

Meghalaya : Using ICT to Metamorphose Governance

Meghalaya - Blessed with abundant rainfall, sunshine, virgin forests, high plateaus, tumbling waterfalls, crystal clear rivers, meandering streams - the state, carved from the erstwhile state of Assam - bounds it on the North and East while the South and West is covered by Bangladesh.



Timothy Dkhar
State Informatics Officer
sio-megh@nic.in

NIC - Meghalaya, established in 1988, has left no stone unturned in delivering ICT services to the state and central government offices located in the region, hence laying a strong foundation for e-Governance in the state. It is from here all ICT services for the state emanate.

Infrastructure

The two 45 Mbps leased line serves as a backbone between NIC Meghalaya and N.E INOC Centre, Guwahati, The 2 Mbps lease line connects Shillong, the state capital, with all the seven NIC district centres. SCPC (DAMA) for data, voice and video-conferencing facility are installed at district centres, CM Office and the NIC State Centre. In addition a DirectWay VSAT connects district centres and Sub-Divisional offices.

A state-of-the-art Data centre operates on 24x7 basis. The Storage Area Network (SAN) with a capacity of 4 Tera Bytes is protected with SecureNet Servers, Pix firewall, Anti-virus server, NAT Servers, etc. Various ICT applications and databases are housed at the centre.

A City Wide Network comprising of more than 2000 nodes connects different secretariat buildings, state government departments through Optical Fibre Cable (OFC), Wireless/ Radio Frequency links, 2 mbps leased line,

Dial-up etc. The facility has provided internet connectivity, web browsing, electronic mail, virus protection, and many web based applications - delivering G2C and G2E services.

Video Conferencing facilities, commissioned at NIC State Centre, Yojana Bhavan, NEC Secretariat and district centres are being extensively used for meetings, trainings etc. An executive VC system has also been set up at the office of the Chief Secretary, Govt. of Meghalaya.

Web Service

Websites for various government departments / directorates and other organization were designed, developed and hosted at the data center. The official website <http://meghalaya.gov.in> serves as a widow to the cyber world. It has many useful G2C services links, forms download and a host of information related to art, culture, tourism and administrative set up of the state.



Homepage of Government of Meghalaya website

Meghalaya Board of School Education (MBOSE) Results

The results declared by the MBOSE are disseminated at the website - <http://megresults.nic.in> as well as via SMS. The website also provides Result Abstract, Top Ten Merit List, List of all the candidates securing highest marks in each of the subjects and the division wise detailed results.

Major Projects Implemented

Online Computerisation of Treasuries (TreasuryNET): A web-enabled 3-tier architecture, designed with PHP and DB2 database, under Linux OS, TreasuryNET works with a central data server to which the users can access it from client machine located in various treasuries and sub-treasuries throughout the state. Designed on a workflow concept where the data (information) flow from the lower level (Counter) to a higher level (Treasury Officer), which has different roles to access the data. TreasuryNET takes care of all the major activities and transaction of the treasuries.



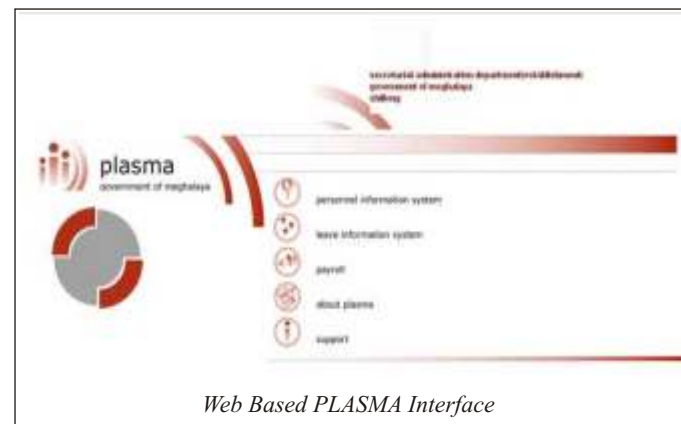
TreasuryNET Interface

Value Added Tax Application System (VATAPPS): VatAPPS (VAT Applications), a web-based MIS developed using Oracle 10g database and deployed through Oracle10g Application Server is hosted at NIC Data center. The field offices access the application from remote locations. VatAPPS system has the following functionalities and modules: Registration of Dealers, Processing of Returns, Payment of Challans, Way-Bills Administration, Transit Pass & Transit Documents,

