, the Act lays down a prima facie rule for measuring damages where there is an available market in which the buyer may obtain a replacement.

4. Damages for other breaches

This category covers not only the situation where the seller is only in breach of warranty, but also that where the buyer elects, or is completed, to treat a breach of condition as a breach of warranty. The measure of damages is subject to the ordinary rules of remoteness.

Proper Law and Jurisdiction

Where there is a foreign element in the contract, it may become necessary, in the event of a dispute between the parties, for a court or arbitrator to decide whether the contract is governed by the Indian law or by some foreign law. there may also be uncertainty as to which courts have jurisdiction to hear the case. E.g., if either the offer or acceptance of the contract took place outside India, or if any services are to be performed under the contract or goods are to be delivered outside India. In The absence of a binding agreement between the contracting parties in relation to the law and jurisdiction to be applied, it will be necessary to fall back on rules on conflicts of laws and jurisdiction. Applying such rules may lead to an undesired outcome for one of more parties (i.e. being required to litigate in a foreign country and / or have the contract interpreted under foreign laws). To avoid such an outcome it is important to specify which law shall govern the contract and which courts shall have jurisdiction.

Exclusive and non-exclusive jurisdiction

If it is agreed that any proceedings between the parties in connection with the contract should be brought only in the Indian courts, the jurisdiction of those courts should be expressed to be exclusive. The effect of this will be that judgments given by a foreign court in proceedings brought contrary to an express agreement between the parties that another court should have jurisdiction will not be recognized or enforced.

On the other hand, if non-exclusive Indian court jurisdiction is specified, it will be possible to bring proceedings in a foreign court on a matter over which that court has jurisdiction. Where cross-border rights (e.g. intellectual property rights) are the subjects of the agreement, it may be in the owner's interest to insist on the inclusion of this term in order to reserve the right to take protective action abroad. If an urgent injunction might be needed (e.g. to prevent disclosure of confidential information), it may be desirable to reserve the right to bring interlocutory proceedings in the other party's home jurisdiction.

Arbitration and Alternative Dispute Resolution

Arbitration is a process by which disputes between two or more persons are determined with final and binding effect by impartial third person acting in a judicial manner, rather than by a court of law. The arbitrator's authority is derived from the agreement of the parties concerned. In contrast to proceedings in court, arbitration takes place in private (this may be an important reason for preferring arbitration to court proceedings), and the contracting parties may in general confer on the arbitrator such procedural powers as they think fit. Arbitration is sometimes thought to be speedier and less expensive than a court action.

Arbitration is not the only alternative to court proceedings. Reference to an expert may be preferred, particularly if a technical, rather than a legal, issue needs to be decided. In recent years, mediation and other forms of non-binding ADR (Alternative Dispute Resolution) have become popular. In the majority of agreements, and where both parties are domiciled in India, the parties will agree to refer disputes to a sole arbitrator, leaving the choice of arbitrator to be agreed on by them. Where there may be practical difficulties in agreeing on in the more complex commercial agreements, it may be advisable to provide for the appointment of two or more arbitrators, presided over by an umpire. Usually the umpire is appointed by the arbitrators, and has no part in proceedings unless the arbitrators fail to agree, in which case the umpire will enter the proceedings and make an award as if he were sole arbitrator. It may be thought advisable to make the basic rules of procedure clear in the initial agreement.

Arbitration clauses are usually to be found in agreements in which the parties are more or less on an equal footing, and which confirm and formalize their desire to cooperate in a project or transaction. Typical examples might be shareholders' agreements, joint ventures, research and technical aid agreements, partnership deeds and certain contracts for services. In this type of transaction the parties will often wish difference to be settled quickly inexpensively, and with a minimum of animosity or publicity. An arbitration clause may not be appropriate where one of the parties has, by the very nature of the transaction, the upper hand, as e.g. in an agency or franchise agreement or contract of employment, or financing and loan agreement. Each case must, of course, be treated on its merits.

CHAPTER V

Information Technology Act - An Overview

Information Technology Act 2000 (ITA 2000) was the first law in India to provide legal recognition to Electronic Documents and ushered in an era of judicially approved transactions based on electronic documents.

It also gave recognition to a form of “Signing” of an electronic document and therefore introduced for the first time in India the possibility of a legally valid contract based entirely on the offer and/or the acceptance being in the form of computer generated documents.

ITA 2000 therefore ushered in an era of digital society in India. ITA 2000 was notified with effect from 17th October 2000, which therefore is recognized as the “Digital Society Day of India”.

The ITA 2000 was enacted with the objective of promoting E Commerce and followed the general guidelines provided by the United Nations through a model E Commerce Act that it circulated in 1996.

In December 2008, a major amendment was made to the ITA 2000 through Information Technology Amendment Act 2008 (ITAA2008) which was notified with effect from 27th October 2009. Certain key rules under the amendment were notified on 11th April 2011. Subsequently other notifications have been made from time to time.

The version of ITA 2000 that emerged after the amendments which is sometimes referred to colloquially as ITA 2008 had a larger emphasis on Information Security, Data Protection and coverage of Cyber Crimes.

Further discussions on ITA 2000 are based on this modified version. A more detailed discussion on the legislative history of ITA 2000 can be studied at: https://www.naavi.org/naavi_comments_ita/index.htm

The Structure of ITA 2000/8

ITA 2000/8 consists of 119 sections divided into 14 Chapters as indicated in the diagram below. In this version, Chapter XIIA as well as other sections which carry the suffix of the capital letters such as 10A, 43A, etc. are sections added in ITA 2008. Out of the sections added in ITA 2008, Section 66A is to be considered as removed following the Supreme Court judgement in the Shreya Singhal case. Further Sections 20, as well as 91,92,93 and 94 which were present in the ITA 2000 have been removed in ITA 2008 and many other sections have been modified.

A Comparison of the two versions ITA 2000 and ITA 2008 is available for detailed study at https://www.naavi.org/naavi_comments_ita/compare_2000-6-8/compare_2000-2008/index.htm

Leaving the detailed study for the students to pursue, we shall discuss the essential part of the Act in the following paragraphs.

Chapter	Title	Sections	
I	Preliminary	1, 2	2
II	Digital Signature and Electronic Signature	3, 3A	2
III	Electronic Governance	4,5,6,6A,7,7A,8,9,10,10A	10
IV	Attribution, Acknowledgement and Despatch of Electronic Records	11,12,13	3
V	Secure Electronic Records and Secure Electronic Signatures	14, 15, 16	3
VI	Regulation of Certifying Authorities	17,18, 19, 21,22,23, 24,25, 26,27,28,29,30,31,32,33,34	17
VII	Electronic Signature Certificates	35,36,37,38,39,	5
VIII	Duties of Subscribers	40,40A,41,42,	4
IX	Penalties and Compensation for damage to computer, computer system, etc	43,43A,44,45,46,47	6
X	The Cyber Appellate Tribunal	48,49,50,51,52,52A,52B,52C,52D, 53,54,55,56,57,58,59,60,61,62,63,64	21
XI	Offences	65,66,66A,66B,66C,66D,66E,66F, 67,67A,67B,67C,68,69,69A,69B, 70,70A,70B,71,72,72A,73,74,75, 76,77,77A,77B,78,	30
XII	Intermediaries not to be liable in certain cases	79	1
XIIA	Examiner of Electronic Evidence	79A	1
XIII	Miscellaneous	80,81,81A,82,83,84,84A,84B,84C 85,86,87,88,89,90,	15
		Total	120

Applicability of ITA 2000/8

Territorially, ITA 2000 is applicable to the whole of India including Jammu and Kashmir.

In terms of the documents, except for the excluded documents as provided in the Schedule I of the Act, the Act is applicable to all electronic documents which mean such documents that are expressed in “Binary” form and processed by Computer devices which perform logical, arithmetical and memory functions by manipulating electronic, magnetic or optical impulses. The definition of the term “Computer”, “Data”, “Document in Electronic Form” etc. used in ITA 2000/8 includes attached peripheral devices such as monitor or keyboard or printer as also a “Computer” and paper documents meant to be used by a computer or printed by a computer also as “Electronic Documents”.

