

E-Governance and ICT: A Legal Critique under Information Technology Act, 2000

Dr. Amita Verma
Assistant Professor,
University Institute of Legal Studies,
Panjab University
Chandigarh,

Jatinder Maan
LLM Student
Department of Laws
Panjab University
Chandigarh

Abstract

The rapid and unprecedented growth in Information and Communication Technologies has revolutionized every sector. Today, people with dramatic cultural, social, economic, and educational differences are interacting and conversing freely due to ICTs. We are living in a digital era- digital India – where every individual is digitally empowered. Mobile phones, desktop computers, hand held devices, emails and use of internet has become a central part of our lives. Boundaries are blurring and there is no such place which cannot be accessed. Use of ICTs in various fields has brought greater efficiency, effectiveness, transparency, quickness and reduced costs.

Due to development in ICTs, there is also increasing pressure on governments across the globe to use technology to improve governance especially among developing nations. They still face problems of inefficiency, communication failures, poor service delivery, corruption etc. Today, major private players are making best use of ICTs and delivering quick and efficient services to people. There is increased demand in society for better and smart governance. A moral, responsive, simple, accountable governance. ICTs can play a vital role in sustainable human development and eradicating various social problems. So, this concept of E-governance emerged where ICTs are applied to modernize government functioning. E-governance offers vast opportunity for transforming governance in general and improving capacities of government in particular in empowering citizens and providing services efficiently. It offers opportunities to transform both the mechanics of government and the nature of governance itself. Even after

knowing the importance of ICTs in governance it is still a challenging task for government in a country with billion plus heads where majority people are still illiterate and are not comfortable with technology to deliver the benefits of E-governance. This paper mainly focuses on the e-governance system, how it is beneficial for citizens and also discusses various E- governance projects in areas of Land management, transport, education, health and delivery of numerous essential services under national schemes for rural people. Then this paper discusses the legal provisions relating to E-governance under the Information Technology Act, 2000 with recent amendments.

Contents

- **Introduction**
- **History of E-Governance Initiatives**
- **E-Governance projects**
- **Functional- Equivalent approach**
- **Legal Recognition of Electronic Records**
- **Legal Recognition of [Electronic Signatures]**
- **Use of Electronic records and [electronic signatures] in government and its agencies**
- **Delivery of services by service provider**
- **Retention of electronic records**
- **Audit of document, etc., maintained in electronic form**
- **Publication of rule, regulation, etc., in Electronic Gazette**
- **Section 6, 7 and 8 not to confer right to insist document should be accepted in electronic form**
- **Power to make rules by central government in respect of [electronic signature]**
- **Validity of contracts formed through electronic means**
- **Conclusion**

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“You can’t solve a problem on the same level that was created. You have to rise above to the next level. This is possible through Innovation.....”

Albert Einstein

Introduction

Development of Information and Communication Technologies (ICTs) across the world has revolutionized the way we live, think, perceive and perform our tasks. It has brought some significant and tremendous changes in the lifestyle of people. Flow of frequent information has significantly raised the aspirations of people in every field and the government also could not remain unaffected from the impact of ICTs. Today there is increasing pressure on governments to deliver and improve its governance capabilities. So E-governance has become a norm for better governance. Today, governance is becoming intense and complex. India which has bewildering diversity, vast population with billion plus heads, predominance of rural areas and vast illiteracy, even the task of e-governance is all the more challenging and difficult and at the same time very important also.

The “e” in e-Governance stands for ‘electronic’. Thus, e-Governance is basically associated with carrying out the functions and achieving the results of governance through the utilization of what has today come to be known as ICT (Information and Communications Technology).

Two major trends are considered as the key drivers for ICT to propel e-governance projects:

- a) Massive developments in IT industry that has propelled e-governance further
- b) Development of skills and knowledge of end users in computers and internet and increasing adoption of ICT in their daily lives.

These factors have fuelled the usage of ICT in the development of e-governance solutions and platform.¹

¹ N. Vijaykumar, *Role of ICT in E-Governance: Impact of Cloud Computing in Driving New Initiatives* SET labs Briefings Vol9 No2 2011 , page 43, Available at <http://www.infosys.com/infosys-labs/publications/Documents/e-Governance.pdf>, (last visited August16,2014)

The main effect of e-governance is “simply better government by enabling better policy outcomes, higher quality services, and greater engagement with citizens and by improving other key outputs.”²

The citizens can get immediate online access to information, which may be otherwise time consuming. It makes the governmental functioning more transparent, efficient, effective, accountable and helps to check corruption. Traditionally, the interaction between a citizen or business and a government agency took place in a government office. With the emergence of ICTs, it is possible to locate service centres closer to the citizens (clients). It gives the governed a stronger voice. E-governance offers opportunities to transform both the mechanics of government and the nature of governance itself.

E-governance works on the simple principle of KISS-“Keep it small and simple”. It is a step towards moral, responsive, simple, accountable and good governance. Good governance means achieving the desired goals and delivering through a system of adequate capacity to perform with sound norms and values. Good governance is in essence about being able to provide equal socio-economic and political opportunities to people, being responsive to people’s needs, being able to provide basic services to people, and being fair and accountable in dealings. It means that the processes and institutions produce results that are consistent, reliable and meet the desired standards.

