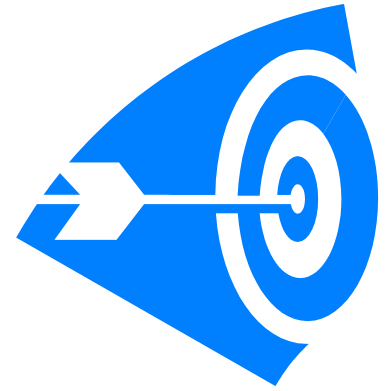


Course:

Government Process Re-engineering

Legal and Policy Framework for GPR

# Agenda



- Need for regulatory framework for GPR & e-Governance
- IT Act 2000, its amendments and related provisions
- Impact of e-Governance on existing legislations and acts

# GPR and the legal framework governing e-Commerce

- Many GPR exercises involve converting services delivered in a manual / paper environment to an electronic environment
- The supporting framework for such electronic transactions are enshrined in the IT and e-Commerce laws of the country
- The implications of such laws and how they provide legal backing to electronic transactions is discussed in this session

# Why a Regulatory Framework?

- E-Commerce & E-Government service delivery involves:

- ✓ Use of Electronic Records
- ✓ Electronic Transactions
- ✓ Electronic Contracts
- ✓ Handling of citizen data & privacy issues
- ✓ Issue of Certificates electronically...

Most of these issues are common also to the wider e-Commerce landscape of the country, and need to be addressed to build trust in electronic transactions

- Other e-Governance specific aspects include:

- ✓ Legal backing to e-Governance initiatives
- ✓ Formalisation of Standards and Interoperability norms
- ✓ Data Protection, Privacy and IPR issues
- ✓ Mechanism for socially inclusive service delivery

# Electronic Transactions: How are they different?

- Challenges posed by e-Commerce:
  - Classification difficulties: the virtual goods
  - New contract types: web hosting, web server etc.
  - Transactions taking place in open platforms
- ... but the essence of business transactions remains the same.
- Conventional law has not become obsolete...
  - “On line” contracts are not different from “off line”
  - Medium of a transaction is generally irrelevant for the law.
- ...and nevertheless, it requires some adaptation.

# Legal Obstacles to e-Commerce

- Legal concepts are based on the existence of a tangible medium:
  - “instrument”, “document”, “original”, “signature”



- Legal concepts based on geographic location:
  - “delivery”, “receipt”, “dispatch”, “surrender”
- Functional Equivalence needs to be established between the Manual and Electronic media used (electronic records, signatures, documents, communication)

# Achieving Functional Equivalence

- Paper-based requirements (“writing”, “record”, “signature”, “original”) specify certain purposes and functions
- Consider criteria necessary to replicate those functions and give electronic data the same level of recognition as information on paper
  - A paper document signed by an individual fulfils the following criteria:
    - The document can be attributed to the individual as the signature is unique to the person (authenticity, non repudiation and integrity)
  - If the electronic document can replicate these functions (e.g. by use of a Digital Signature Certificate attached to the document), it is functionally equivalent to the paper document



# Providing legal backing for Functional Equivalence

If certain conditions are fulfilled, the legal value of electronic transactions shall be equivalent to that of other forms of communication, such as the written form.

Indian IT Act, 2000 achieves this by defining the conditions by which equivalence can be ascertained between paper based and electronic documents

This can be achieved by a single enactment of Law without having to review every single piece of existing legislation establishing formal requirements



# Genesis of IT Act - The UNCITRAL Model Law

- As electronic transactions extends across national boundaries, there is a need for international harmonization in IT Laws
- The United Nations Commission on International Trade Law (UNCITRAL) is the legal body of the United Nations system in the field of international trade law
- UNCITRAL drafted the “UNCITRAL Model Law on Electronic Commerce - 1996” for adoption by countries
- The e-Commerce / IT Laws of most countries are modelled on UNCITRAL Model Law

# Objectives of the Model Law

- To *facilitate* rather than *regulate* electronic commerce
- To *adapt* existing legal requirements
- To provide basic *legal validity* and raise *legal certainty*
  
- Basic Principles of Model Law
  - Functional Equivalence
  - Media and Technology Neutrality
  - Party Autonomy

Law to provide conditions for equivalence of handwritten (manual) and electronic records, signatures etc