The documents which do not come under the provision of ITA 2000/8 are

1. A Negotiable Instrument (Other than a cheque) as defined in Section 13 of the Negotiable Instruments Act 1881 (26 of 1881)
2. A Power of Attorney as defined in section 1A of the Power of Attorney Act 1882 (7 of 1882)
3. A trust as defined in section 3 of the Indian Trusts Act, 1882 (2 of 1882)
4. A will as defined in clause (h) of section 2 of the Indian Succession Act, 1925 (39 of 1925) including any testamentary deposition whatever name called
5. Any contract for the sale or conveyance of immovable property or any interest in such property

Jurisdiction

ITA 2000/8 covers certain Civil Wrongs as well as Criminal offences. The Act also recognizes an “Adjudicator” and a “Cyber Appellate Tribunal” to hear the Civil Complaints and pass orders on payment of compensation. The adjudicator has the powers of a Court and has an exclusive jurisdiction for all complaints arising out of contravention of ITA 2000/8 where the amount of damage is less than Rs 5 Crores. Above this financial limit, the jurisdiction passes on to the relevant Civil Court.

Appeals from the “Adjudicator” go to the “Cyber Appellate Tribunal”. At present, the IT Secretary attached to each State Government or Union Territory is designated as the “Adjudicator” for the State or the Union Territory and exercises all jurisdiction when at least one computer within the boundaries of the State is used in committing the Contravention.

The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) have been designated as the Cyber Appellate Tribunal.

Appeals from the TDSAT go to the High Court of relevant State in which the Adjudication was initiated and thereafter the Supreme Court.

The Civil Procedure Code is not binding either on the Adjudicator or the TDSAT and principles of natural justice and own procedures guide the procedures.

For a more detailed discussion on the adjudication procedure refer to https://www.naavi.org/cl_editorial_13/issue-3_cxo_march_2010.pdf and the rules notified for the purpose. (Kindly note that Cyber Appellate Tribunal referred to in the above article has now been merged with TDSAT and some contact address mentioned the publication has changed).

The Criminal offences enumerated in the Act are prosecuted by the Police like any other Criminal offence under CrPC and through the Criminal Courts such as the Magistrate’s Court, the Session Court, the High Court and the Supreme Court.

For the purpose of general Jurisdiction under Section 75 of the Act, the Act provides extra territorial jurisdiction. Accordingly the Act is applicable for offences or contraventions committed outside India by any person irrespective of his nationality, provided at least one computer located in India was used in the commission of the offence or contravention.

Authentication of Electronic Documents

ITA 2000/8 has indicated under Section 4 that an electronic document is equivalent to a paper document for all legal purposes (excepting the documents excluded under Schedule I). Similarly the Act has also stated under Section 5 that a “Digital Signature” as per section 3 or an Electronic Signature as per Section 3A is equivalent to a physical signature on a paper

document. The Digital/Electronic signature can be applied only on electronic documents and the Act has recommended an infrastructure of the Controller of Certifying Authorities, (CCA), licensing Certifying Authorities who in turn receive applications from the public and provide the necessary empowerment for them to apply Digital Signature or Electronic Signature.

A Digital/Electronic Signature uses two technical procedures namely “Hashing” and “Asymmetric Crypto system” to authenticate an electronic document by a person.

Hashing is a technology which reads any electronic document as a “number” from its binary footprint and applies certain mathematical operations to reduce this number to a distinct small number called the “Message digest”. The algorithm that is used for this purpose ensures that a specific document always has the same hash value (Also called message or hash code) and even if a single binary digit is altered in the original document the hash value changes noticeably. This hashing process is used to check “Whether a document has been altered after it has been signed”.

The hash value is a representation of the original document but it is a one way process and the original cannot be re-created with the hash value.

Presently the CCA has approved algorithms named as SHA 1 or SHA 2 for the purpose of use in the digital signature system.

The second part of the digital/electronic system namely the Asymmetric Crypto System is an “Encryption System” which uses two paired keys which are related in such a manner that a document encrypted with one of these keys can be decrypted only with the other key of the pair.

Presently CCA has approved the RSA algorithm for this encryption in the digital/electronic signature system.

Any other form of authentication of any system or document such as biometric scanning or signature on a writing pad, Clicking of any button, OTP etc. is not approved as a legally accepted form of authentication of an electronic document as per ITA 2000/8.

Further to be legally eligible a signatory should obtain a “Digital Certificate” only from a “Certifying Authority” licensed in India by the CCA and not anybody else. Digital Certificates issued by foreign agencies will not be legally acceptable unless they are cross-certified by a licensed certifying authority.

For a Complete discussion on Digital/Electronic Signature, students may refer to the E Book, “Electronic Signatures Made Easy” available through www.naavi.org .

Digital Contracts

ITA 2000 provided legal recognition to electronic documents and digital signatures paving the way for digital contracts to be entered into with an offer and or acceptance drawn in the form of electronic documents.

Further under Section 11, attribution of an electronic document to a person who “Originates” the document was defined.

Section 12 spoke of when an acknowledgement of a message is required and when it can be excused to determine the sending and receiving of a message in the formation of a contract. Essentially it leaves the parties to specify the requirement of an acknowledgement and its form and the time within which the acknowledgement is to be given. This determines the option to the sender of a message to withdraw his message if no acknowledgement is received as specified or within a reasonable time.

Section 13 defines the time and place of a message sent and received to determine whether a contract formation is complete or not. Since a contract is considered to be complete when the acceptance is sent to an offer, the time and place of sending of the acceptance determines the formation of the contract.

For this purpose, message sent to a designated e-mail is considered as received when it enters the receiver's system while if it is sent to a different e-mail, the receipt is treated as occurring when the message is opened. The sending of the message is linked to the time when it leaves the system of the sender.

In the case of individuals, the place of permanent residence is considered as the place from which a message is sent or received irrespective of the actual place from which it was sent or received. In the case of a business which has more than one place of business, the principal place of business is considered relevant. In the case of an organization which does have a place of business, the place where the registered office is situated may be considered relevant.

These sections addressed some aspects that were peculiar to the formation of contracts through sending of electronic messages over the internet. Rest of the legal aspects of contract was considered as covered through the Indian Contract Act itself.

In 2008, Section 10A was introduced to clarify that use of electronic documents for sending an offer or acceptance cannot be treated as negating a contract. This was just a confirmation of the position as it existed and was not a new provision.

Civil Contraventions

In ITA 2000/8 Chapter IX covers the contraventions that are considered as civil wrongs this entitles the person who suffers a wrongful loss, claim compensation from a person who has made a wrongful gain through a process of adjudication.

Section 43 and 43A are the two most important sections which address all instances of what is normally recognized as Cyber Crimes leading to financial loss to a person including "Data Theft", "Identity Theft", "Denial of Service", "Unauthorized Access", "Introduction of Virus" etc.

Section 43 is reproduced below:

S43: Penalty and Compensation for damage to computer, computer system, etc.

If any person without permission of the owner or any other person who is in charge of a computer, computer system or computer network -

- (a) accesses or secures access to such computer, computer system or computer network or computer resource
- (b) downloads, copies or extracts any data, computer data base or information from such computer, computer system or computer network including information or data held or stored in any removable storage medium;
- (c) introduces or causes to be introduced any computer contaminant or computer virus into any computer, computer system or computer network;
- (d) damages or causes to be damaged any computer, computer system or computer network, data, computer data base or any other programmes residing in such computer, computer system or computer network;
- (e) disrupts or causes disruption of any computer, computer system or computer network;
- (f) denies or causes the denial of access to any person authorized to access any computer, computer system or computer network by any means;
- (g) provides any assistance to any person to facilitate access to a computer, computer system or computer network in contravention of the provisions of this Act, rules or regulations made thereunder,
- (h) charges the services availed of by a person to the account of another person by tampering with or manipulating any computer, computer system, or computer network,

- (i) destroys, deletes or alters any information residing in a computer resource or diminishes its value or utility or affects it injuriously by any means
- (j)Steals, conceals, destroys or alters or causes any person to steal, conceal, destroy or alter any computer source code used for a computer resource with an intention to cause damage,

he shall be liable to pay damages by way of compensation to the person so affected.

It may be observed that this section lists 10 different sub sections all of which apply when the contravention is committed “without the permission of the owner” of the computer.

Secondly it is observed that the section includes “Causing damage to any computer” and “causing disruption of any computer”, which may occur either through electronic means or otherwise.

Under 43(g) providing assistance to another person to contravene the Act is also considered a contravention.