HISTORY OF E-GOVERNANCE INITIATIVES

Recognising the increasing importance of electronics, the Government of India established the Department of Electronics in 1970. The subsequent establishment of the National Informatics Centre (NIC) in 1977 was the first major step towards e-Governance in India as it brought ‘information’ and its communication in focus. In the early 1980s, the use of computers was confined to very few organizations. The advent of personal computers brought the storage, retrieval and processing capacities of computers to Government offices. By the late 1980s, a large number of government officers had computers, but they were mostly used for ‘word

² E-Government More than an automation of government services, Information Society Commission, Page2, (October 2003) Available at <http://www.dcenr.gov.ie/NR/rdonlyres/B65A7E6E-7710-4879-A8BC-24714C6888C0/0/eGovernmentOct03.pdf> (last visited on Aug. 16, 2014)

processing'. Gradually, with the introduction of better softwares, computers were put to other uses like managing databases and processing information. Advances in communications technology further improved the versatility and reach of computers, and many Government departments started using ICT for a number of applications like tracking the movement of papers and files, monitoring of development programmes, processing of employees' payrolls, generation of reports etc.³

However, the main thrust for e-Governance was provided by the launching of NICNET in 1987 – the national satellite-based computer network. This was followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments. NICNET was extended via the State capitals to all district headquarters by 1990.⁴ In the ensuing years, with ongoing computerization, teleconnectivity and internet connectivity, came a large number of e-Governance initiatives, both at the Union and State levels. A National Task Force on Information Technology and Software Development was constituted in May 1998. While recognising Information Technology as a frontier area of knowledge per se, it focused on utilizing it as an enabling tool for assimilating and processing all other spheres of knowledge. It recommended the launching of an 'Operation Knowledge' aimed at universalizing computer literacy and spreading the use of computers and IT in education. In 1999, the Union Ministry of Information Technology was created. By 2000, a 12-point minimum agenda for e-Governance was identified by the Government of India for implementation in all the Union Government Ministries/Departments.⁵

In 2006 the Government of India formally launched its National e-Governance Plan (NeGP),

³ *PROMOTING e-GOVERNANCE The SMART Way Forward*, Second Administrative Refoms Commission 11th Report Dec.2008, Deptt. Of Administrative Reforms and Public Grievances, Ministry of Personnel, Public Grievances & Pensions, Government of India, Chapter 4 at page 26, Available at http://arc.gov.in/11threp/ARC_11thReport_Ch4.pdf , (last visited on Aug.16, 2014)

⁴ *Id.*

⁵ *Id.*

The National e-Governance Plan (NeGP) has been formulated by the Department of Information Technology (DIT) and Department of Administrative Reforms & Public Grievances (DAR&PG) with the vision to "Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realise the basic needs of the common man"

It comprises 27 Mission Mode Projects (MMPs) at the Central, State and Local Government level, as well as Core and Support Infrastructure. For the effective management of the NeGP, the National e-Governance Advisory Group was also constituted to advise the Government on policy issues and strategic interventions necessary for the accelerating introduction of e-Governance across Central and State Government Ministries/Departments. The National e-Governance Advisory Group was first constituted in March 2005 and then reconstituted again in 2010.⁶

E-Governance projects

The e-Governance scenario in India has come a long way since computers were first introduced. The focus now is on extending the reach of governance to have a major impact on the people at large. As stated earlier, e-Governance is an important tool to enhance the quality of government services to citizens, to bring in more transparency, to reduce corruption and subjectivity, to reduce costs for citizens and to make government more accessible. A large number of initiatives have been taken in this category by the Union and the State Governments. Some of these are described below.⁷

Bhoomi Project in Karnataka : Online Delivery of Land Records

⁶ National E-Governance Plan, Meeting of National E-Governance Advisory Group, Background Papers, Nov. 12, 2010 New Delhi, Department of Information Technology, Ministry of Communication and Information Technology, Government of India, Available at https://negp.gov.in/templates/pdfs/12th_Nov_NAG_261110.pdf (last visited on Aug. 17, 2014)

⁷*Supra* note 3, at 29.

Bhoomi (meaning land) is the project of on-line delivery and management of land records in Karnataka. It provides transparency in land records management with better citizen services and takes discretion away from civil servants at operating levels. The Revenue Department in Karnataka, with the technical assistance from National Informatics Centre (NIC), Bangalore, has built and operationalised the BHOOMI system throughout the state. The BHOOMI has computerized 20 million records of land ownership of 6.7 million farmers in the state.

BHOOMI has reduced the discretion of public officials by introducing provisions for recording a mutation request online. Farmers can now access the database and are empowered to follow up. In the BHOOMI project, a printed copy of the RTC can be obtained online by providing the name of the owner or plot number at computerized land record kiosks in 177 taluk offices, for a fee of Rs.15. A second computer screen faces the clients to enable them to see the transaction being performed. A farmer can check the status of a mutation application on Touch Screen Kiosks. If the revenue inspector does not complete the mutation within 45 days, the farmers can now approach a senior officer person with their grievances.⁸

Lokvani Project in Uttar Pradesh

Lokvani is a public-private partnership project at Sitapur District in Uttar Pradesh which was initiated in November, 2004. Its objective is to provide a single window, self sustainable e-Governance solution with regard to handling of grievances, land record maintenance and providing a mixture of essential services. As 88 per cent of the District population resides in villages and the literacy rate is only 38 per cent, the programme had to be designed in a way which was user-friendly and within the reach of the people both geographically as well as socially. To achieve this, the programme format uses the local language, Hindi, and is spread throughout the district to a chain of 109 Lokvani Kiosk Centres. These Kiosks have been established by licensing the already existing cyber cafes. In a Lokvani Centre, people can access information regarding Land Records, Arms license application status, Government Provident Fund accounts of employees, medical facility and can file complaints to the District Magistrate.⁹

⁸ For more information on project BHOOMI visit <http://www.bhoomi.karnataka.gov.in/landrecordsonweb/about.htm>

⁹ *Supra* note 3, at 36.

Project FRIENDS in Kerala

FRIENDS (Fast Reliable Instant Efficient Network for Disbursement of Services) Jan Sevana Kendrams has been designed as a single-window facility where citizens can make government related transactions with ease & comfort and without delay. In FRIENDS bills/dues to the government are collected under a common roof.

Adopting an easy-to-recall acronym 'FRIENDS', the facility is now operational in all the 14 districts of Kerala. FRIENDS centres are providing service for different departments and agencies like the Motor Vehicle Department, Revenue Department, Civil Supplies Department, KSEB, KWA, Universities, Local Bodies, Electrical Inspectorate and BSNL.

