

Informatics

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Cover Story

National Task Force on Information Technology and Software Development

Aiming towards making India an Information Technology "Super Power" in the years to come, the Government has set up a National Task Force on IT and Software Development.

("IT Action Plan - Highlights")

During the past few decades, an unprecedented advancement in the field of computers and telecommunication has constituted possibly the greatest scientific revolution in human history. With its vast 'knowledge base', India is already making a major headway in the world arena of Information Technology. For India to emerge as a global infotech superpower, the Prime Minister Sh. Atal Behari Vajpayee has given a top priority call for evolving an appropriate action plan. As an initiating step, a high powered National Task Force on IT and Software Development was set up on May 22, 1998 under the Chairmanship of the Deputy Chairman of the Planning Commission, Sh. Jaswant Singh. The Andhra Pradesh Chief Minister, Sh. Chandrababu Naidu and the former Union Minister for Science and Technology, Prof. M.G.K. Menon, have been named co-chairpersons. The Director General of NIC, Dr. N. Seshagiri is the Member-Convener of the Task Force.

The IT Task Force, comprising of a sixteen member expert panel and five co-opted members, has a mandate to formulate the draft of a National Informatics Policy. In its endeavour, the task force will also be guided by an "**info-tech vision group**" comprising eminent infotech professionals, academicians, Non Resident Indians and foreigners.

The Tasks Ahead

According to the Government Notification issued by the Prime Minister's Office, the Force would aim to accomplish the following :

- 🌟 This Task Force will formulate the draft National Policy on Informatics whose aim will be to enable India to emerge as an Information Technology Superpower within the next ten years. It will submit the draft policy to the Prime Minister in three months.
- 🌟 The Task Force will recommend an appropriate empowered institutional mechanism to implement this policy as a National Mission with the participation of the Central and State Governments, Industry, Academic Institutions, and the Society at large.

- 🌸 This Task Force will recommend, within one month, immediate steps that the Government needs to take to remove bottlenecks and give a big boost to India's Information Technology industry.
- 🌸 This Task Force will prepare a Vision Statement that will excite and energize the people of India, creating the faith in them that Information Technology vitally aids personal growth and national growth. It will also suggest a strategy for the effective articulation and dissemination of that Vision, so as to create an ethos, an ambiance, a mindset, and a work culture consistent with the needs of the emerging knowledge-driven global civilisation.
- 🌸 This Task Force will prepare a blue print for making the adoption of Information Technology into a national movement, with a wide network of empowered task forces at all governmental and non-governmental levels.

Terms of Reference

The Terms of Reference of the Informatics Task Force provide a comprehensive charter of action and can be listed as below :

- 🌸 Recommend a strategy for the extensive use of Information Technology in all areas of national economy - agriculture, industry, trade and services - as a critical input in making India a global economic power.
- 🌸 Prepare the design for building a world-class physical, institutional and regulatory IT infrastructure, which is appropriate for India. This design will embrace the growing convergence of telecommunications, computers, consumer electronics and the media infrastructure (minus its content).
- 🌸 Towards this end, determine the means for creating a National Informatics Infrastructure (NII) backbone, bridging it to the Local Informatics Infrastructure (LII) and the Global Informatics Infrastructure (GII). The design of the NII will be dynamic, taking into account the rapidly changing nature of Information Technology.
- 🌸 Recommend how NII can be created at an optimal cost by using the existing resources of the various wings of Government such as the Department of Telecommunications, Prasar Bharati, Railways, Power Grid Corporation of India, etc.
- 🌸 Suggest measures for achieving a massive expansion in the use of the Internet by all sections of society, especially in business and education, and development of Indian content on the Internet.
- 🌸 Recommend a strategy for boosting the learning and use of Information Technology in Indian

languages. The policy will suggest measures to promote the development of software, especially educational and commercial software, in Indian languages.

- Develop a strategy for a twenty-fold increase in India's software and other IT service exports in the next ten years. In particular, the Policy will focus on the development of world-class software products and brands that can quickly establish global dominance.