Under 43(h), availing some service and charging it to another person (as in a credit card fraud) is also a contravention.

One of the most interesting aspects is 43(i) which records that if a person “Diminishes the value” of information residing inside a computer resource or diminishes its utility is also considered to have contravened the section.

Though this section is meant for enabling a civil claim, since Section 66 of the Act is linked to this section and prescribes an imprisonment of 3 years and a fine of Rs 5 lakhs if any of these contraventions are committed fraudulently or dishonestly, these sub sections are also relevant in defining Cyber Crimes which are prosecuted by the law enforcement under CrPC.

Section 43A was a section specifically introduced in 2008 to address the demand of the industry that there should be “Data Protection” provisions in the Act to satisfy the requirements of international data transfer for data processing BPOs.

Section 43A states as under:

Compensation for failure to protect data

Where a body corporate, possessing, dealing or handling any sensitive personal data or information in a computer resource which it owns, controls or operates, is negligent in implementing and maintaining reasonable security practices and procedures and thereby causes wrongful loss or wrongful gain to any person, such body corporate shall be liable to pay damages by way of compensation, not exceeding five crore rupees, to the person so affected.

Explanation: For the purposes of this section

- i) "body corporate" means any company and includes a firm, sole proprietorship or other association of individuals engaged in commercial or professional activities
- ii) "reasonable security practices and procedures" means security practices and procedures designed to protect such information from unauthorised access, damage, use, modification, disclosure or impairment, as may be specified in an agreement between the parties or as may be specified in any law for the time being in force and in the absence of such agreement or any law, such reasonable security practices and procedures, as may be prescribed by the Central Government in consultation with such professional bodies or associations as it may deem fit.
- iii) "sensitive personal data or information" means such personal information as may be prescribed by the Central Government in consultation with such professional bodies or associations as it may deem fit.

Rules under this section were notified on 11th April 2011 and identified the following types of data as “Sensitive Personal Information”.

- (i) password;

- (ii) financial information such as Bank account or credit card or debit card or other payment instrument details ;
- (iii) physical, physiological and mental health condition;
- (iv) sexual orientation;
- (v) medical records and history;
- (vi) Biometric information;
- (vii) any detail relating to the above clauses as provided to body corporate for providing service; and
- (viii) any of the information received under above clauses by body corporate for processing, stored or processed under lawful contract or otherwise:

Reasonable Security Practice was defined as follows”

“A body corporate or a person on its behalf shall be considered to have complied with reasonable security practices and procedures, if they have implemented such security practices and standards and have a comprehensive documented information security programme and information security policies that contain managerial, technical, operational and physical security control measures that are commensurate with the information assets being protected with the nature of business. In the event of an information security breach, the body corporate or a person on its behalf shall be required to demonstrate, as and when called upon to do so by the agency mandated under the law, that they have implemented security control measures as per their documented information security programme and information security policies.”

Though a mention was also made that international standards such as ISO27001 could be one of the standards that may be followed by a company to demonstrate compliance to this section, the ability to demonstrate the documented information security practices when an occasion demands is the key to compliance.

While Section 43A applied only to “Sensitive Personal Information”, a separate section 72A addressed the requirements of following the contractual obligations with a data subject while

handling “Personal Information” failing which there could be imprisonment upto 3 years and fine.

Personal information means any information that relates to a natural person, which, either directly or indirectly, in combination with other information available or likely to be available with a body corporate, is capable of identifying such person.

Presently the Government of India is considering a separate Act called “Personal Data Protection Act” (PDPA) for data protection purpose. Once this Act becomes effective, Section 43A would be deleted and compliance requirements under Section 43A of ITA 2000/8 will shift to a more rigorous compliance regime under PDPA.

Detailed rules under Section 43A can be found at

https://www.naavi.org/importantlaws/it_rules_compendium/11042011_2.pdf

Criminal Offences

Offences that attract imprisonment and fine and that would be prosecuted by the Police under the CrPC are contained in Chapter XI of ITA 2000/8.

A quick glance of the sections under this chapter along with Sections 84B and 84C which are related are given in the table below.

In the table 1, the sections and the brief description are provided. Table 2 contains the details of punishments.

For a detailed analysis of the different sections, it is recommended that the students refer to the E Book: “Cyber Crimes under ITA 2008” available at Naavi.org.

Table 1: List of offences

No	Description
65	Tampering with Computer Source Documents
66	Computer Related Offences
66A	Punishment for sending offensive messages through communication service, etc (P.S: Section scrapped by Order of Supreme Court)
66B	Punishment for dishonestly receiving stolen computer resource or communication device
66C	Punishment for identity theft
66D	Punishment for cheating by personation by using computer resource
66E	Punishment for violation of privacy
66F	Punishment for cyber terrorism
67	Punishment for publishing or transmitting obscene material in electronic form
67A	Punishment for publishing or transmitting of material containing sexually explicit act, etc. in electronic form
67B	Punishment for publishing or transmitting of material depicting children in sexually explicit act, etc. in electronic form.
67C	Preservation and Retention of information by intermediaries
68	Power of Controller to give directions
69	Powers to issue directions for interception or monitoring or decryption of any information through any computer resource
69A	Power to issue directions for blocking for public access of any information through any computer resource
No	Description
69B	Power to authorize to monitor and collect traffic data or information through any computer resource for Cyber Security

70	Protected system
70A	National nodal agency
70B	Indian Computer Emergency Response Team to serve as national agency for incident response
71	Penalty for misrepresentation
72	Breach of confidentiality and privacy
72A	Punishment for Disclosure of information in breach of lawful contract
73	Penalty for publishing electronic Signature Certificate false in certain particulars
74	Publication for fraudulent purpose
84B	Punishment for abetment of offences
84C	Punishment for attempt to commit offences

Table 2: Punishments

Section	Jail-Years	Fine Rs,Lacs	Cog	Bail	Com
65	3	2	Yes	Yes	Yes
66	3	5	Yes	Yes	Yes
66A	3	NS	Yes	Yes	Yes
66B	3	1	Yes	Yes	Yes
66C	3	1	Yes	Yes	Yes
66D	3	1	Yes	Yes	Yes
66E	3	2	Yes	Yes	Yes
66F	Life	0	Yes	No	No
67	3/5	5/10	Yes	Yes/No	Yes/No
67A	5/7	10	Yes	Yes/No	No
67B	5/7	10	Yes	Yes/No	No
67C	3	NS	Yes	Yes	Yes
68	2	1	No	Yes	Yes
69	7	NS	Yes	No	No
69A	7	NS	Yes	No	No
69B	3	NS	Yes	Yes	No
70	10	NS	Yes	No	No
70A	-	-	-	-	-
70B	1	1	No	Yes	Yes
71	2	1	No	Yes	Yes
72	2	1	No	Yes	Yes
73	2	1	No	Yes	Yes
74	2	1	No	Yes	Yes

It may be observed that the different sections cover almost all types of known and predictable cybercrimes.

Section 66 which is tied to Section 43 is the most comprehensive section since it covers any offence that can be interpreted as “Diminishing the value of information residing inside a computer”, besides, unauthorized access, denial of service, virus introduction etc.

Section 66A has since been scrapped because of a Supreme Court observation that it violates the constitutional right of “Freedom of Expression”.

Section 66B covers use of a stolen electronic device such as a mobile or a computer.

66C and 66D cover the offence of “Impersonation”, “identity theft”, “password theft” etc.

66F is a special section which defines the offence of “Cyber Terrorism” where the punishment may extend to life.

Obscenity in electronic form is covered under Sections 67, 67A and 67B as well as 66E. Section 67 covers publishing and distribution of electronic documents and imposes an imprisonment of 3 years. Section 67A provides for publishing and distribution of sexually explicit electronic information and carries a higher sentence of 5 years. Section 67B addresses “Child Pornography” and makes even browsing and storing of information in which children are engaged in sexual act a punishable crime with 5 years of imprisonment. Section 66E covers taking of pictures of indecent persons of persons violating their body privacy.

Section 67C mandates retention of data for specified periods in specified formats (though detailed rules have not been notified for the purpose) and along with Section 65 cover the requirement of evidence being preserved for a reasonable period.

Section 69 provides powers of interception and decryption to notified agencies and Section 69A provides powers of blocking of any computer resource including the internet and website to certain other notified agencies. Section 69B similarly provides powers to certain notified agencies to demand and collect information such as “Traffic data” from intermediaries or other IT users.

