

REPORT ON THE WORKSHOP
ON

INFORMATION TECHNOLOGY BILL 1999



National Institute of Advanced Studies
Bangalore

ISBN 81-87663-04-9

REPORT ON THE WORKSHOP ON
Information
Technology Bill 1999

A REPORT



NATIONAL INSTITUTE OF ADVANCED STUDIES
Indian Institute of Science Campus
Bangalore 560 012 India

© National Institute of Advanced Studies
1999

Published by
National Institute of Advanced Studies
Indian Institute of Science Campus
Bangalore 560 012

Price : Rs. 45/-

Copies of this report can be ordered from:

The Controller
National Institute of Advanced Studies
Indian Institute of Science Campus
Bangalore 560 012
Phone : 080-3344351
Email : mgp@hamsadvani.serc.iisc.ernet.in

This is NIAS Special Publication 6-1999

ISBN 81-87663-04-9

Typeset & Printed by
Verba Network Services
139, Cozy Apts., 8th Main, 12th Cross
Malleswaram, Bangalore 560 003
Tel.: 334 6692

FOREWORD

The Union Government has recently taken the initiative to present an Information Technology Bill before Parliament. This Bill is of far reaching significance, and in fact if the Government will eventually promulgate an Act on Information Technology, it could have wide repercussions on the growth of this vital industry in India. In order to discuss the implications of the Bill and to crystallize a consensus on its provisions, the National Institute of Advanced Studies organized a Workshop on 14 December 1999. The Workshop was attended by IT professionals, businessmen, academics and members of the legal and judicial profession. The Workshop welcomed the provisions of the Bill for e-commerce and recommended that they should be adopted without delay; but on other provisions in the Bill connected with certification, computer crimes and related areas there were strong reservations. This report has been prepared for wide circulation, with the objectives of disseminating the findings of the Workshop and inviting comments on the recommendations from any person or agency interested in the IT Bill. A synopsis of the Bill is also attached; the full text of the Bill is available on the web at: www.doe.ernet.in

I thank my colleagues Prof N Balakrishnan (SERC, Indian Institute of Science), Prof Swamy Manohar (Computer Science & Automation, Indian Institute of Science), Mr Rahul Matthan (Matthan Law Offices) and Mr Sanjoy Dasgupta (Government of Karnataka) for helping to organize what turned out to be a very lively and interesting Workshop.

Prof Roddam Narasimha
Director, NIAS

REPORT ON THE WORKSHOP ON
**INFORMATION
TECHNOLOGY BILL 1999**

A Workshop on the Information Technology Bill 1999 was held at the National Institute of Advanced Studies on 14 December 1999. A summary of the consensus that emerged in the Workshop, and the associated recommendations, are given below.

1. The Workshop welcomed the initiative of the Government in formulating the IT Bill 1999, and considered that the Bill was generally forward-looking and a step in the right direction.
2. The Workshop welcomed in particular the provisions in the Bill for e-commerce, and recommends that they should be adopted without delay.
3. The overall recommendation however is that the current Bill be replaced by a small number of separate legislations governing different aspects of IT. The immediate goal of enabling e-commerce can be achieved by enacting a law

governing cyber transactions, largely along the lines of the first 4 sections of the present Bill. Such a Bill could be simply called the E-Commerce Bill, or the Electronic Data Interchange Bill. Once the basic law governing such issues as are important to ensure the success of electronic commerce has been passed, other bills may be proposed on the other areas of information technology as may be required from time to time.

4. Provisions for according legal recognition to constructs of the digital age such as digital signatures and electronic records are essential for effective implementation of electronic commerce as well as electronic governance, and the provisions in this regard in the present Bill are welcome and should be retained.
5. However an alternate definition of digital signatures that would make it more technology-neutral than it is in the current Bill is essential. The current definition is too closely tied to public-key cryptography, which is both undesirable and unnecessary in a field that is still changing very rapidly.
6. The establishment of a Cyber Regulations Appellate Tribunal is a welcome step. However, as it currently stands, the Tribunal proposed in the Bill is authorised to hear appeals from the orders of the Adjudicating Officer in respect of only a limited range of issues relating to compensation for computer crimes. The scope of this Tribunal should be

expanded to allow it to adjudicate on all cyber-related disputes involving the enforcement of the provisions of the Bill. When other laws are passed subsequently in respect of different areas of information technology, such laws may refer to this Tribunal as the forum for the resolution of disputes within the scope of those other laws as well.