- Suggest measures to catalyze the growth of exports through the extensive use of e-Commerce and EDI(Electronic Data Interchange).

- Suggest ways in which the use of IT can be maximised in the Government at all levels, so as to make its functioning people-friendly, transparent and accountable.

- Develop a strategy for dramatically increasing the PC density in the country and, to that end, ensure that every household and commercial establishment that has a telephone also has a computer. The strategy will aim to facilitate the availability of computer hardware, software and connectivity at the lowest possible cost.

- Devise a strategy for establishing a strong and internationally competitive domestic manufacturing base for computers, computer components and peripherals.

- Design a training and manpower development plan involving Government agencies, private business, voluntary organizations, educational institutions and others to quadruple the number of IT professionals in the country in the next two years. The Task Force will suggest a plan to implement the commitment made in the National Agenda for Governance to ensure universal computer literacy in all secondary schools in the country. The plan will also aim at making available IT education to all those sections of the economy where it serves as a productivity multiplier.

- Develop a strategic plan to raise the necessary financial resources to realise the objectives of the National Informatics Policy. This plan will rely on innovative means of funding that minimise government outlay.

- Suggest an appropriate legal frame work for the creation of an IT-based society, with due focus on intellectual property rights (IPR), secrecy, security and safety of information.

- Recommend how India can leverage its global competitiveness in InfoTech to play a prominent role in the development of IT in other countries, especially those that are underdeveloped.

The establishment of the Task Force is a clear indication of the growing realization that Information Technology is an area where India can speedily establish its global pre-eminence. Once the New Informatics Policy comes into being, it is hoped that IT would prove immensely

useful in all areas of National Economy - Agriculture, Industry, Trade and Services - and would contribute significantly in making India a global economic power.

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IT Action Plan : the Highlights

The IT Task Force submitted its first report in the form of an "IT Action Plan" to the Prime Minister on July 4, 1998. The report contains a special section on "IT for all by Year 2008" whose centre piece is a Major National Campaign called "**Operation Knowledge**", focussing on universalization of IT and IT based education at all levels. Some of the highlights of the IT Action Plan, which covers both bottleneck and promotional issues, are :

- Conversion of STD/ISD booths in the Country into "Information-Kiosks" providing Internet and related services like email.
- Ministries and Departments to earmark 1-3 % of the budget for IT.
- IT Literacy requirement for Government / Public Sector Employment.
- 100% depreciation on all IT Products in two years.
- Software and IT to be treated as priority sector by banks for five years.
- Tripling of working capital requirements from Rs.400 crore to Rs.1,200 crore.
- Setting up of at least four venture capital funds of not less than Rs.50 crore.
- Blanket approval for Indian IT companies for overseas acquisitions from export earnings.

- Zero Duty on all IT Products by Year 2002 by advancing ITA schedule.
- Broadening definition of software to include entire range of IT software as per WTO-ITA norms.
- Exemption for software developers and exporters from physical and custom bonding at STPs, EDUs and EPZs
- Access to Internet through cable TV
- Early introduction of cyber laws
- Networking of all Engineering / Medical colleges, Universities before 2000 A. D

For more details on the IT Action Plan, visit the IT Task Force web site at

<http://it-taskforce.nic.in>

IT TASK FORCE ON THE NET

Delhi : A Special web site has been developed on the National Taskforce on Information Technology and Software Development which is being hosted on NIC's web server.

Besides providing detailed information about the Task Force, this web-site is a forum for receiving suggestions, analysing them and hosting them back as a structured and classified digest of suggestions from IT Professionals in India and abroad. It thus intends to make the evolution of the Policy transparent.

The highlights of the website include:

- An open web-letter to all the IT Professionals from the Task Force Chairman, Sh.Jaswant Singh.
- The Government Notification on the setting up of the Task Force.
- The Members' List of the Task Force
- The Basic Background Report
- The Digest of suggestions received from India and abroad.; and
- Advisory Virtual Forums for discussions on identified areas.