Section 70B similarly provides certain powers to CERT-In which are declared as a “Nodal Agency” to monitor the security of the Cyber Space.

These sections are also guidelines for compliance to companies since non co-operation with the agencies exercising these powers could be an offence with a possible imprisonment.

Section 70 is another special section under which the Government may declare any appropriate system as a “Protected System” and any unauthorized access of such a system or even an attempt to do so results in an offence with a possible punishment of up to 10 years.

Section 68 provides some powers to the CCA against the licensed certifying authorities along with a power to recommend their prosecution for violating any order of the CCA.

Sections 71, 73 and 74 are related to wrongful use of Digital Signature systems such as misrepresentation to obtain a Digital Certificate, publishing a digital certificate with false information and using the digital certificate for a fraudulent purpose.

Section 72 and 72A address the issue of “Protection of Privacy”. Section 72 address violations by authorities which under the Act are empowered to collect personal information and 72A addresses violation by other parties who collect information through a contract. If these agencies allow the confidentiality of the information to be breached, there could be a criminal prosecution.

An attempt to commit any of the crime would be deemed as an offence punishable with half the punishment meant for the offence under Section 84C. At the same time, under Section 84B, abetment would be carrying the same punishment prescribed for the offence.

Powers of the Police

Police offices of the rank of “Inspector” are permitted to investigate a crime under ITA 2000 and even cause arrest without warrant in a public place if an offence is being committed or about to be committed or has been committed.

Additionally offences with an imprisonment of 3 years and above have been declared as “Cognizable offences” while offences with imprisonment of 3 years are declared as “Bailable”.

Vicarious Liabilities

ITA 2000/8 also prescribes that “Intermediaries” shall be considered guilty of an offence committed with data under their control unless they have exercised due diligence as prescribed.

Under Section 85, in offences under which a company is punishable, the officers in charge including the CEO, the Director, the person in charge of the business etc. are also liable to be held guilty, unless they can prove that they had exercised “Due Diligence”.

These provisions make it critical for companies to establish appropriate information security practices as part of their “ITA 2000/ compliance measures”.

Electronic Evidence

Along with the notification of ITA 2000, several sections of Indian Evidence Act were amended. One important inclusion to the Indian Evidence Act was Section 65B which prescribes the method by which an electronic document may be made admissible in a Court. The provisions of Section 65B are mandatory and it requires a human observer to certify the electronic documents brought to the Court as evidence in the prescribed manner.

Section 65B has been extensively discussed at www.ceac.in and students may also refer to the E-Book, “**Section 65B of Indian Evidence Act 1872 clarified**” available at www.naavi.org.

When an admitted electronic evidence under Section 65B certification is challenged for “Genuineness”, the Court can use the services of an accredited “**Digital Evidence Examiner**” to satisfy itself on the genuineness of the evidence, as per Section 79A of ITA 2000/8.

Cyber Crimes is an important aspect of ITA 2000 and students of law need to study it in depth. A more detailed discussion of the subject is beyond the scope of this write up and it is recommended that the students refer to the E Book on Cyber Crimes as recommended.

Upcoming Developments

ITA 2000/8 is a law that focused first on E Commerce and subsequently on Cyber Crimes and Information Security. From 2018 onwards there has been a demand for a separate comprehensive law on “Privacy Protection” and a consequent “Data Protection Legislation”. Accordingly, taking the recommendations of the Justice B N Srikrishna Committee on regulation for Data Protection in India, the Government has accepted a draft law presented by the committee and prepared a Bill named “Draft Bill for Personal Data Protection Act”. This act will focus on protection of “Personal Data” and will expand the due diligence responsibilities discussed under Section 79 and Section 85 of ITA 2000/8 and Reasonable Security practices under Section 43A.

Once this Act becomes operative, Section 43A of ITA 2000 would be removed.

Additionally another law for “Data Governance” to address regulation of Non Personal Data is being worked on. Simultaneously, ITA 2000 is expected to undergo further refinements. With the advancement of technology with the development of Artificial Intelligence, Machine Learning, Quantum Computing, extensive use of industrial robotics, autonomous cars etc., there is a need for ITA 2000 to keep pace with the developments in Technology and interesting days seem to be ahead of us in re-defining the Cyber Law environment in the country.

Case discussions

Since Cyber Crime cases are of recent origin, we do not have much of case law developed in respect of these cases in India. Cases have not been discussed at length in High Courts and Supreme Court and hence there are no reliable set of cases to follow at this point of time. Hence our effort in discussing these cases is to contribute towards development of Cyber Jurisprudence.

Our analysis of these cases would be from the point of view of how ITA 2000 applies to the instant case and what are the issues involved in collecting the evidences required.

Caselet 1: The First Case of Conviction under ITA-2000:

The case of Government of Tamil Nadu Vs Suhas Katti, tried at the Additional CMM Court in Egmore, Chennai is a landmark case in the history of Cyber Crime prosecution in India.

The facts of the case were as under:

A lady in Chennai started getting phone calls at her residence soliciting company. A complaint was lodged. When Police queried, one caller informed that he was calling based on an invitation posted by the lady in a Yahoo message group. When checked, it was found that in two e-groups at yahoo, messages had been posted in the lady's name inviting for sexual company and providing her residence phone numbers.

The Cyber Crime Police Station took the assistance of a private expert (Ed: Incidentally, the expert was Naavi) and through the header information available in the group message, identified the IP address which was traced with the help of the ISP involved to an address in Mumbai.

When queried about known persons in Mumbai, the lady provided the name of an acquaintance in Mumbai who could be suspected.

Armed with this information, Police went to Mumbai and with the assistance of the local Cyber Crime Police station, visited the address provided by the ISP. The address belonged to a Cyber Café in Sion. On examination of the Cyber Café's visitor's register, the investigators zeroed in on an entry which indicated that a visitor by the name of the complainant had accessed the Cyber Café around the time indicated in the header of the message posted in the yahoo group.

The Cyber Café owner recollected that though the name entered in the register was that of a woman, it was in fact a "Boy" who had used the facility and signed in the name of a girl. He

stated that though he had observed the anomaly, he did not consider it significant at that time. Since the incident was only about a week old, he was ready to identify the boy. When the suspect was presented before the Cyber Café owner, he was able to make a positive identification. Police then arrested the accused and the case came before the court for trial.

After careful examination of all the evidences presented and examining the witnesses, the Court confirmed conviction of the accused for offences under sections 469 and 509 of IPC, and Section 67 of ITA 2000. The Accused was sentenced to undergo Rigorous imprisonment for 2 years u/s 469 IPC, and to pay a fine Rs.500/- or in default to undergo simple imprisonment for 1 month, to undergo 1 year simple Imprisonment and to pay a fine of Rs.500/- i/d to undergo simple imprisonment for 1 month , for the offence u/s 509 IPC and for the offence u/s 67 of Information Technology Act 2000 to undergo Rigorous Imprisonment for 2 years and to pay a fine of Rs.4,000/- i/d to undergo S.I. for 6 months. All sentences to run concurrently. The period undergone by the Accused to be set off u/s 428 Cr.P.C.

In the process of coming to this decision, the Court came to the conclusion that the content posted on the message group was “lascivious”, “appeals to the prurient interest” or “its effect is such as to deprave and corrupt persons who are likely, having regard to all relevant circumstances, to read, see or hear the matter contained or embodied in it” and therefore satisfies the requirements of Section 67 of the ITA 2000. It was also satisfied the conditions for invoking section 509 of IPC as content that “outraged the modesty of woman”.

The message posted was

“Hi ! , My name is Mary and I am 23 yrs old girl based in Chennai. Like the flower rose, I am blossomed fully and waiting to be picked. Inviting Chennai & Bangalore guys to contact me to hav fun. I can be contacted at 044-2827xx11,2825xx37(o),4344xx10 (r) or on@rediffmail.com. Waiting for your phone calls”

(PS: phone numbers deliberately masked)

The Court also concluded that the accused had committed a “forgery” by posting the message on the yahoo group in the name of the lady and insulted her modesty. Hence it invoked sections 469 and 509 respectively.