Each counter follows a token management system which eliminates the need for queues and inordinate delays in making remittances. At each centre, there is a special Help-Desk to guide the public who are not well conversant with the payment procedures.¹⁰

Computerized Interstate check posts in Gujarat¹¹

Gujarat has an extensive road network, which carries a large volume of commercial traffic Major highway systems link Delhi to Mumbai and provide the principal link to the Kandla sea port on Gujarat's west coast. Gujarat's 10 check posts are positioned at the border with three neighboring Indian states. Nearly 25,000 transport vehicles enter daily through these check posts. Trucking Companies to maximize profits often encouraged transporters to overload their trucks. Thus, by overloading trucks, manufacturers have evaded excise duty. (Some estimates are that 80-90% of vehicles are overloaded.)

¹⁰ For more information on project FRIENDS visit

http://www.kerala.gov.in/index.php?option=com_content&id=3639&Itemid=2954

¹¹ P. Panneervel and Subhash Bhatnagar, Case study on Gujarat, Submitted on January 16, 2000 and revised on December 3, 2001, Available on

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTINFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/EXTGOVERNMENT/0,,contentMDK:20486012~menuPK:1767268~pagePK:210058~piPK:210062~theSitePK:702586,00.html>

Now in the computerized process, all the check posts are monitored at a central location using video cameras installed at every check post cabin. The video camera captures the registration number of all trucks approaching the check post. (There are flood-lights and traffic lights which make the check posts appear like a runway at night.) Software converts the video image of the registration number to a digital form and the details of the truck are accessed from a central data base. An electronic weigh bridge captures the weight and the computer issues a demand note for fine, automatically. Drivers can use a stored value card for payment.

This inspection of all vehicles has produced three-fold increase in tax collection over 2 years. Revenue increased from \$12 million to \$35 million, paying back the total project cost of \$4 million in just 6 months. On average, vehicles are cleared in 2 minutes instead of 30 in the manual system.

MCA21

The vision of the MCA21 project implemented by the Ministry of Corporate Affairs (MCA), Government of India, was “to introduce a service-oriented approach in the design and delivery of Government services”

Its mission was “to build up a secure portal that offers availability of all registry related services including filing of documents, registration of companies and public access to corporate information. The portal services can be accessed/ availed from anywhere, at any time that best suits the corporate entities, professionals and public at large.” There are more than 100 services covered within the scope of MCA21. MCA21 has changed the way citizens and companies interact with Government now. MCA21 has created an overall positive environment amongst stakeholders and its adoption can be gauged from the fact that MCA21 portal is getting 4 million hits per day.¹²

National Knowledge Network

¹² Saaransh A Compendium of Mission Mode Projects under NeGP Department of Information Technology, Ministry Of Communications and Information Technology, Govt. of India at Page 18, Available at https://negp.gov.in/templates/pdfs/Compendium_FINAL_Version_220211.pdf (last visited Aug. 17,2014)

The NKN is the state-of the-art multi- gigabit pan-India network for providing a unified high speed network backbone for all knowledge related institutions in the country. A total of 822 institutes have been identified under NKN out of which 682 institutes have already been connected. The fiber for another 56 institutes has been laid and the commissioning work for these institutes is in progress. Sixty six virtual classrooms have been created at various institutes across the country. In addition, 273 institutes have been migrated from National Mission on Education for Information and Communication Technologies (NMECIT) to NKN. NKN Points of Presence (PoPs) at Guwahati, Bangalore, Belapur, Delhi, Hyderabad and Bhopal are operational. Integration work with respect to each end user organization is in progress. NKN network has been enabled for IPv6 services and this has been made available to the end users. 250 district links have been identified and allotted to the Telecom Service Providers for providing the required connectivity at district headquarter level.¹³

Revenue Administration through Computerized Energy (RACE) BIHAR¹⁴

Patna Electric Supply Undertaking (PESU) is one of the seven Area Boards of BSEB spanning the Patna Urban Area and catering to the energy requirements of more than 3 lakh consumers. The entire billing process was manual and done with the help of a Private Agency till 2001. The bill collection process at the counters was also manual. There were long queues in the counters and the average time taken to complete the payment formalities for a consumer was more than 5 minutes. Then Irregular billing system, ineffective data management, Lack of transparency in billing, delayed accounting were some problems. In view of the above crisis, RACE implementation was initiated in Kankarbag division in 2001. A separate IT department was made functional at the Board HQ to coordinate all IT related activities. In the second phase in 2007, all

¹³ http://www.nic.in/sites/upload_files/nichome/files/documents/ANNUALREPORT2012-13.pdf

¹⁴ S.N. Behera, *Revenue Administration through Computerized Energy (RACE) Billing, Bihar State Electricity Board (BSEB)* Compendium of e-Governance Initiatives in India, Chapter 19, Available at [http://workspace.unpan.org/sites/internet/documents/S4IN13%20Revenue%20Administration%20through%20Computerized%20Energy%20\(RACE\)%20Billing.%20Bihar%20State%20Electricity%20Board\(BSEB\).pdf](http://workspace.unpan.org/sites/internet/documents/S4IN13%20Revenue%20Administration%20through%20Computerized%20Energy%20(RACE)%20Billing.%20Bihar%20State%20Electricity%20Board(BSEB).pdf) (last visited 18 August, 2014)

counters, Divisions and Board HQ were connected with SAN Server of NIC Bihar through broadband and the entire billing data was hosted on SAN.

After implementation of Revenue Administration through Computerized Energy (RACE) billing, the manual system has been completely stopped and every activity relating to billing data is automated. Bills for more than 3 lakh consumers are being generated on monthly basis at the divisions. With the introduction of barcoded bills and billing data on net, consumers can now see and down load their bills and also pay in any of the collection counters. With new value additions in process, consumers can benefit from any-time payment shortly.

Single User Window Disposal Helpline for Applicants (SUWIDHA)¹⁵

SUWIDHA is conceived to facilitate citizen by capturing the input at a single point, defining a specified delivery date depending upon the type of service, accepting cash at the counter itself and delivery of final document from the same counter.

Suwidha Centers have been established till sub-division level since 2003 for delivery of more than 30 Services. Suwidha Centers provide single window front end delivery channel for more than 30 services of various departments.