URL : <http://it-taskforce.nic.in>

TRAINING PROGRAMME AT HARYANA

Chandigarh : The Haryana State Unit of NIC recently conducted Mass Training Programmes for the State Government Officials in the State Secretariat. The training was the result of a recent decision taken by the State Government to identify 5-6 officials and one nodal officer from each department for undergoing computer training. It was also decided that these officials will carry out computerization related activities of their Department and coordinate with NIC-Haryana.

The Training Schedule included courses on Windows, MS-Word, MS-Excel, Power Point, E-mail etc. The training process started from mid of February'98 and was scheduled for two weeks, two hours a day for each batch. Till now, more than 200 officials have been trained from 40 departments.

This training being a continuous process, some of the identified officials will be re-trained so that they can manage computer centres in their departments.

DISTRICT COURTS COMPUTERIZATION WORKSHOP

Ahmedabad : A two day workshop on " **District Courts' Computerization** " was recently conducted at Ahmedabad. The workshop was inaugurated by the Chief Justice of India Hon'ble Mr. Justice M.M. Punchhi in a ceremony attended by many distinguished legal luminaries.

The participants in the workshop were the District/Principal Judges, Judges-Incharge, System Administrators and District Informatics Officers of NIC, Gujarat State.

The sessions held during the workshop included topics such as **the Methodology of District Court Computerization , District Court Information System, District Court Computer Centre Management and and District Court Computerization: Action Plan for Gujarat**

NITPU ORGANIZES TRAINING FOR COURT OFFICIALS

Panipat : A two week training programme on computerization in Courts for the District Court Supervisors in the State of Haryana was inaugurated on March 15,1998 by Hon'ble Chief Justice of Punjab and Haryana High Court at NITPU, Panipat. During the inauguration ceremony attended by the High Court and District Judges, a demonstration was given on JUDIS and INTERNET which was highly appreciated. The training programme was attended by more than thirty-four participants.



*Inauguration of Training Programme at NITPU
Panipat*

WORKSHOP AND WEBSITE OF DISTRICT INDUSTRIES CENTRES

Jammu : The J&K State Unit of NIC organised a workshop on the computerization of (DIC) District Industries Centre on April 24, 1998 at Jammu.

The workshop aimed at enlightening the participants with the use and benefits of computers in their field. While addressing the participants, the State Informatics Officer, NIC J&K laid emphasis on the utilisation of computers for their day to day activities. The participants were also apprised of the utilization of NICNET to build up fast and reliable communication links between the Districts and State Office. The concepts of Email and Internet were also put forth at the workshop.



From L to R : Mr. A.K. Agarwal (SIO J&K), Mr.Gupta (MLC), Mr.B.R. Bali (Industries Minister), Mr.P.Tripathi (Director I&C)

NIC J&K has also developed a web site for the DIC which was inaugurated along with the workshop on the same day by Mr. Bodh Raj Bali, the Minister for Industries, J&K. The site gives detailed information of the Industrial Infrastructure along with an insight into the various sectors of the Industry, the potential areas for Industrial Development and Investment and the policies. The Application Form for the registration of Small Scale Industries(SSI) has also been put up on the web site.

The website may be accessed at the following URL :

<http://jandk.jk.nic.in>

<http://sdijk.jk.nic.in>

COMPUTERIZED 'BIRTH AND DEATH' CERTIFICATES

Pondicherry : A scheme of the Pondicherry Government to issue computerized birth and death certificates was recently inaugurated by the Local Administration Minister Mr.C.Jayakumar at the Municipal Office.

The Software used in the computerization process has been developed by NIC in a period of six months. In this scheme, the computerized particulars of children born after January 1, 1990 and deaths during the same period have been readily made available. However, the particulars of births and deaths between January 1, 1979 and 1990 are still being fed into the computers and verification of the same is going on. The records of births and deaths that took place between 1880 and 1979 (which were in French) would also be made available through photo images.

The computerization would enable the authorities to effectively meet the heavy requirement of certificates (around 1,200 to 1,500 per day) during the school admission period, even if all the particulars of the students are not known.