Law to provide the transacting parties the autonomy to choose to use e-Commerce and decide security levels

Law to treat all technologies on an equal footing

# IT Act, 2000

- Came into effect from October 17<sup>th</sup>, 2000 on the lines of the UNCITRAL Model Law
- India is the 12<sup>th</sup> nation in the world to adopt Cyber Laws
- The Act applies to the whole of India and also applies to any offence or contravention there under committed outside India by any person irrespective of his nationality, if such act involves a computer, computer system or network located in India
- 94 Sections segregated into 13 Chapters and 4 Schedules
- IT Act 2000 was amended through the Information Technology Amendment Act, 2008 which came into effect from October 27, 2009

IT Act and amendments is equivalent to:

- at least 45 (and counting) U.S. Federal enactments
- at least 598 (and counting) U.S. State enactments
- at least 16 (and counting) UK enactments

# Objectives of IT Act, 2000

- Legal Recognition for transactions carried out by means of electronic data interchange
  - Digital Signatures and Regulatory Regime for Digital Signatures
  - Admissibility of Electronic Documents at par with paper documents
- E-Governance
  - Electronic Filing of Documents and E-Payments
- Define Civil wrongs, Offences, punishments
  - Investigation, Adjudication of Cyber crimes
  - Appellate Regime
- Amend existing Acts to address IT Act provisions
  - Indian Penal Code & Indian Evidence Act - 1872
  - Banker's Books Evidence Act – 1891 & Reserve Bank of India Act – 1934

# IT Act – Important Definitions (1 of 2)

- **“access”** means gaining entry into ,instructing or communicating with the logical, arithmetic or memory function resources of a computer, computer resource or network;
- **"computer"** means electronic, magnetic, optical or other high-speed data processing device or system which performs logical, arithmetic and memory functions by manipulations of electronic, magnetic or optical impulses, and includes all input, output, processing, storage, computer software or communication facilities which are connected or relates to the computer in a computer system or computer network;
- **"computer network"** means the inter-connection of one or more computers through-(i) the use of satellite, microwave, terrestrial lime or other communication media; and (ii) terminals or a complex consisting of two or more interconnected computers whether or not the interconnection is continuously maintained;

# IT Act – Important Definitions (2 of 2)

- **"electronic record"** means data, record or data generated, image or sound stored, received or sent in an electronic form or micro film or computer generated micro fiche;
- **"security procedure"** means the security procedure prescribed by the Central Government under the IT Act, 2000.
- **secure electronic record** – 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

# Admissibility of Electronic Records

As per the definition provided in IT Act, 2000

- "electronic record" means data, record or data generated, image or sound stored, received or sent in an electronic form or micro film or computer generated micro fiche

Section 4 of the IT Act provides legal recognition to electronic records

- *“If any information is required in printed or written form under any law the Information provided in electronic form, which is accessible so as to be usable for subsequent use, shall be deemed to satisfy the requirement of presenting the document in writing or printed form”*

# Electronic Records in Government Service Delivery

## Section 4: Where any law provides for:

- the filing of any form, application or any other document with any office, authority, body or agency owned or controlled by the appropriate Government;
- the issue or grant of any license, permit, sanction or approval in a particular manner;
- the receipt or payment of money in a particular manner.

**Section 9** of the Act clarifies that no person can insist that a government body should accept, issue, create, retain and preserve any document in electronic form

*“Such requirement shall be deemed to have been satisfied if such filing, issue, grant, receipt or payment, as the case may be, is effected by means of such electronic form as may be prescribed by the appropriate Government”*

The Law also gives recognition for publication of Rules, Regulation etc in Electronic Gazette



# Authentication of Electronic Records

- Section 3: Any electronic record may be authenticated by a subscriber using a Digital Signature

*“The authentication of the electronic record shall be effected by the use of asymmetric crypto system and hash function which envelop and transform the initial electronic record into another electronic record”*

Digital Signature Regime will be discussed in detail in the next session

# Retention of Electronic Records

Section 7: Where any law provides that documents, records or information shall be retained for any specific period, then, that requirement shall be deemed to have been satisfied if such documents, records or information are retained in the electronic form, if:

- the information contained therein remains accessible so as to be usable for a subsequent reference;
- the electronic record is retained in the format in which it was originally generated, sent or received or in a format which can be demonstrated to represent accurately
- the details which will facilitate the identification of the origin, destination, date and time of dispatch or receipt of such electronic record are available in the electronic record:

# Attribution of Electronic Records

An electronic record can be attributed to the originator:

- if it was sent by the originator himself;
- by a person who had the authority to act on behalf of the originator in respect of that electronic record; or
- by an information system programmed by or on behalf of the originator to operate automatically.