SUWIDHA has been developed and implemented in client-server mode in all the districts and Tehsils/Sub-Tehsils since 2005. Currently SUWIDHA is successfully implemented at more than 114 locations including district/tehsils/sub-tehsils level

The need for to Web Based Centralized System lead to SUWIDHA upgrade from Client-Server mode to web based application. In Pilot Phase the web-SUWIDHA project will be implemented in 4 districts i.e. Barnala, Mohali, Gurdaspur and Jalandhar.

Except above examples, many judges from Mumbai High court make use of Video conferencing to discuss any case with other judges in India. This is done by providing point-to-point ISDN

¹⁵For more information on project SUWIDHA visit, <http://www.dgrpunjab.gov.in/Home/suwidha>

lines from Mumbai to the other cities. Video conferencing is also used regularly between the Mazgaon Court and Arthur Road jail in Mumbai.¹⁶

Agriculture, power and education are fields where the government makes use of IT to provide services to citizens. The revenue collection department is in the process of using information technology for applications such as income tax.

A Kolkata-based hospital leverages e-governance for tropical medicine. The hospital employs tele-medicine to assist doctors in rural areas as they analyse and treat panchayat residents. This method does away with patients having to travel all the way to Kolkata for treatment. Patients feel better being examined in their own village. Using tele-medicine, the hospital is able to dispense its expertise to far-flung districts. The patient goes for an examination to the local doctor in the panchayat. This doctor is in contact via a voice & data connection with a doctor at the hospital for tropical medicine. Thus, the panchayat resident gets the benefit of being treated by both a local doctor and a hospital specialist.

In Hyderabad, through e-Seva, citizens can view and pay bills for water, electricity and telephones, besides municipal taxes. They can also avail of birth / death registration certificates, passport applications, permits / licences, transport department services, reservations, Internet and B2C services, among other things.

eChoupal, ITC's unique web-based initiative, offers farmers the information, products and services they need to enhance productivity, improve farm-gate price realisation, and cut transaction costs. Farmers can access the latest local and global information on weather, scientific farming practices, as well as market prices at the village itself through this web portal—all in Hindi. eChoupal also facilitates the supply of high quality farm inputs as well as the purchase of commodities at the farm.

Given the literacy and infrastructure constraints at the village level, this model is designed to provide physical service support through a choupal sanchalak-himself a lead farmer—who acts as the interface between the system and the farmers. The contents of this site in their entirety are made available only to the registered sanchalaks.¹⁷

¹⁶ Satinder Kaur “Successful E-Governance initiatives in India” Available at <http://itvoir.com/portal/boxx/knowledgebase.asp?iid=761&Cat=3> (Visited on July 27, 2011)

¹⁷ E-Governance in India: A Success or a Failure? at <http://www.1888articles.com/e-governance-in-india-a-success-or-a-failure-084243.html> (visited on July 27, 2011)

The preferred policy of the government ensuring transparency and accountability has now been made legally feasible with the statutory recognition of e-governance under the Information Technology Act enacted by the Parliament. Chapter III of the Information Technology Act, 2000 containing Section 4 to 10 provides the legal mechanism for e-governance. It covers the area of legal recognition to certain paper based concepts and functions in electronic form. This chapter serves dual purpose: (1) it introduces the principle of functional equivalence; and , (2) it provides foundation to one of the averred objects of the Act of introducing e-governance by ‘facilitating electronic filing of documents with the government agencies.’¹⁸ Electronic records and digital signatures have been granted legal recognition while permitting their use in government and its agencies. Now with the 10 of 2009 amendment, the Act is being made technologically neutral. This has been done by amendment of relevant sections of the Act to provide for ‘electronic signature’ with ‘digital signature’ as one of the types of electronic signature.

The functions or purposes of a written communication are:

1. Authentication of contents by signature;
2. The document is legible to all;
3. It would be unaltered over time;
4. It would allow for reproduction without alteration; and
5. Acceptability before public authorities and courts.

Therefore, any writing in any form which satisfies these functions would be acceptable. Consequently, whether writing is on paper or in an electronic form, so long as it performs the functions for which it been made, there is no justifiable reason to object. The form in which the writing is made is merely the means to achieve the objects enumerated above.

Functional- Equivalent approach

Chapter III of the Act has adopted the functional- equivalent approach. This approach is based on an analysis of the purposes and functions of the traditional paper-based requirement with a view to determining how those purposes or functions could be fulfilled through e-commerce

¹⁸ See, Preamble of the Information Technology Act, 2000

techniques.¹⁹ When adopting this approach in the UNCITRAL Model Law, which provides distinct level of reliability, traceability and unalterability with respect to paper-based documents. Once the electronic documents are able to perform the same functions as performed by the paper-based documents, they attain legal acceptability. For example, if a contract is signed and sent as an electronic document after being digitally signed by using a electronic signature certificate issued by a trustworthy electronic signature certificate provider, then, since it would be able to perform the same functions of reliability, traceability and unalterability as a paper-based document, it would receive legal sanction.

Legal Recognition of Electronic Records

Section 4²⁰ of the Indian IT Act, 2000 confers legal recognition to electronic records. Paper based documents are equated with electronic records so long as they are made available in electronic form and are accessible so as to be usable for a subsequent reference. It deems the fulfillment of the requirement of any information to be in writing in typewritten or printed form, if such information fulfils two conditions. Firstly, such information should be rendered or made available in an electronic form. Secondly, such information is accessible as to be usable for a subsequent reference.

The word 'accessible; as per the UNCITRAL Guide, is meant to imply that information in the form of computer data should be readable and interpretable, and that the software that might be necessary to render such information readable should be retained. The word 'usable' is not intended to cover only human use but also computer processing.²¹ This section does not seem to lay down any stringent standards as to the reliability or durability of the electronic record. Rather, it merely requires that such information if made available at a certain point of time in

¹⁹ Para 16 of the Guide to Enactment of the UNCITRAL model Law on Electronic Commerce (1996)

²⁰ Section 4 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.

²¹ Para 50 of the Guide to Enactment to the UNCITRAL Model Law on Electronic Commerce (1996)

electronic form should be available for usage at some future time as well. The purpose is to basically provide a legal sanctity to production of any information in electronic form. Whether such information provided is correct, or authentic, or unaltered, or reliable is not within the purview of this section. If the law provides something to be in writing, then, subject to certain conditions, the legal requirement of writing would be fulfilled if such information is in electronic form.