In arriving at its conclusion, the Court relied on the evidence in the form of copies of web documents certified under Section 65B. The certified copies had been provided by Cyber Evidence Archival Centre a private body. The evidence was contested by the defense both on the ground that they are copies and are not admissible and also that the evidence of the “Private Expert” should not be relied upon. Court rejected the contentions and also heard Naavi’s views as an expert and finally arrived at the conclusion.

Comments:

In the process of this judgment the Court validated

- a) the Section 65B process of producing admissible evidence of electronic documents in print form,
- b) accepting the views of a private expert and
- c) bringing about conviction simultaneously under different sections of IPC and ITA 2000.
- d) This was the first case in which a Section 65B certificate was produced in the Court.

The case also highlighted the usefulness of the maintenance of the visitor’s register at a Cyber Café and the advantages of a quick investigation.

This case was tried before the amendments of 2008 became effective. In the event a similar offence occurs now, perhaps Section 66A could have been invoked for sending a message “so as to deceive the recipient about the origin of the message”. The same section would become relevant for “Causing annoyance” etc. Similarly, section 66C/D could also become relevant.

Caselet 2: S Umashankar Vs ICICI Bank

This was also a historic case in which a customer of the Bank who was a victim of a Phishing fraud had filed an adjudication application against the Bank and claimed compensation from the Bank.

The victim, Mr S.Umashankar was an NRI and customer of the Tuticorin branch of ICICI Bank. One day in September 2008, Rs 595,000/- had been transferred to the credit of a current account in ICICI Bank, Fort branch through online transfer. Bank called the customer next day and informed about the transfer. By that time Rs 4.60 lakhs had been drawn in cash by the current account holder.

Customer immediately took up the complaint. Initially Bank said that they are investigating internally and no action was required by the customer for 30 days. Subsequently, they refused to refund the amount and did not even return amount of Rs 1,50,000 lying in the current account undrawn. Bank also appropriated Rs 35,000/- towards the overdraft outstanding in the account.

The customer and filed the adjudication application after which the excess amount of Rs 1,50,000/- was returned. Bank continued to hold Rs 4,95,000/- of which included Rs 35,000/- appropriated by the Bank.

After a detailed proceedings, the adjudicator of Chennai ordered that the Bank was negligent in following security measures as expected and as per RBI guidelines and ordered the return of money along with costs.

ICICI bank went on appeal to Cyber Appellate Tribunal which stopped functioning in 2011 before a judgement could be passed. In 2018, TDSAT continued the hearing and dismissed the appeal. It held that ICICI Bank had assisted the fraudster through negligence and committed a contravention under Section 43(g).

Caselet 3: The Bazee.com case

In one of the early cases that went into trial under ITA 2000, the case against an IIT Student who posted an obscene video for sale at bazee.com occupies an important place. In this case the video put up for sale was titled “DPS MMS Video” and contained a mobile captured video of a sexual activity between two students of Delhi Public School, in Delhi. The boy involved in the act was accused of having released the video as an MMS which went viral. The IIT Student had put a copy for sale at bazee.com. The accused himself was a minor and so was the girl involved in the video.

The case was interesting for the reason that the IIT Student was charged under Section 67 of ITA 2000 for transmitting electronic content which was obscene. Additionally the CEO of Bazee.com was also accused for having facilitated the offence by invoking Section 85.

The CEO argued that the website had followed “Due Diligence” which was contested by the Police. After more than 7 years in different Courts, the CEO was acquitted for the reason that he had been charged of an offence as a CEO without the Company itself having been made an accused.

In 2012, the CEO was acquitted by the Supreme Court for the reason the Police had not arraigned the Company before charging the CEO under Section 85.

Comments:

This case was important since it also tested the operation of Section 75 of ITA 2000 under which the CEO of Bazee.com who was not a citizen of India was made liable. Though he was acquitted in the end, the case established the operation of Section 85 on the executives of the Company.

Caselet 4: P V Anvar Vs P.K. Basheer

On September 18, 2014, the Supreme Court gave a judgement in the case of P V Anvar vs P.K.Basheer in which the operation of Section 65B was discussed. The Court held that production of Section 65B certificate for admissibility of electronic evidences was mandatory.

Naavi had first produced a Section 65B Certificate in the Suhas Katti case. However in the Afzal Guru case in 2005, Supreme Court had accepted electronic evidence without Section 65B certificate and since then most Courts did not insist on the certificate until the P V Anvar judgement over turned the Afzal Guru verdict.

Comment

Section 65B of IEA is a unique provision of law whereby a properly certified copy of an electronic document can be admitted in the Court without the production of the original. The Chennai Court in the Suhas Katti case had rightly accepted the certified copy and concluded the trial. It has taken years for this principle to become widely accepted.

P.S: For more case laws check the Internet and browse through TDSAT cases.

ICANN PRIMER

UNDERSTANDING THE TECHNICAL AND BUSINESS
FUNCTIONS OF THE INTERNET CORPORATION FOR
ASSIGNED NAMES AND NUMBERS (ICANN)

October 2013



GOVLAB

Introduction & Objectives

ICANN's role in governing the Internet is to coordinate the Internet's unique identifier system to ensure the operability, stability and security of one global Internet. Understanding what this means in practice, however, requires a comprehensive understanding of both the Internet technologies that underlie ICANN's work as well as the Internet's key business operation players and their relationship to ICANN.

This primer, therefore, serves the goal of helping frame ICANN's key responsibilities in the Internet governance space as they relate to Internet technologies and the business operations of the Internet.

Introduction to Internet Technologies

PACKET SWITCHING

The Internet (or "inter-network") is a global network of networks. The fundamental innovation that produced the Internet as we know it, and that makes the Internet run, is packet switching.

Packet switching allows for the delivery of variable-bit-rate data streams over a shared network, which allocates transmission resources (e.g. bandwidth) as needed. The Internet gains its robustness from packet switching in that information does not need to take a determined path from sender to receiver. The way packet switching works is that when a computer sends information, Transmission Control Protocol (TCP) breaks the information into smaller "packets" of data. Each packet is labeled with sender and receiver information using the Internet Protocol (IP) addressing system and is transmitted through the Domain Name System (DNS), with each packet not necessarily traveling the same route. When a packet reaches its specific computer destination, again using TCP, the packet is reassembled with the other packets.

Packet switching means that any machine connected to the Internet can send information to and receive information from any other machine connected to the Internet, regardless of either machine's location.¹

WHAT ARE NETWORKS?

A network is created when two or more machines are linked together with the ability to communicate. There are many kinds of computer networks,² including, for example:

- ▶ Local-area networks (LANs) – connect computers located in proximity to each other.
- ▶ Wide-area networks (WANs) – connect computers located far apart through telephone lines or radio waves.
- ▶ Campus-area networks (CANs) – connect computers within a limited geographic area, such as a campus or military base.
- ▶ Metropolitan-area networks (MANs) – connect computers within a town or a city.
- ▶ Home-area networks (HANs) – connect digital devices contained within a user's home.

The Internet, as described above, operates as one global network,³ linking different types of networks around the world across "a widespread information infrastructure."⁴

1 "Packet Switching Demo." PBS. Retrieved from http://www.pbs.org/opb/nerds2.0.1/geek_glossary/packet_switching_flash.html; Video: "Circuit Switching and Packet Switching." YouTube. Retrieved from <http://www.youtube.com/watch?v=Dq1zpiDN9k4>.

2 Definition: "Network." Webopedia. Retrieved from <http://www.webopedia.com/TERM/N/network.html>.

3 Definition: "Internet." Webopedia. Retrieved from <http://www.webopedia.com/TERM/I/Internet.html>.

4 "Brief History of the Internet." Internet Society. Retrieved from <http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet>.