7. It is essential that the Cyber Regulations Appellate Tribunal consist of at least two persons, one from the judiciary and the other an expert in technology. This is the only way to enable judicially and technologically sound interpretations of the regulations.
8. The all-powerful role assigned to the Controller of Certification Authorities has the danger of bringing in a new license raj, and hence all aspects related to the activities of certification and of the Certification Authorities (CAs) mentioned in the Bill need to be reexamined carefully. The provisions of the current Bill will be detrimental to the growth of a nascent industry that has the potential of being a major global player. A model recommended by the Workshop to minimise a direct operational role for government is that of specifying certification practice statements for Certification Authorities, putting in place an auditing mechanism (similar to ISO certification and software engineering certification models) in order to maintain the credibility of CAs. One possible course of action is to bring forward a separate bill

on Cyber Certification. The Workshop prefers, however, that provisions for cyber certification are a part of an E-commerce Bill, provided such provisions can be critically discussed and formulated, through a Task Force appointed for the purpose, and incorporated in the proposed E-commerce Bill *without delay*.

9. The attempt to regulate CAs, while providing possible options for foreign CAs to be approved by the Controller (as proposed in the Bill), has the potential to suffocate indigenous development of certification technologies and enterprises.
10. Detailed provisions concerning licensing, renewal of licenses, fees for licensing, revocation of licensing etc. should not be part of the Bill, but should be made part of the certification practice statement as is the existing practice among the numerous CAs already operating on the Internet.
11. The Bill specifies compensation for computer crimes. These crimes include the introduction of a computer virus, unauthorised access to computer systems, tampering with computer systems, etc. The Bill proposes that compensation be paid for loss or damage suffered as a consequence of any such computer crime subject to a maximum limit of Rs. 10,00,000/- as compensation. This is neither a penalty nor a universally appropriate compensation. The Bill therefore needs to be amended to permit a compensation that is appropriate to the damage suffered (and could be higher where necessary).

12. The Bill also deals with another series of offences including tampering with computer source documents, publication of obscene information, misrepresentation of information to certifying authorities, etc. In respect of these offences, fines as well as imprisonment have been specified as punishment. It is recommended that a separate enactment be passed under which all crimes relating to information technology are listed and dealt with.
13. While it may be possible to make suitable modifications to the Indian Penal Code, it may (in the interests of the establishment of specialised cyber courts) be advisable to pass a separate enactment dealing with the criminal aspects of information technology. Such an enactment may also include other issues such as harassment through electronic media, invasion of privacy, cyber-stalking and a number of other issues that are not adequately dealt with in the present version of the Bill.

The Workshop was held at the JRD Tata Auditorium, National Institute of Advanced Studies. It was organized at the initiative of the Secretary for Information Technology, Government of Karnataka, and was sponsored by OnlineBangalore.com. The programme was organized by Prof. R. Narasimha (NIAS), Prof. N. Balakrishnan (IISc), Prof. Swami Manohar (IISc) and Mr. Rahul Matthan (of Matthan Law Offices). The event was hosted by NIAS in line with its mission of facilitating interdisciplinary interactions on issues of national importance. The participants, numbering more than 70, came from industry, government, academia and the legal and judicial professions.

The primary objective of the Workshop was to study the proposed Bill in detail from various perspectives, including legal, technological, societal, and commercial, and to evolve a set of recommendations for consideration by Parliament during the discussion on the Bill.

A set of draft recommendations, prepared after a detailed study of the Bill by the organizing group, were presented by Prof. N. Balakrishnan to the audience in the presence of a panel consisting of Justice G. C. Bharuka (Karnataka High Court), Mr. Sanjoy Das Gupta (Secretary IT, Government of Karnataka), Mr. Rahul Matthan and Mr. Ashutosh Parasnis (Tektronics, representing industry).

Detailed discussions on each section of the Bill were held during the Workshop. Mr. Bhaskar, Director General, Corps of Detectives, observed that the requirement in the Bill that an officer not below the rank of DSP shall deal with certain investigations is impractical, and that this should be changed to include Inspectors, who are mostly graduates and have several years of experience in criminal investigations. The drafting of such laws in the country should take inputs from the law enforcement agencies as well, in order to ensure that the laws are in practice enforceable.

Justice Bhorka made several observations clarifying the role of the judiciary in implementing the provisions of the proposed Bill. He was not aware of any case that had come up before the Courts with IT implications; and the judiciary in India has as yet little experience with handling the new technology. Hence it is advisable that laws related to IT do not depend on judicial interpretations at this stage. Justice Bhorka welcomed the setting up of the Appellate Tribunal proposed in the Bill from the point of view of providing speedier justice, but concurred with the general suggestion that this Tribunal should have at least two members, one from the judiciary and another an expert in technology.

The Workshop noted that the term Information Technology is very broad and covers a number of areas related to or concerned with computers and the Internet. These areas include: electronic contracts and electronic documents; digital signatures and

certification of digital signatures; cyber crimes; privacy issues in cyberspace; jurisdiction; intellectual property protection in the digital context (copyrights, patents and trade secrets); trademark protection (including cyber-squatting); and databases and data protection. Thus, any legislation that purports to regulate information technology must address all these areas, as well as such others that may arise from time to time, having regard to the rapid advances taking place in technology. The Information Technology Bill 1999 addresses some of these areas in detail, some peripherally and some not at all.