This provision has been made notwithstanding anything contained in any other law for the time being in force. As such, the provisions of section 4 have been given overriding effect and are made universally applicable to all laws prevailing in our country, which require any information or matter to be in writing or in typewritten or in printed form.

Merely making information available or running the same in an electronic form is not sufficient. The information that is referred to has also to be made readable and usable for subsequent references. If the electronic form were not capable of being accessed so that the same can be used for subsequent reference, then the requirement of section 4 would not be satisfied. Such an electronic record will not have legal validity and sanction or recognition in as much as the provisions of section 4 are not satisfied.

Thus, section 4 envisages the existence of an electronic record which is not a one-time e-record but which is capable of being used again and again. Only such an electronic record would be a valid and legal electronic record within the meaning of section 4 of the IT Act, 2000.

So it means, Section 4 has achieved what no other law had achieved earlier. It has made all electronic information, electronic records, electronic documents and electronic databases as legal electronic records which can be duly proved and produced in a court of law and there should not be any kind of forgery or false electronic records²²²³.

²² Subs. by Act 21 of 2000, sec. 91 and Sch. I, for certain words (w.e.f. 17-10-2000)

²³ [A person is said to make a false document or false electronic record—

First—Who dishonestly or fraudulently—

- (a) makes, signs, seals or executes a document or part of a document;
- (b) makes or transmits any electronic record or part of any electronic record;
- (c) affixes any 3electronic signature on any electronic record;
- (d) makes any mark denoting the execution of a document or the authenticity of the 3electronic signature,

Legal Recognition of [Electronic Signatures]²⁴

Section 5²⁵ confers legal recognition to electronic signatures and equates it with handwritten signatures. Under the existing law, signatures of persons are used as a means of authenticating any information or matter. Therefore, signatures assume immense significance in the eyes of law. The authentication of such electronic signatures will be ensured by means of electronic signatures affixed in such manner as the Central Government prescribes. Section 5 as well proceeds on the functional-equivalent approach. It is based on the recognition of the functions of a signature in a paper-based environment. The following functions of a signature are considered in the UNCITRAL Guide:

- Identifying a person;
- Providing certainty as to the personal involvement of that person in the act of signing;
- Associating such person with the content of the document.²⁶

Broadly, these being the functions of a signature, the purpose of section 5 are to merely introduce and give legal sanctity and acceptance to the use of electronic signatures. It is not necessary as to what is the mode of signature; it may be paper-based or electronic. However, so long the functions of the signature are being performed; such signature will receive legal recognition.

with the intention of causing it to be believed that such document or part of document, electronic record or electronic signature was made, signed, sealed, executed, transmitted or affixed by or by the authority of a person by whom or by whose authority he knows that it was not made, signed, sealed, executed or affixed; or
Secondly—Who, without lawful authority, dishonestly or fraudulently, by cancellation or otherwise, alters a document or an electronic record in any material part thereof, after it has been made, executed or affixed with electronic signature either by himself or by any other person, whether such person be living or dead at the time of such alteration; or

Thirdly—Who dishonestly or fraudulently causes any person to sign, seal, execute or alter a document or an electronic record or to affix his electronic signature on any electronic record knowing that such person by reason of unsoundness of mind or intoxication cannot, or that by reason of deception practised upon him, he does not know the contents of the document or electronic record or the nature of the alteration.]

²⁴ Subs. By Act 10 of 2009, sec 2 for “digital signature” (w.e.f. 27-10-2009)

²⁵ Section 5 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 [electronic signature]²⁵ 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.

²⁶ Para 53 of the Guide to Enactment of the UNCITRAL Model Law on Electronic Commerce (1996)

Section 5 provides that wherever any law provides any particular information to be authenticated by affixing the signature of any person, then that requirement shall also be deemed to be satisfied if such information or matter is authenticated by means of affixing electronic signatures prescribed by the Government. Further, if any law requires any document to be signed or bearing the signature of any person, then such requirement of law shall be deemed to have been met if the document is affixed with the electronic signatures of the subscriber. This is notwithstanding anything contained in any other law for the time being in force in the country. Thus, section 5 has been given immensely wide amplitude and scope.

Electronic Signatures have been defined under section 2 (ta)²⁷ to mean authentication of any electronic record by a subscriber by means of the electronic technique specified in the second schedule and includes digital signature.

The Explanation to the Section further clarifies the ambit of the word 'signed' shall mean affixing of the handwritten signature or any mark on any document by any person. The explanation further explains that the word 'signature' shall be construed accordingly.

Use of Electronic records and [electronic signatures]²⁸ in government and its agencies

Section 6²⁹ of the Act provides the foundation of Electronic Governance. Section 6 aims to eliminate red tapism and promote use of electronic records and electronic signatures in Government and its agencies. It provides the filing of any form, application or other documents, creation, retention or preservation of records, issue or grant of any licence or permit or receipt or

²⁷ Subs. By Act 10 of 2009, sec 2 for "digital signature" (w.e.f. 27-10-2009)

²⁸ Subs. By Act 10 of 2009, sec 2 for "digital signature" (w.e.f. 27-10-2009)

²⁹ Section 6 (1) Where any law provides for -

(a) the filing of any form, application or any other document with any office, authority, body or agency owned or controlled by the appropriate Government in a particular manner;

(b) the issue or grant of any licence, permit, sanction or approval by whatever name called in a particular manner;

(c) the receipt or payment of money in a particular manner,

then, notwithstanding anything contained in any other law for the time being in force, 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.

(2) The appropriate Government may, for the purposes of sub-section (1), by rules, prescribe -

(a) the manner and format in which such electronic records shall be filed, created or issued;

(b) the manner or method of payment of any fee or charges for filing, creation or issue any electronic record under clause (a).

payment in government officer and its agencies may be done through the means of electronic form.