PROTOCOL LAYERS

Key to every network is its protocols—the sets of “rules” that guide technical interactions on that network. A network protocol is defined as the “agreed-upon format for transmitting data between two devices.”⁵

Network protocols include everything from the electrical specifications for how a device physically connects to the network infrastructure, to specifications for which methods can be used to control congestion in the network or for how application programs will communicate and exchange data.⁶ Network protocols are often described in terms of two different frameworks:

THE OPEN SYSTEM INTERCONNECTION (OSI) MODEL

The OSI defines a vertical stack of seven layers of protocols for a network.⁷ Control is passed from one layer to the next, starting at the application layer, and proceeding to the bottom-most layer and then back up the hierarchy.⁸ The stack of OSI layers is as follows:

- ▶ **Application Layer (Layer 7)** – This layer includes protocols that enable a “window for users and application processes to access network services.”⁹
- ▶ **Presentation Layer (Layer 6)** – This layer includes protocols that format data for presentation to the application layer. In a way, these protocols serve as “translator” for the network.¹⁰ An example protocol within this layer is HyperText Transfer Protocol (HTTP).
- ▶ **Session Layer (Layer 5)** – This layer focuses on protocols for “setting up, managing and then tearing down sessions between Presentation layer entities.”¹¹ Example protocols within this layer include Network File System (NFS) and Structured Query Language (SQL).
- ▶ **Transport Layer (Layer 4)** – This layer focuses on protocols enabling the process for delivery of data to the appropriate application process on host computers. Key protocols within this layer are the Transmission Control Protocol (TCP) and User Datagram Protocol (UDP).¹²
- ▶ **Network Layer (Layer 3)** – This layer is where the physical path of data is set based on network conditions, priority of service, and other factors.¹³ The most significant protocol at Layer 3 is the Internet Protocol, or IP (described in further detail below).
- ▶ **Data Link Layer (Layer 2)** – This layer provides the protocols or specifications for transferring data between network entities.¹⁴ The foremost data link layer protocol is the Ethernet protocol.
- ▶ **Physical Layer (Layer 1)** – This layer is “concerned with the transmission and reception of the unstructured raw bit stream over a physical medium.”¹⁵ This layer begins at the network interface card (NIC), which is the device within a computer used for connecting the internal data bus of a computer to the external media (cables) of the network.¹⁶

5 Definition: “Protocol.” Webopedia. Retrieved from <http://www.webopedia.com/TERM/P/protocol.html>.

6 “Networking Protocols General Information.” TechFest. Retrieved from <http://www.techfest.com/networking/prot.htm>.

7 “OSI Model - Open Systems Interconnection model.” Compnetworking. Retrieved from http://compnetworking.about.com/cs/designosimodel/g/bldef_osi.htm.

8 “The 7 Layers of the OSI Model.” Webopedia. Retrieved from http://www.webopedia.com/quick_ref/OSI_Layers.asp.

9 “The OSI Model’s Seven Layers Defined and Functions Explained.” Microsoft. Retrieved from <http://support.microsoft.com/kb/103884>.

10 Id.

11 Id.

12 “Networking on z/OS.” IBM z/OS Basic Skills Information Center at 27. Retrieved from http://publib.boulder.ibm.com/infocenter/zos/basics/topic/com.ibm.zos.znetwork/znetwork_book.pdf.

13 “The OSI Model’s Seven Layers Defined and Functions Explained.” Microsoft. Retrieved from <http://support.microsoft.com/kb/103884>.

14 Think of sending mail through the postal system. The data link layer is where the letter is stuffed into the envelope (when data is moving down through the layers) and where the envelope is opened (when passing the contents upward at the receiving end).

15 “The OSI Model’s Seven Layers Defined and Functions Explained.” Microsoft. Retrieved from <http://support.microsoft.com/kb/103884>.

16 Tamara Dean. Network+ Guide to Networks at 9. Retrieved from http://books.google.com/books?id=UD0h_GqgbHgC&printsec=frontcover&dq=network%2B+guide+to+networks&src=bmrr#v=onepage&q&f=false.

THE TCP/IP MODEL

Combining and generalizing some of the OSI model's protocol layers, this model describes a suite of four layers of protocols for communication over the Internet¹⁷:

- ▶ **The Application Layer (Layer 4)** – This layer includes the protocols specifying how applications get access to networked services. It encapsulates the session, presentation and application layers as described in the OSI framework.
- ▶ **The Transport Layer (Layer 3)** – This layer includes protocols that act as delivery service for the application layer and those that handle error detection and recovery.
- ▶ **The Internet Layer (Layer 2)** – This layer focuses on routing and delivery of data, allows for communication across independent networks, and carries out translations to deal with dissimilar data addressing schemes.
- ▶ **The Link Layer (Layer 1)** – This layer is a combination of the Data Link and Physical layers of the OSI model. It consists of the actual hardware, including wires and NICs.

INTERNET PROTOCOL

Internet Protocol (IP) sits at the third later in the OSI Model, and is the principal communications protocol in the TCP/IP suite. IP specifies the format of packets (also called datagrams) sent and received on the Internet, as well as the standard for routing packets across interconnected networks, i.e., the Internet.

ROUTING

The first key component of IP is the concept of “routing,” the process of moving packets from source to destination on the Internet.¹⁸ The hardware supporting this process is called a router and serves as the core or “centerpiece” of the network from which computers, servers, printers and other devices can be connected to the Internet.¹⁹

IP ADDRESSING

The next key component of IP is the addressing system. Every computer, server, router or other device connected to the Internet has a unique number assigned to it called an IP address, without which communication with other devices, users, and computers on the Internet would prove impossible. An IP address can be analogized to a telephone number, each one providing a unique way to reach you and only you.

Connected devices are assigned IP addresses through the process of IP allocation. Large bundles of IP addresses are allotted to Internet Service Providers (ISPs) from the “Unallocated Address Number Pool,” which is administered by the Internet Assigned Numbers Authority (IANA), now a department of ICANN.²⁰ ISPs then assign IP addresses to every server and every computer that connects to the Internet.

With so many Internet users, ISPs choose to “lend” IP addresses from a pool of numbers, rather than assigning every computer a fixed (or static) IP address. This loaning of IP addresses is known as “dynamic IP addressing.”²¹

17 “4 Layers of the TCP/IP Model.” *Pitt.edu*. Retrieved from http://www.sis.pitt.edu/~icucart/networking_basics/4LayersofTCPIPModel.html.

18 Definition: “Routing.” *Webopedia*. Retrieved from <http://www.webopedia.com/TERM/R/routing.html>.

19 Guy McDowell. “How Does a Router Work?” *Makeuseof*. [October 10, 2009]. Retrieved from <http://www.makeuseof.com/tag/technology-explained-how-does-a-router-work/>.

20 “IPv4 Address Report.” *Potaroo.net*. Retrieved from <http://www.potaroo.net/tools/ipv4/index.html>.

21 “Networks with Dynamic IP Addresses.” *OpenDNS*. Retrieved from <http://www.opendns.com/support/article/61>.

IPV4 VERSUS IPV6

Notably, two versions of this communications protocol are currently in use. Internet Protocol version 4 (IPv4) was the first publicly available IP; it encompasses 32-bit IP addresses, which limits the number of possible unique IP addresses to 4,294,967,296. In 1998, however, in recognition of the impending exhaustion of available addresses within IPv4, a successor Internet Protocol version was developed: IPv6. This version uses 128-bit addresses and offers about 3.4×10^{38} (340 undecillion) possible unique addresses.²²

While the intention is for IPv6 to replace IPv4, this process has not yet been completed. This matters because IPv4 and IPv6 essentially operate as parallel systems, meaning data cannot be exchanged between these protocols without “special gateways” or transition technologies.²³

THE DOMAIN NAME SYSTEM (DNS)

WHAT IS THE DNS?

When Internet users connect to websites or other Internet servers, they do so by typing a domain name into a browser.²⁴ A domain name is a unique, human memorable identifier such as www.icann.org.²⁵ However, connected devices to the Internet do not communicate via domain names, but communicate (as described above) through IP and IP addresses (www.icann.org's IP address, for instance, is 192.0.34.163).

The way that domain names are “resolved” and mapped to their correlating IP addresses is called Domain Name Resolution. These resolutions are performed through the DNS,²⁶ a hierarchical, distributed database operated by millions of different entities around the world.

HOW DOES THE DNS WORK?

Domain Name Resolution occurs in multiple steps.²⁷ First, every time an Internet user enters a domain name into a browser (e.g. [icann.org](http://www.icann.org)), the user's computer's first stop in resolving (or finding the IP address for the server housing [icann.org](http://www.icann.org)'s content) is its own DNS “cache,” which stores information for queries a computer has recently run.

If the IP address is not stored in the DNS cache, the user's computer next queries its ISP's DNS server for the mapped IP address. If the ISP's DNS server does not have this information stored, it redirects the query to one of the core “root name servers” that sit at the top of the DNS hierarchy. The authoritative core root name servers are managed by 12 organizations that use redundant machines around the globe to provide distributed service; in fact, there are core root name servers in over 130 physical locations around the world.²⁸

These core root name servers store authoritative information on all top-level domains (.com, .net, .org, etc.) and their cor-

22 RFC2460: “Internet Protocol, Version 6 (IPv6) Specification.” IETF. Retrieved from <http://tools.ietf.org/html/rfc2460>.