Against this background, the major recommendations listed above represent the consensus among the participants.

A final set of recommendations, revised on the basis of further inputs from concerned experts in industry, academia and the legal profession, will be eventually available from the office of the Director, NIAS.

A Synopsis

1. Object

To provide legal recognition to e-commerce and transactions and contracts and other matters related thereto. To facilitate e-filing of documents with Government agencies and matters connected therewith or incidental thereto.

2. Basis

The UNCITRAL Model on E-commerce to give effect to UN Resolution dated 30-1-1997, recommending reliance on the said Model Law to bring about, as far as possible, uniformity in e-commerce law, globally.

3. Commencement

As notified by the Central Government, with possibility of different dates for different provisions.

4. Body of Bill

The Bill provides legal validity to E-versions of any hand written or typed matter, as required by any law to be in such latter form. The Bill also recognises the validity of digital signatures on any document required to be traditionally signed as per the provisions of any law. These digital signatures are to be affixed as per the rules prescribed by the Central Government in that regard.

In order to facilitate widespread recognition of the security of digital signatures, the Bill provides for the issue of Digital Signature Certificates to applicants, who conduct the majority of their business through e-commerce and otherwise in the e-form. These certificates are issued by Certifying Authorities, who are granted licences, subject to several conditions and a fee, to set up as such, by the Controller of Certifying Authorities. The Controller may be appointed by the Central Government by notification in the Official Gazette and such number of Deputy and Additional Controllers as the Central Government may determine. A Digital Signature Certificate will be issued subject to satisfaction of certain conditions by the applicant, including the applicant's digital signature containing an encryption system that has two keys - a private key that helps him to create the signature and a public key that enables

verification of the digital signature thus created. The public key will be listed in the Digital Signature Certificate.

The Bill seeks to convert government administration at both Central and state levels to an electronic base, in terms of according validity to maintenance of government filings, records, forms licences, approvals, etc. in e-form as also payment of government fees, charges, etc. in e-form; such form being prescribed by the appropriate government - central or state. The Bill also provides for the publication of rules, regulations, bye-laws, etc. in e-form. However these are facilitatory provisions and not a mandate on the respective governments.

The Bill has several provisions on e-records, in terms of their origin, destination, receipt and time and place of the same. To elaborate, e-records are attributed to the originator if sent by him, or a person authorised on his behalf or an automatic information system programmed by him or on his behalf. The time of dispatch is deemed to occur when the e-record enters an information system outside the control of the originator. E-records, where specifically required to be acknowledged by the addressee, are validly acknowledged if receipt of the same is sent by e-form or traditional means or where any conduct of the addressee, indicates receipt of such e-record. The time of receipt of an e-record is taken as when it enters the designated information system of an addressee or when retrieved by the addressee, when sent to a system other than the designated one.

The Bill also specifies the nature of secure e-records and digital signatures and also empowers the Central Government to prescribe security procedure in respect of e-records and digital signatures having regard to the nature and volume of e-commercial transactions and e-communications and the availability of alternatives.

The Bill seeks to address the area of computer and cyber crimes by providing for the imposition of penalties in the form of imprisonment and fines and in certain cases, compensation for damages caused to any person by virtue of such crime. These crimes are elaborated under several provisions of the Bill and are subject to the jurisdiction of several authorities. Where the redressal of certain specified computer crimes is by way of compensation, the adjudication on the same is to be done by an adjudicating officer, appointed in this regard by the Central Government. Any appeal against the decision of the adjudicating officer is to be filed before the Cyber Regulations Appellate Tribunal, constituted by the Central Government. The Presiding Officer of the Tribunal should be qualified to hold the post of a High Court judge or its

equivalent. An appeal to the High Court against the order of the Tribunal is permitted under the Bill. The adjudicating officer and the Tribunal shall have the powers of a civil court as well as of a criminal court in certain circumstances and all proceedings shall be deemed to be judicial before them. The jurisdiction of the civil court is ousted in respect of any matter adjudicated upon by the adjudicating officer or the Tribunal. As regards other crimes under the Bill, they will be adjudicated like normal crimes with the police being given suitable powers of investigation, search and confiscation.

In order to bring the provisions of other law in consonance with the Bill, the Bill provides for the suitable amendment of several provisions of several laws, including the Indian Penal Code the Indian Evidence Act, the Banker's Book evidence Act and the RBI Act.

The Bill carves out an exception in certain specified cases to the liability of network service providers. The Bill also empowers the Central Government to make rules to carry out the provisions of the Bill. The Bill also directs the Central Government to set up, as soon as possible after its commencement, a Cyber Regulations Advisory Committee.