WEB SITES LAUNCHED ON NIC'S WEB SERVER

<http://www.nic.in>

Delhi : During the recent months, a number of new web sites were designed and developed by NIC and hosted on its own web server. Given below are the highlights of some of the major web sites released recently.

PUNJAB

<http://www.nic.in/punjab>

The State of Punjab recently made it to the Internet Map of the world with the launch of the Punjab web site. The aesthetically designed web site touches all aspects of the State, from Culture and History to Agriculture, from Tourism to Education and Technical Education and most importantly from Economy and Infrastructure to every detail about the Industry. For the prospective entrepreneurs and investors, all required application forms have been included as a part of the web site. The Site was recently launched at a function in Chandigarh by the Punjab Chief Minister Mr. Prakash Singh Badal.



Inauguration of Punjab web site by the Chief Minister Mr. Prakash Singh Badal

NACO

<http://www.nic.in/naco>

The website of National Aids Control Organization is a milestone in the area of generating awareness about AIDS and its related aspects. The content on the web site is divided into three parts. The first part gives detailed information about NACO and its activities and programmes. The second part gives informative facts about AIDS and the third part is an announcement section covering the latest events of NACO.

GAIL

<http://www.nic.in/gail>

Gas Authority of India Ltd.(GAIL) is one of the 'Navratna' Public Sector Enterprises in the Country. Its web site provides useful information about GAIL, its areas of business, finance aspects, environment safety features, business prospects, operations and maintenance, GAIL's publications etc.

UNION BUDGET(98-99)

<http://www.nic.in/indiabudget/budget98-99>

Like last year, this year too the Union Budget was put on the Internet within minutes of its announcement in the Parliament. The website gives complete budget document giving information about aspects such as Key features , the Budget Speech, Annual Financial Statement , the Finance Bill, Memorandums, Receipt and Expenditure Budget and Customs and Excise Notifications etc. Keeping in mind the large number of hits expected on the day of the Budget release, four mirror sites were also set up to ensure a fast access.

ECONOMIC SURVEY (97-98)

<http://www.nic.in/indiabudget/es97-98>

The Economic Survey (97-98) was also released recently on the Net on the same day of its release in the Parliament. The site contains the entire document of the Economic Survey giving information on the General Review, Public Finance, Monetary and Banking Developments, Capital and Money Markets, etc.

CAPART

<http://www.nic.in/capart>

The web site of the Council for Advancement of Peoples' Action and Rural Technology (CAPART) is a multimedia enriched site giving information about CAPART as an organization, its various functional divisions, the procedure for accessing support from CAPART and its publications and films. A highlighting feature of the site is the search interface to obtain details

about the various NGOs in India which are associated with CAPART and its activities.

NIC AT EDICON-98

Delhi: EDICON'98, a conference cum exhibition with the theme of "**Trade Facilitation thru Electronic Commerce**" was organised from 28th - 30th May, 1998 at Hotel Ashok, New Delhi jointly by the Ministry of Commerce, NIC and FIEO (Federation of Indian Export Organizations), in association with NASSCOM. The conference was inaugurated by Sh.R.K.Hegde, the Union Minister for Commerce.

NIC was responsible for working out the technical content of the conference, addressed by eminent speakers from India and abroad discussing Electronic Commerce in different sectors such as Automobiles, International Trade, Banking on Internet, Security of Electronic transactions etc.



The NIC Stall at EDICON'98 Exhibition

Most of the leading Indian organizations in the area of EDI/EC participated in the EDICON'98 Exhibition, which attracted a wide number of visitors both from the private and the government / public sector. The highlights of NIC's stall at EDICON'98 Exhibition include the following :

- The demonstration of the capabilities of the NICNET Electronic Commerce server for transmission of structured EDI document through a web browser.
- The indigenously developed "Remote EDI System", a software currently deployed with the Custom House Agents.
- The "**EXPO-INDIA**" CD containing a database of information about the member companies of 80 different Export Promotion Councils, Trade Boards, Development Authorities and Apex Trade Chambers. The web version of the database (having One Lakh Eighteen Thousand records), was also shown.
- Demonstration of an Electronic Trading Opportunity (ETO) database, which is provided by NIC (in association with UN Trade Promotion Development Council) to its subscribers through EDI. The database generated a lot of interest, especially in the exporting community and NIC was able to enrol new subscribers to this service.