# Acknowledgement of receipt of Electronic Records

An electronic record can be attributed to the originator:

- If Originator has not specified particular method - Any communication automated or otherwise from the addressee or conduct from the addressee indicating the receipt of the record
- If specified that the receipt is necessary, then unless acknowledgement has been received Electronic Record shall be deemed to have been never sent
- Where acknowledgement is not received within time specified or within reasonable time the originator may give notice to treat the Electronic record as though never sent

# Digital Signatures under IT Act

- IT Act 2000 provides equal recognition to Electronic Signatures (using technologies specified in IT Act Rules), at par with handwritten technologies
- As of now, Digital Signatures based on PKI technology is recognized in India
- PKI based Digital Signatures ensures:
  - Authentication
  - Non Repudiation
  - Confidentiality
  - Integrity
- The PKI regime is regulated by Controller of Certifying Authorities with CCA delegating the issuance of Digital Signatures to Licensed Certifying Authorities
- Any online submission / e-Filing which requires signature of the customer should mandatorily ask for Digital Signing (e.g. Income Tax filing)

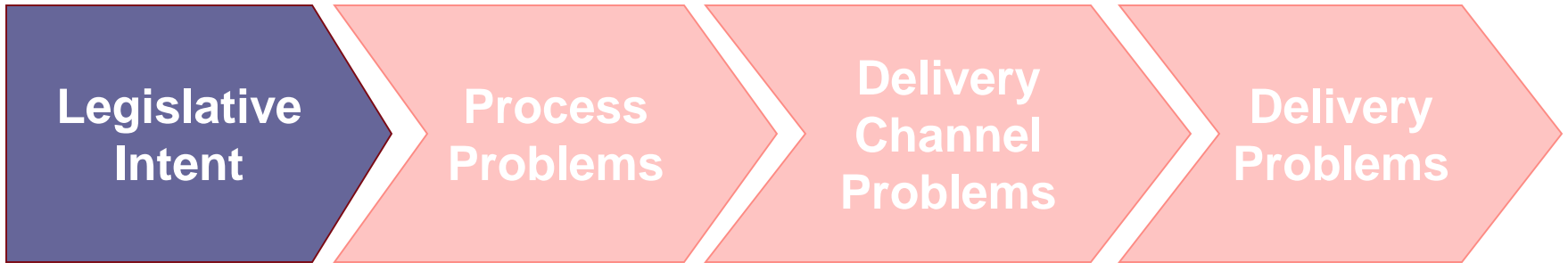
# Impact of e-Governance on Legal Framework

- GPR might necessitate changes in the Legal Framework governing the domain
- Process changes have to be accompanied by appropriate domain legal changes, to provide legal backing to the change
- GPR can also be seen as an opportunity for changing the archaic Rules governing many domains...

# Government Processes are related to Legal Framework..

- Processes are designed /processes evolve in accordance with the legislation governing that particular domain
- Some of these Legislations may be old and antiquated:
  - ✓ E.g. Laws governing the Land Record Management include - Registration Act 1905, Stamp Act 1899, Survey & Boundaries Act 1923, Revenue Code 18xx
- Basis of the legal system is to put in controls, and not better service delivery
- Acts are department-centric, not citizen-centric
- Rules are complex and tedious
  - ✓ 10,000 rules, 0.1 million forms!
- E-Government allows for controls to be enforced in a cost-effective manner, allowing departments to concentrate on better service delivery

# Many a time, process / service delivery problems can be traced back to legislative intent...



- Legislation was well intentioned and relevant at the time it was drafted
- Focused more on control and ensuring compliance, rather than service delivery
- Rules added along the way, making the legal framework complex and tedious



# Process problems arose due to the focus on control...



- Asking for too much information (by every agency, on every occasion)
- Burden of proof thrown on Citizen (Attachments, Annexures, Attestations)
- Complexity of rules & regulations (Anything to do with money is more complex!)
- Heavy reliance on manual systems
- No concept of Quality Assurance