Section 6 provides for use of electronic records and electronic signatures in government functioning. If any particular law requires filing of any form, application or any other document with any office, authority, body or agency owned or controlled by the appropriate Government³⁰ in a particular manner, or the issuance or grant of any license, permit, sanction or approval by whatever name called in a particular manner, or the receipt or payment of money in a particular manner, then, under sub-section (1) of the section 6, such requirement would 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 appropriate Government may, under sub-section (2), has been given the power to make rules to prescribe the manner and format in which such electronic records shall be filed, created or issued, as also the manner or method of payment of any fee or charges for filing, creation or issue any electronic record. Therefore, an application for electricity connection, if made in the prescribed electronic form to the electricity department, would be legally valid under section 6.

These three provisions stipulated in section 6 have been made notwithstanding anything contained in any law for the time being in force and overrides all prevailing laws on the specific issues stipulated in section 6. Thus, the functions and activities in relation to and concerning different government agencies and instrumentalities, through the prescribed electronic form, have been given legal validity and sanction under section 6.

Under Section 6 (2), the appropriate government, whether Central or State, has been given the power and discretion to prescribe the manner and form in which such electronic records shall be filed, created or issued. Section 6 (2), thus, mandates, that the concerned filing, issue, grant, receipt or payment, as the case may be, has to be effected only by such electronic form as may be prescribed by the appropriate government. If the things are not in the format as prescribed by the appropriate government, the same shall not be legally valid and the conditions of section 6 shall not be attracted. The appropriate government is also empowered to prescribe the manner or method of payment of any fee or charges for filing, creation or issue of any electronic record, which is prescribed under section 6 (2)(a).

³⁰ S. 2(1) (e)- '*appropriate Government*' means as respects any matter,- (i) enumerated in List II of the Seventh Schedule to the Constitution; (ii) relating to any law enacted under List III of the Seventh Schedule to the Constitution, the State Government and in any other case, the Central Government.

Delivery of services by service provider

To allow public private partnership in e-governance delivery of services, certain amendment has been made in section 6 of the Act. Section 6A³¹³² allows the efficient delivery of services to the public through electronic means authorize, by order, any service provider to set-up, maintain and upgrade the computerized facilities and perform such other services. For example, e-sampark has been open by government for providing different services to the citizens.

Retention of electronic records

Section 7³³ allows retention of electronic records akin to paper based records to fulfill legal requirement of retention of records. It provides for retention of electronic records when

³¹ Section 6A³¹ (1) *The appropriate Government may, for the purposes of this Chapter and for efficient delivery of services to the public through electronic means authorise, by order, any service provider to set up, maintain and upgrade the computerised facilities and perform such other services as it may specify, by notification in the Official Gazette.*

Explanation: For the purposes of this section, service provider so authorised includes any individual, private agency, private company, partnership firm, sole proprietor form or any such other body or agency which has been granted permission by the appropriate Government to offer services through electronic means in accordance with the policy governing such service sector.

(2) *The appropriate Government may also authorise any service provider authorised under sub-section (1) to collect, retain and appropriate service charges, as may be prescribed by the appropriate Government for the purpose of providing such services, from the person availing such service.*

(3) *Subject to the provisions of sub-section (2), the appropriate Government may authorize the service providers to collect, retain and appropriate service charges under this section notwithstanding the fact that there is no express provision under the Act, rule, regulation or notification under which the service is provided to collect, retain and appropriate e-service charges by the service providers.*

(4) *The appropriate Government shall, by notification in the Official Gazette, specify the scale of service charges which may be charged and collected by the service providers under this section:*

Provided that the appropriate Government may specify different scale of service charges for different types of services.

³² Inserted by Act 10 of 2009, sec 7 (w.e.f. 27-10-2009)

³³ Section 7 (1) *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, -*

(a) *the information contained therein remains accessible so as to be usable for a subsequent reference;*

(b) *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 information originally generated, sent or received;*

(c) *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:*

Provided that this clause does not apply to any information which is automatically generated solely for the purpose of enabling an electronic record to be dispatched or received.

(2) *Nothing in this section shall apply to any law that expressly provides for the retention of documents, records or information in the form of electronic records.*

documents, records or information is required to be retained for any specific period under any law. The section deems the fulfillment of the legal requirement of paper-based retention of information if the same is done in electronic form. But certain conditions have to be fulfilled before the section comes into operation:

1. The information retained in the electronic form should remain accessible so as to be usable for a subsequent reference.
2. The electronic record is retained in the format in which it was originally generated, sent or received. It may also be retained in a format which can be demonstrated to represent accurately the information originally generated, sent or received. Therefore, the format in which the information is not of much relevance. What is important is the accuracy of the information originally generated, sent or received. So long as it can be shown that such format has achieved the purpose of accurately representing the information, retaining the information in such format is permissible.
3. Such details should be available in the electronic record which will facilitate the identification of the origin, destination, date and time of dispatch or receipt of such electronic record. Such information is known as transmittal information.³⁴ This condition has been imposed so as to facilitate the identification of the electronic record. This information would be useful for the purpose of section 11, 12 and 13 with respect to attribution, acknowledgement and dispatch of electronic records. However, the proviso to clause (a) of sub-section (1) of section 7 makes this condition inapplicable to any such information which is automatically generated solely for the purpose of enabling an electronic record to be dispatched or received. Such information too forms part of the transmittal information but are generated solely for the purpose of dispatching and receiving the electronic record. They no value with regard to the electronic record and which would automatically be stripped out of an incoming electronic record by the receiving computer before the electronic record actually enters the information system of the addressee.

Sub-section (2) of section 7 makes this section inapplicable to any such law that expressly provides for the retention of documents, records or information in the form of electronic records. The purpose is to specifically allow such special law relating to retention of

³⁴ Para. 74 of the Guide to Enactment of the UNCITRAL Model Law on Electronic Commerce (1996)

information in electronic form to prevail over the general rule enunciated in section 7. The condition laid down in section 7 is not very stringent and are only of minimal requirement in nature. Any special enactment relating to retention of electronic records might provide for stricter observation of technical details, increased technical safeguards and higher standards of proof.