Products/Services

- Web Enabled Applications in Haryana
 - Election Information System
 - Court Cases Monitoring System
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Web Enabled Applications in Haryana

In accordance with NIC's Policy to keep up with the changing times, various State Units are in the process of developing applications that are web compatible. In this regard, NIC-Haryana has developed certain web enabled application software.

The State Unit needs to monitor the implementation of various applications on a regular basis. Consequently, a need was felt for an application software, which can automate the process of data compilation and its presentation. A web-enabled application has thus been designed and developed in HTML(Hyper Text Markup Language) and CGI (Common Gateway Interface) using the "C" language.

As a part of this package, Input forms for monitoring of Land Records, Below Poverty Line [BPL] Census and Public Information Facilitation [PIFC] have been developed in HTML . This application has been placed on the Web Server at the New Secretariat Building in the State . The District Informatics Officers of NIC can access this Server through X.25 connectivity and can login to this machine. The input forms can be accessed through the text browser lynx. The DIOs can then enter the status of any of the three applications. The software compiles the information in the form of tables using CGI . This way, workload of compilation of status at State level is reduced, as desired by the State Government .

A Query Module on Village level database of Land Records has also been designed using UDB at back-end and MS-Access at the front end. Data of all the villages in the State of Haryana is available and is being used for planning purposes.

Election Information System

The NIC Pondicherry Unit has developed an application package entitled "**Election Information System (EIS)**" to computerize some major electoral activities. The Information System, developed

on the request of the Chief Electoral Officer of Pondicherry, is modular in nature and covers the following four areas :

🌸 **Polling Personnel Allotment** - This module takes care of the allotment of over 4000 polling personnel to the 799 Polling Stations (PS) in the Union Territory through Random Number generation techniques.

🌸 **Polling Day Activities** - This module absorbs the data of votes polled in the individual polling stations across all the Districts in the Union Territory and disseminate the details to the general public throughout Pondicherry. Data entry can be done on-line from the respective Returning Offices directly into the system at the NIC Unit. The details of votes polled (with gender break-up) along with their percentages can be calculated every thirty seconds and the query screens have been so designed to provide the latest information by refreshing the screens automatically.



Election Information System being used during Pondicherry Elections

🌸 **Counting Personnel Allotment** - This module takes care of allotment of over 500 Personnel spread across 13 Halls in the counting centre through Random Number generation techniques.

🌸 **Counting Day Activities** - This module absorbs the details of votes fetched by the candidates for each assembly segment and disseminates them to the general public.

This package was successfully used by the Pondicherry Government in the last Lok Sabha Elections .

Court Cases Monitoring System

The Madhya Pradesh State Unit of NIC has developed an application package for the effective

monitoring of court cases, filed against the State Government , which are in progress in various courts. The Package has already been implemented for the Agriculture Department (*see Informatics April'98 issue for details*), while the same is being done for the Health Department and the Department of Panchayat and Rural Development. A novel approach has been used in the design of this System as it has been generalised for a direct use by any Department. A comprehensive set of parameters were identified (based on a requirement study of several departments), to meet the monitoring requirements. This set has been embedded into the system to enable each user department to select and define its own data set for monitoring their court cases.

The System helps capture the relevent details of pending cases, namely Case details (Case No., Registration Date, Subject etc), OIC Details (Designation, place of posting etc.), Proceeding Details (Return Filing details, Stay vacation, last hearing etc.), Details of Interim Order and Final Order, etc.