23 Ben Parr. “IPv4 & IPv6: A Short Guide.” Mashable. (February 3, 2011). Retrieved from <http://mashable.com/2011/02/03/ipv4-ipv6-guide/>; see also “IPv6 Transition Mechanisms.” Ripe.net. Retrieved from <http://www.ripe.net/lir-services/training/e-learning/ipv6/transition-mechanisms>.

24 Domain names are read hierarchically from right to left. Take “[icann.org](http://www.icann.org)” for example: the “.org” specifies the top-level domain (TLD), and the word preceding the period constitutes the second-level domain, which is registered by a specific individual or entity, in this case ICANN.

25 Definition: “Domain Name.” Webopedia. Retrieved from http://www.webopedia.com/TERM/D/domain_name.html.

26 Paul Mockapetris. RFC 1034: “Domain Names - Concepts and Facilities.” The Internet Society. (November 1987). Retrieved from <http://tools.ietf.org/html/rfc1034>.

27 Chris Gonyea. “DNS: Why it's important and how it works.” DYN. Retrieved from <http://dyn.com/blog/dns-why-its-important-how-it-works/>.

28 “Root Servers.” IANA. Retrieved from <http://www.iana.org/domains/root/servers>; Kim Davies. “There are not 13 root servers.” ICANN Blog. (November 2007). Retrieved from <http://blog.icann.org/2007/11/there-are-not-13-root-servers/>.

relating top-level domain (TLD) name servers. This information is stored in a file called the “root” (also called the “root zone,” “root zone file,” “DNS root zone,” or “root domain”).

While the core root servers will not know the final IP address a computer is looking for, they look at all of the TLDs and will return a list of authoritative TLD name servers who might have the final IP address.

These authoritative TLD name servers are queried next. These servers host information about that specific TLD and the name servers of any domains subordinate to it.

The last part of the resolution process involves a query to the name server for the specific domain sought (so in our example from above, the “ICANN” domain within the .org TLD). These name servers contain a record of information on that specific domain, including the IP address(es) associated with it. The query returns this information back to the ISP’s DNS server, which communicates the correlating IP address to the user’s computer, which can then use the IP address to connect to the particular server storing the sought-after domain’s content.

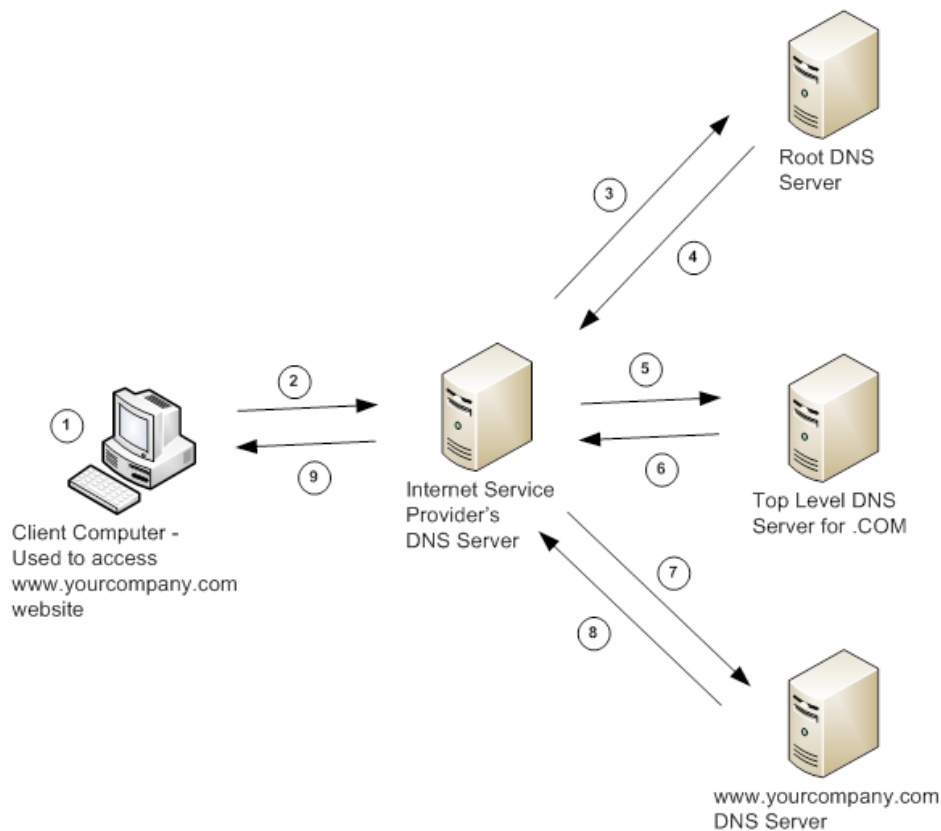


Figure 1.²⁹

29 “Diagram: How the Domain Name System (DNS) Works.” UXWorld. Retrieved from <http://www3.uxworld.com/uncategorized/dns-query-flow/>.

Introduction to the Business Operations of the Internet

In addition to understanding the technologies of IP and the DNS, knowing about the different types of organizations that serve core business operation functions for the Internet proves vital to understanding ICANN's work.

ISPS & WEB HOSTING COMPANIES

Within the network of networks that is the Internet, ISPs serve a number of roles related to Internet access and services. The primary role of an ISP is to serve as access provider, offering users Internet connection through available technologies such as telephone lines, cable, Wi-Fi, and fiber optics.³⁰ For example, Verizon is an ISP company offering Internet connection through fiber optics in New York City; Spectranet is an ISP company offering connection through broadband and WiFi in India.³¹

ISPs may also offer hosting services, such as offering email and/or web hosting services through virtual and/or physical servers, where users can store data and run their own software. For example, many small companies rent servers through ISPs to host their websites.³²

Some ISPs also provide transit services, meaning that they provide an “upstream cascade” of Internet access to other ISPs. These “upstream ISPs” usually have a larger network than the ISP contracting with users and/or is able to provide the “contracting ISP” with access to parts of the Internet the contracting ISP by itself has no access to.³³

REGISTRIES

Registries are organizations that manage the allocation and registration of Internet number resources such as IP addresses and autonomous system numbers (ASNs) for the Internet. Specifically:

- ▶ **Regional Internet Registries (RIRs)** manage the allocation and registration of Internet number resources within a particular region of the world. There are currently five RIRs:
 - African Network Information Center (AfriNIC) for Africa.³⁴
 - American Registry for Internet Numbers (ARIN) for the U.S., Canada, parts of the Caribbean, and Antarctica.³⁵
 - Asia-Pacific Network Information Center (APNIC) for Asia, Australia, New Zealand, and neighboring countries.³⁶
 - Latin America and Caribbean Network Information Center (LACNIC) for Latin America and parts of the Caribbean.³⁷
 - Réseaux IP Européens Network Coordination Centre (RIPE NCC) for Europe, Russia, the Middle East, and Central Asia.³⁸
- ▶ **National Internet Registries (NIRs)** are entities organized under the umbrella of an RIR and coordinate Internet number

30 “What are the different Internet connection methods?” Microsoft. Retrieved from <http://windows.microsoft.com/en-us/windows-vista/what-are-the-different-internet-connection-methods>.

31 “About us.” Spectranet. Retrieved from <http://www.spectranet.in/about-spectranet.php>.

32 “Web Hosting Providers.” w3school. Retrieved from http://www.w3schools.com/hosting/host_providers.asp. Notably, however, not all web-hosting companies are ISPs. Companies like Dreamhost or Hostgater, for example, are dedicated to web hosting and not to providing access. Alan Henry. “5 Best Web Hosting Companies.” Lifehacker. (May 2012). Retrieved from <http://lifehacker.com/5911651/five-best-web-hosting-companies>.

33 Jason Gerson and Partick S. Ryan. “A Primer on Internet Exchange Points for Policymakers and Non-Engineers.” SSRN. (August 11, 2012). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2128103.

34 [Afrinic.net](http://www.afrinic.net/). Retrieved from <http://www.afrinic.net/>.