Declaration Form (Administration of C-Forms). The software has been integrated with TreasuryNET for Challans so that it can generate various statistical reports of revenue collection.

Computerisation of PHEDA Web based MIS for the Public Health Engineering Department comprises of thirteen modules which encompasses the major functions and activities of the department. The application fully automates the various functions within the department right from the Chief Engineer's office down to the Sub-Divisional office. The major modules are: Scheme and Program Management, Contractor and Supplier Information System, Material and Stores Management, Personnel and Payroll System etc.

Personnel Leave Attendance Salary Management Application (PLASMA): PLASMA, an integrated web-based G2G software is designed to simplify the management of Personnel Information of the state government employees. The application maintains the Service books of individuals in an organization, monitors their attendance and also processes the payroll. The salary component of the software seamlessly integrates with the TreasuryNET for faster processing of the salary bills.



Web Based PLASMA Interface

Transport Computerisation (VAHAN & SARATHI): VAHAN 2.0 and the SARATHI software are at various implementation stages at District Transport Offices (DTO's) in the state. Necessary changes were incorporated in the VAHAN application for its implementation in the North Eastern States. Training programs were organized at Shillong for the transport officials.

Computerisation of Khasi Hill Autonomous District Council (KHADC): NIC state center has extended its support & services to KHADC with the implementation of software application comprising of the following modules (i) Professional Tax Information System (ii) Payroll System (iii) Trade & Licensing (iv) Budgeting.

NIC North Eastern Council (NIC NEC): NIC North Eastern Council (NICNEC) was setup way back in 1987. Since its inception NICNEC provided various services and support to the NEC. The services include Video-Conferencing, Internet Services, E-mail, etc through SCPC VSAT. Applications already developed and deployed within the NEC Intranet are IntraNEC portal (G2E/G2C models), NEC Systems Inventory, Call Maintenance (G2E/Office Automation), NEC Library Automation, Comprehensive DDO package from Accounts Informatics Division, NIC Hqtrs. A dynamic website for NEC has also been designed and its URL is <http://necouncil.gov.in>.

City Civil Court Project: The Case Information System is being implemented in the District court, Shillong, under City Civil Court (CCC) Project. A full fledged computer centre has been set up in the premises of the District Court. All court rooms have been provided with a computer to record the courtroom proceedings. LAN has been installed and commissioned in the office of the District & Session Judge. The Central Server is updated daily with the Cause list and Judgment.



Other Projects Implemented

CIPA Project: Common Integrated Police Application

(CIPA), implemented at seven police stations in the state capital, is poised for a roll out to ten more stations across the state. The major modules that are operational are GD entry, FIR, Investigation, Reports & Query.

Energy Billing System: Implemented for the Meghalaya State Electricity Board (MeSEB) the application has been customized as per the new "Meghalaya State Electricity Tariff" and also as per the bill, receipt and report format required by the board. The software has been implemented at Jowai Revenue Division.

Digitization of Land Records and Land Registration: The pilot project for the computerization of Land Records and Registration has started in the District of East Khasi Hills, Meghalaya. Under this Project, a system study has been conducted and the software application development is completed. The Software is undergoing the Testing Phase. Implementation of the Project will commence from July onwards.

Hospital Management System: HMS, a web based application, designed and developed to manage the ever-expanding volume of patients and their health related information. The Hospital Management System has been implemented in Ganesh Das Hospital, Shillong.