Projects

- Computerization of Below Poverty Line Census
 - Vehicle Registration Computerized
 - Computerized Management System for MPSAT
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Computerization of Below Poverty Line Census

The Haryana State Unit of NIC was entrusted with the task of computerization of Below Poverty Line [BPL] Census of the State by the Directorate of Rural Development, Government of Haryana. Subsequently, a detailed study was undertaken and NIC-Haryana developed the software as per user requirements which was then released to all District NIC Units of Haryana.

The BPL Census schedule is divided into two parts. The field investigator visits every household of the village and fills up Part-I of the schedule having basic parameters for determining the criteria for its inclusion in BPL. If a family lies below the poverty line, then Part-II is filled which includes parameters such as sex, age, any physical handicap, social group, religion, occupation, housing status, land ownership, ownership of livestock, training for skill development, expenditure during last 30 days and receipt of assistance under different government schemes.

The software developed as a part of the Project is being effectively used by all District Rural Development Agencies [DRDAs] in Haryana. The software is available on UNIX [Multi-User] and DOS [Single User] platforms. The data entry is being done by the data entry operators trained by Districts Informatics Officers of NIC. The Query System has been planned in such a way that DRDAs can utilize this data while sanctioning the loans to the deserving beneficiaries. It will also be linked to Computerized Rural Information System Project [CRISP] in Haryana.

This data would also be utilized by various Government agencies at State and National level for planning the various schemes for the poor and sanctioning of funds for such schemes.

The Directorate of Rural Development has appreciated the efforts put in by NIC-Haryana in the successful implementation of BPL Census Computerization Project.

Vehicle Registration Computerized

The Pondicherry Transport Department recently computerized the procedure for issuing the

Vehicle Registration Certificates in the Union Territory. The software used for the preparation of computerized Registration Certificates (RC) has been developed by the Pondicherry Unit of National Informatics Centre. The computerized RC Books are being issued for both Goods Vehicles (Transport) as well as those for Personal use (Non-Transport).



Inauguration of computerized RC Books

The computerized Registration Certificates prepared using the new software contain information about the vehicle under various categories such as Registration Number, Brief Description of the Vehicle, Name and Address of the concerned Dealer, the particulars of the vehicle owner and also the technical details about the vehicle such as Type of Body, Chassis Number, Kind of Fuel used, Engine Number, cubic capacity, maker's classification, seating capacity, month & year of manufacturing etc.

The introduction of computerized Registration Certificates in the Transport Department was formally inaugurated on April 1, 1998 by the Minister of Transport in the Pondicherry Government Mr. A.M.H. Nazeem at a specially organised function at Pondicherry. NIC's role in the entire project of computerization was also appreciated.

Computerized Management System for MPSAT

NIC, Madhya Pradesh State Unit, Bhopal has taken up the project for computerization of various activities of the Madhya Pradesh State Administrative Tribunal (MPSAT) in a phased manner. The computerization in MPSAT includes Registration & Updation of cases, Cause List Generation, Daily Proceedings, Order Generation, Generation of MIS and Statistical Reports, Payroll, Accounting etc. It is also proposed to setup a computer centre in the MPSAT, Bhopal in future, for which the finalization of infrastructure is under consideration.

In the first phase of the computerization process, all the cases pending for final judgements have already been entered and daily updation of the same is being done by NIC. On the basis of updated

data, various monthly statistical reports i.e., No. of cases instituted/disposed during the month, Year-wise No. of cases pending at the end of the month, Subject-wise No. of cases pending at the end of the month, Department-wise list of pending cases at the end of the month, Year-wise breakup of No. of cases disposed during the month etc. are being generated from the computerized system by the user department for further appropriate action.

The State Administrative Tribunal Computerized Management System (SATCMS) has a menu driven and user friendly selection procedure to select the appropriate option for desired activity. The Data entry module provides on-line help and field validation facility. The system also generates certain exception reports to serve as efficient aids in the removal of various errors/ inconsistencies in the data, thereby improving the data accuracy and integrity.

With the successful completion of the first phase of the Project, MPSAT, Bhopal has ushered computer culture in its operations, thus striving to improve its efficiency and productivity.