Audit of document, etc., maintained in electronic form³⁵

Section 7A³⁶ allows Audit of document, etc., maintained in electronic form. This section provides provisions for audit for audit of documents, records or information, that provision shall also be applicable for audit of documents, records or information processed and maintained in electronic form.

Publication of rule, regulation, etc., in Electronic Gazette

Section 8³⁷ permits publication in Electronic Gazette. In case of the electronic as well as the traditionally printed gazette, it is stipulated that publication of rules, regulations and notifications in the Electronic Gazette shall also be legally recognized under section 8. Therefore, where the publication of any rule, regulation, byelaw and notification is required to be published in the Official Gazette, such requirement is satisfied if the same is published electronically. Further, where such Official Gazette is published in both electronic as well as printed form, the date of publication shall be the date of publication of the Official Gazette that was first published, whatever may be the form. (See: Orissa Consumers Assn. v Orissa Electricity Regulatory

³⁵ Ins. By Act 10 of 2009, sec 8 (w.e.f 27-10-2009)

³⁶ Section 7A Where in any law for the time being in force, there is a provision for audit of documents, records or information, that provision shall also be applicable for audit of documents, records or information processed and maintained in electronic form (ITAA 2008, Standing Committee Recommendation)

³⁷ Section 8 Where any law provides that any rule, regulation, order, bye-law, notification or any other matter shall be published in the Official Gazette, then, such requirement shall be deemed to have been satisfied if such rule, regulation, order, bye-law, notification or any other matter is published in the Official Gazette or Electronic Gazette:

Provided that where any rule, regulation, order, bye-law, notification or any other matters published in the Official Gazette or Electronic Gazette, the date of publication shall be deemed to be the date of the Gazette which was first published in any form.

Commission³⁸). Section 2 (s) defines 'Electronic Gazette' to mean the Official Gazette published in the electronic form. Therefore, a requirement like section 90 of the Act, which empowers the State Government to make rules, by notification in the Official Gazette, would be fulfilled if such notification is published either in the Official Gazette or in the Electronic Gazette. The proviso to section 8 makes it clear that the date of publication of such regulation, order, bye-law, notification or any other matter shall be deemed to be the date of the Gazette (Official Gazette or Electronic Gazette) which was published in any form. For instance, if a rule was published by the legislature in the electronic gazette on the 15th of January and the same was published in the official gazette on the 27th of January, of the same year, then the date of publication shall be 15th of January, which is the date of the publication of the Electronic Gazette.

Section 6, 7 and 8 not to confer right to insist document should be accepted in electronic form

Section 9³⁹ strikes a note of caution and gives clarity to the scheme of things envisaged by sections 6, 7 and 8 of the IT Act, 2000. While, section 6, 7 and 8 talk about use, retention and publication of electronic records by Government or governmental agencies or instrumentalities, at the same time, the provisions are enabling in nature. At the same time, no person can insist on electronic filing of returns or records, as the Government needs sufficient time to set up set infrastructure facilities that will enable them to conduct electronic transactions in the future. It is still the prerogative of the government authorities to apply e-governance and not right to a citizen to insist upon the same. However, significant progress has been made in this regard for over 50 years, as secrecy has been the norm in the works of the government and the transparency, the exception. In the case of Rama Krishna v Municipal Corporation of Hyderabad⁴⁰, Mr. Justice Gopala Reddy, J. stated that licence secrecy are a colonial legacy and were adopted by

³⁸ AIR 2005 Ori. 11

³⁹ Section 9 Nothing contained in sections 6, 7 and 8 shall confer a right upon any person to insist that any Ministry or Department of the Central Government or the State Government or any authority or body established by or under any law or controlled or funded by the Central or State Government should accept, issue, create, retain and preserve any document in the form of electronic records or effect any monetary transaction in the electronic form.

⁴⁰ 2004 (6) ALD 791, 2005 (2) ALT 186

totalitarian regimes to legitimize suppression of information about its functioning. Though secrecy in public affairs is anathema to the very notion of democracy, yet laws favouring governmental secrecy have dragged on for half a century after India became democratic republic. No person can insist that the Government has to, under section 6, 7 and 8, accept, issue, create, retain and preserve any document or effect any monetary transaction in the electronic form. Section 9 provides for such protection to the Ministry or Department of the Central and the State Government or any authority or body established by or under any law or controlled or funded by the Central or State Government. This is to avoid hassles to the Government. The provisions have basically been incorporated by the legislature, as it does not want the government or its instrumentalities to be burdened with liabilities or unwanted litigations. This provision has been incorporated keeping in mind the resource crunch, financial and other constraints that Governments often work under. Sometimes, the Government may not have the resources to set up the necessary infrastructure for enabling electronic filing⁴¹. The basic legal provisions for use of computer technology and for induction of e-governance into the system have been provided for. How and when, the Government will actually make use of; it has been left to the Government. Any person merely wanting to file documents in electronic form or retaining tax-related information in electronic form or requiring publication of Electronic Gazette on the basis of sections 6, 7 and 8 cannot insist the Government to do so.⁴²

Evolution of computer technology and the enactment of the Information Technology Act, 2000 followed by Right to Information Act, 2005 are roads that may make the citizens interaction with the government offices hassle free. The Government of Andhra Pradesh has undertaken e-government projects to provide services in integrated manner through suitable technological and commercial arrangements. In the light of above policy, the Municipal Corporation of Hyderabad published a notification displaying the online services. Section 9 of the Act has been enacted to provide for situations when it is not feasible to implement e-governance considering that India is not fully technologically advanced and that only a fraction of people have access to the internet.

⁴¹ Pavan Duggal, "Cyberlaw-The Indian Perspective", Saakshar Law Publications, New Delhi, ed. 2002, p 66-82

⁴² S.K. Verma and Raman Mittal, "Legal Dimensions of Cyberspace", Indian Law Institute, New Delhi, ed.2004, p 344-351

Power to make rules by central government in respect of [electronic signature]⁴³

The Central Government has been conferred with the power to make rules in respect of electronic Signature, interalia, the type, manner, format in which electronic signature is to be affixed and procedure of the way in which the electronic signature is to be processed under section 10⁴⁴. The Central government has also to prescribe the manner or procedure which facilitates identification of the person affixing the Electronic Signature. In addition, the control processes and procedures to ensure adequate integrity, security and confidentiality of electronic records or payments have also to be prescribed by the Central Government by making appropriate rules. It also gives power to the Central Government to prescribe any other matter which is necessary to give legal effect to Electronic Signature.