Budget Computerisation: Budget Information System - a client-server application running on Window 2003 Server, is developed and implemented in the Finance (Budget) Department for the preparation of the annual budget of the state government. The application caters to the preparation of the state budget and the Supplementary Demand. The budget reports are available on the portal of the state government and its URL is <http://164.100.150.131/budget/welcome.htm>.

Computerisation of Meghalaya Public Service Commission: An application catering to the 'Pre & Post Examination' processes of the commission have been computerised. The various modules of the application are candidate's data entry, preliminary extraction of eligible candidates for payment of examination fees, preparation of statements eligibility criteria, generation of Intimation letters, venue master, roll numbers, admission Card, invigilators identity cards etc.

Computerisation of Shillong Municipal Board: The

computerization of Shillong Municipal Board encompasses Property Tax (Property Assessment and Tax on Property PATP), Water Works and Birth and Death Registration. The PATP module facilitates calculation of Annual Rental Value, Tax under various components, Tax collection, Generation of receipts, Mutation and apportionment of holdings etc. The Water Works module generates bills for commercial and temporary water connections. The Birth and Death registration module registers births and deaths and issues certificates.

NREGS: The online monitoring of 'National Rural Employment Guarantee Act' implemented at all the 39 blocks of the state, in collaboration with the Directorate of Community & Rural Development has been a classic example of G2C services. The ministry's portal is regularly updated with current information.


CONFONET Project: An intranet based application to record the proceedings of cases registered by complainants or appellants in consumer courts have been implemented in all District Consumer forums and at the State Commission in Shillong. Data entered using the Case Monitoring System helps in Cause list and Judgments uploading at the Central Server located at Delhi.

Computerisation of Election Department: NIC, Meghalaya has been providing extensive technical support for the State Election department in conducting Election in the State for Parliamentary, Legislative Assembly and District Councils Election. A number of applications have been developed and implemented throughout the state namely:

- **Photoroll Application:** The application has been designed & developed to prepare and generate the Photo Electoral Roll of the Government of Meghalaya as per the direction from the Election Commission of India (ECI).
- **Integration Application:** The application has been designed to integrate the database of the Supplementary Data that were generated for each Revision to the Mother Roll database.
- **MERIMS:** This application is used to add, update or delete records for every revision conducted by the Election department.

- **Delimitation of Assembly Constituencies:** This application has been developed and implemented for bulk data migration of records.
- **Randomization of Polling Personnel:** A standardized randomization for Polling Personnel has been developed for allocation of polling duties to polling personnel as per the guidelines of the Election Commission of India.
- **Randomization of EVMs:** A standardized randomization for Electronic Voting Machines has been developed for allocation of EVMs meant for training and polling as per the guidelines of the Election Commission of India.
- **Election Website:** A district-level election website was conceptualized, designed, developed and launched to cater to the needs of the public to get pre-poll and post-poll information on the election process.

COMPACT: This software package from Accounts Informatics Division of NIC has been implemented in six PAOs in Shillong, viz., Regional Pay & Accounts Office (RPAO), MHA, PAO Customs and Central Excise, PAO Central Board of Direct Taxes, PAO CPWD (N.E. Zone), PAO Assam Rifles & PAO Geological Survey of India.

Capacity Building and ICT Training: Training programs are regularly conducted for state and central government employees on windows and office productivity tools. Trainees have to take the CAPES (Computer Aided Paperless Examination System) exam on completion of the training. Professional Training programs, conducted in collaboration with Oracle, Microsoft, Sun Microsystems & Red Hat Linux, augments the skills of the staff of NIC Meghalaya. 

For further information, contact

Timothy Dkhar

State Informatics Officer,

NIC Meghalaya

NIC Building, Secretariat Hill,

Shillong, Meghalaya- 793 001

sio-megh@nic.in

Edited by: Prashant Belwariar