35 American Registry for Internet Numbers. [ARIN.net](https://www.arin.net/). Retrieved from <https://www.arin.net/>.

36 [APNIC.net](http://www.apnic.net/). Retrieved from <http://www.apnic.net/>.

37 Latin American and Caribbean Internet Address Registry. Retrieved from <http://www.lacnic.net/en/web/lacnic/inicio>.

38 RIPE NCC. Retrieved from <http://www.ripe.net/>.

resources at a national level.³⁹

- ▶ **Local Internet Registries (LIRs)** are allocated “blocks” of Internet number resources by RIRs or NIRs and assign most parts of these blocks to customers. Most LIRs are also ISPs, whose customers are either end users or other ISPs.⁴⁰

DOMAIN NAME REGISTRY OPERATORS

There are also organizations that serve as registry operators; these companies keep track of authoritative information on which second-level domains exist within a specific TLD, and manage the correlating TLD name server to ensure functionality throughout the DNS. Verisign, Inc., for example, manages the TLD name servers and registry databases for the .com, .net, .name, .tv and .cc TLDs.⁴¹

Domain name registry operators also contract with registrars to enable the sale of second-level domains within the TLD by the registrars.

REGISTRARS

Internet registrars are the entities that provide registration services to the public.⁴² ICANN, for example, registered the “*icann.org*” domain name through the registrar GoDaddy.⁴³

Registration of a domain name requires registrars to keep a set of authoritative records on contact information for registrants and managers via a database called Whois. This database is available and searchable to the public.⁴⁴ A typical Whois entry includes not just registrant and manager contact information, but also up-to-date information on IP addresses and the name servers correlating to a registered domain.⁴⁵

Along with registration services, registrars may also provide hosting services.

39 “Operational policies for National Internet Registries in the APNIC region.” *APNIC.net*. Retrieved from <http://www.apnic.net/policy/operational-policies-nirs>.

40 “ARIN Number Resource Policy Manual.” *ARIN.net*. (August 21, 2013). Retrieved from <https://www.arin.net/policy/nrpm.html>.

41 “Domain Names.” Verisign, Inc. Retrieved from http://www.verisigninc.com/en_US/products-and-services/domain-names/index.xhtml.

42 Definition: “Registrar.” *Webopedia*. Retrieved from http://www.webopedia.com/TERM/D/domain_name_registrar.html.

43 “*ICANN.org*.” Whois. Retrieved from <http://who.is/whois/icann.org>.

44 See, e.g., Whois. Retrieved from <http://who.is/whois/icann.org>.

45 *Id.*

Understanding ICANN's Role

ICANN'S WORK AS IT RELATES TO BUSINESS OPERATIONS & IP

To ensure the continued interoperability of the Internet's unique identifier systems, ICANN performs a number of functions within the IP space. First, ICANN coordinates policies determined by the five RIRs for allocating and assigning sets of unique numerical identifiers needed to make the IP system work consistently around the world:

- ▶ **IP addresses** (described above);
- ▶ **Autonomous system numbers**—the number that uniquely identifies a specific network on the Internet⁴⁶; and
- ▶ **Protocol port and parameter numbers**—the numbers that, when added to an IP address, signify the unique destination location needed to reach a specific process or application running on a computer.⁴⁷

Specifically regarding IP addresses, ICANN also manages (through the IANA function) the distribution and allocation of IP address “blocks” to the RIRs, which then sub-delegate these blocks to ISPs for distribution within a given region.

ICANN also administers over two thousand registries for protocol parameters, working closely with the Internet Engineering Task Force (IETF). The IETF is an organization that develops protocols to govern the way computers send and receive packets of data over IP-based networks.⁴⁸

ICANN'S WORK AS IT RELATES TO BUSINESS OPERATIONS AND THE DNS

Within the DNS space, ICANN administers the contents of the root zone, the TLDs, and the DNS records associated with them. ICANN also accredits registrars that take domain name registrations from the public. Specifically, this means that ICANN does the following:

REGARDING THE ROOT ZONE

ICANN manages the root zone through IANA, who serves as operator. Specifically, IANA handles the content of the root zone file by maintaining the “Root Zone Database,” a registry of all TLD delegations and their corresponding operators.⁴⁹ ICANN also coordinates operations of one of the core root name servers, the L-ROOT.⁵⁰

⁴⁶ For example, New York University operates a network (an autonomous system) and thus has a unique ASN, which is used to help express routing policies within the NYU network.

⁴⁷ As an analogy, if an IP address is like a telephone number, the protocol port and parameter number is like an extension.

⁴⁸ “About the IETF.” Internet Engineering Task Force. Retrieved from <http://www.ietf.org/about/>.

⁴⁹ “Root Zone Database.” IANA. Retrieved from <http://www.iana.org/domains/root/db>.

⁵⁰ “L-ROOT.” ICANN. Retrieved from <http://dns.icann.org/>.

REGARDING TOP-LEVEL DOMAINS

ICANN manages the proposal process, delegates administrative responsibility, and coordinates registration requirement policies for approving the assignment of new generic TLDs (gTLDs) (including those incorporating non-Latin scripts), such as .com, .org or .net.⁵¹

ICANN also establishes policies that guide the provision of services for sponsored gTLDs (sTLDs), such as .aero, .cat, .coop, .museum. There are a specific number of sTLDs, each having a designated “sponsor” that represents the specific community served by the sTLD.⁵²

ICANN’s remit also involves coordinating policies to ensure maintenance of authoritative records on country-code TLD (ccTLD) delegations, such as .de or .fr for Germany and France.⁵³ Notably, it is a function of IANA to determine an appropriate trustee for each ccTLD; IANA does not, however, determine what constitutes a country. Instead, IANA refers to the International Standards Organization for such information.⁵⁴

The gTLD domain name registry operators, for the most part,⁵⁵ also sign contracts with ICANN, acknowledging that they will be bound by ICANN’s consensus policies existing at the time of signing as well as those approved through ICANN policy development in the future.⁵⁶

REGARDING DNS RECORDS

- ▶ Domain name registry and registrar operators are required under contract with ICANN to maintain domain name registration data within the publicly available Whois databases. Whois is like an address book; it contains the names of websites, their numerical identifiers, and their owners in searchable form.

REGARDING REGISTRARS

- ▶ ICANN lastly accredits gTLD domain name “registrars.” ICANN’s accreditation process means that ICANN identifies and sets minimum standards for the performance of registration functions (including technical, operational and financial components⁵⁷), and then through accreditation agreements, recognizes persons or entities meeting those standards.⁵⁸

51 Notably, in 2011 ICANN “opened up the domain name space” and “democratized” the allocation of TLDs. In addition to existing gTLDs like .com, ICANN invited applications for new domains (available for \$185,000). David Sarno. “ICANN to let thousands of domain names bloom.” Los Angeles Times. [June 21, 2011]. Retrieved from <http://articles.latimes.com/2011/jun/21/business/la-fi-internet-domain-20110621>.

52 “Status Report on the sTLD Evaluation Process.” ICANN. Retrieved from <http://archive.icann.org/en/tlds/stld-apps-19mar04/stld-status-report.pdf>.

53 Country code TLDs are directly handled by sponsoring organizations “entrusted with operating the domains in the public interest for the community the domain is designed to serve.” See “Understanding the ccTLD Delegation and Redellegation Procedure.” IANA. Retrieved from <http://www.iana.org/domains/root/delegation-guide>.

54 “Procedure for Establishing ccTLDs.” IANA. Retrieved from <http://www.iana.org/procedures/cctld-establishment.html>.

55 Not all registries operate under contract with ICANN, however. For example, the EDUCAUSE registry handles the sale and management of second-level domains within the .edu TLD name, and do not have a contract with ICANN. Similarly, the United States General Services Administration runs the .gov TLD and is not under contract with ICANN.

56 Donna Austin. “Who Are the True Multistakeholders in ICANN.” CircleID. [September 17, 2013]. Retrieved from http://www.circleid.com/posts/20130917_who_are_the_true_multi_stakeholders_in_icann/.

57 “Registrar Accreditation Application.” ICANN. Retrieved from <http://www.icann.org/en/resources/registrars/accreditation/application>.

58 The list of ICANN-accredited registrars can be found here: “ICANN-Accredited Registrars.” ICANN. Retrieved from <http://www.icann.org/registrar-reports/accredited-list.html>.