Validity of contracts formed through electronic means⁴⁵

Section 10 A⁴⁶ deals with validity of contract in electronic form. It deals with cases where in a contract formation, the communication of proposals, the acceptance of proposals, the revocation of proposals and acceptances, as the case may be, are expressed in electronic form or by means of an electronic record, such contract shall not be deemed to be unenforceable solely on the ground that such electronic form or means was used for that purpose.

⁴³ Subs. By Act 10 of 2009, sec 2, for “digital signature” (w.e.f. 27-10-2009)

⁴⁴ Section 10 The Central Government may, for the purposes of this Act, by rules, prescribe

(a) the type of [Electronic Signature]; (Subs. By Act 10 of 2009, sec 2, for “digital signature” (w.e.f. 27-10-2009))

(b) the manner and format in which the Electronic Signature shall be affixed;

(c) the manner or procedure which facilitates identification of the person affixing the Electronic Signature;

(d) control processes and procedures to ensure adequate integrity, security and confidentiality of electronic records or payments; and

(e) any other matter which is necessary to give legal effect to [Electronic Signature].(Subs. By Act 10 of 2009, sec 2, for “digital signature” (w.e.f. 27-10-2009))

⁴⁵ Ins. by Act 10 of 2009, sec 9 (w.e.f. 27-10-2009)

⁴⁶ Section 10A Where in a contract formation, the communication of proposals, the acceptance of proposals, the revocation of proposals and acceptances, as the case may be, are expressed in electronic form or by means of an electronic record, such contract shall not be deemed to be unenforceable solely on the ground that such electronic form or means was used for that purpose.

Conclusion

Today, we are living in a digital era- where every individual is digitally empowered. Mobile phones, desktop computer, handheld devices, emails, use of internet has become a central part of our lives. The impact of information and technology is immense. Governments all across the globe are rapidly changing their style of functioning to meet the rising aspirations of its citizens. With the introduction of ICT the whole paradigm of governance has changed. Consequently, the dependence of government on ICT has also increased, especially during last 2 decades.

In all the states in India, several good attempts have been made to start e-governance projects. These have made a significant contribution for providing interface to citizens sitting in their locality or villages and get a few services from e-kiosks, e-sampak, etc. Earlier the efforts which were in pieces and sporadic received a greater impetus with the introduction of The National e-Governance Plan (NeGP). NeGP takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision, a shared cause. Around this idea, a massive countrywide infrastructure reaching down to the remotest of villages is evolving, and large-scale digitization of records is taking place to enable easy, reliable access over the internet. Today the government is trying to bring maximum services under its e-governance initiatives to bring transparency , accountability and efficiency in its functioning, improving interface with business and industry and empowering people through information. Prime Minister in his speech on 68th Independence day specifically laid emphasis on the importance and commitment of government on e-governance.

"The National e-Transaction Count, which represents number of transactions at national and state level e-governance projects including mission mode projects has grown significantly and are at the level of 1.5 billion during January-July 2014," Communication and IT Minister Ravi Shankar Prasad said in a written reply to the Rajya Sabha.⁴⁷

⁴⁷Over 1.5 billion e-governance transactions completed between Jan-July 2014, The Economic Times, Aug.8, 2014, Available at http://articles.economictimes.indiatimes.com/2014-08-08/news/52594107_1_e-governance-mission-mode-projects-transactions (last visited on Aug.18,2014)

Despite having a very strong presence of India in the IT sector globally, yet the benefits of the IT revolution have not truly percolated into the everyday life of the common man, particularly in rural areas.⁴⁸ The United Nations E-government Survey 2014 has ranked India 118 of 193 countries in its E-Government development index scoring 0.3834.⁴⁹ This shows that we have a long way to go.

E-governance has its limitations and the real benefit to citizens can be realized when the delivery system for various services is rightly placed. Many times wrong information is displayed on internet and people keep developing patience everyday switching on computer, noticing status of their file in the public office (for months together 'same') and ultimately they have to run to that office to chase its progress. There are many such incidents and it is not because of any fault of the machines but the age old status of attitude of public officials in India in government sectors. Lack of infrastructure, predominance of rural areas, vast illiteracy, missing political support at the highest level, corruption etc. are some factors which are becoming obstacle in the e-governance initiatives. In private sector, there are tremendous changes and people are really realizing the impact which according to many is unbelievable unimaginative technological change.⁵⁰

Dr. APJ Abdul Kalam, former President of India and a visionary in the field of e-Governance has aptly summarized the basic challenge lying before the country in this regard:

“e-Governance, has to be citizen-friendly. Delivery of services to citizens is considered a primary function of the government. In a democratic nation of over one billion people like India, e-Governance should enable seamless access to information and seamless flow of information across the state and central government in the federal set up. **No country has so far implemented an e-Governance system for one billion people. It is a big challenge before us.**”(emphasis added)⁵¹

⁴⁸ Saaranish : Acompedium of mission mode projects under NeGP,Jan.2011,The Department of Information Technology, Ministry of Communications and Information Technology, Government of India Available at https://negp.gov.in/templates/pdfs/Compendium_FINAL_Version_220211.pdf (last visited on Aug 19,2014)

⁴⁹United Nations E-Government survey 2014, E-Government Development Index at p.201, Available at http://unpan3.un.org/egovkb/portals/egovkb/documents/un/2014-survey/e-gov_complete_survey-2014.pdf (last visited on Aug.16,2014)

⁵⁰ K. Mani, “A Practical Approach to Cyber Laws The Information Technology Act, 2000”, Kamal Publishers, New Delhi, ed. 2008, p 13-15.

⁵¹ Compendium of Governance initiatives in India, universities press(India)private limited, First published 2008,p.3.