



**INFORMATION TECHNOLOGY  
DEPARTMENT**

**POLICY NOTE**

**DEMAND NO.31**

**2010-2011**

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Minister for Information Technology**

(c)  
Government of Tamil Nadu  
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**INFORMATION TECHNOLOGY DEPARTMENT  
POLICY NOTE - 2010-2011  
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## **CHAPTER – I**

### **INTRODUCTION**

The Agricultural revolution and the Industrial revolution have brought many benefits to mankind. Yet another revolution was instrumental in turning the world into a Global village and this revolution has often been referred to as the Information Technology revolution. It is the Information Technology revolution that has enabled India to leapfrog from a backward nation to a nation that is now recognised as a growing economic power. In Tamil Nadu, under the dynamic leadership and the pioneering vision of our Hon'ble Chief Minister, the seeds were sown for growth of Information Technology in the year 1997 by way of formulating the first Information Technology Policy. Various concessions were announced for attracting the IT majors to invest in this state. Due to the continual efforts of the policy makers and the state administrators, Tamil Nadu has begun to reap the benefits of the Information Technology. Information Technology has evolved as a

multifaceted industry providing employment opportunities, not only for the Engineering and Science students but also for the students of all other streams. As all sectors are coming under the influence of the Information Technology, massive employment opportunities have been generated by virtue of the fact that a student with a specialization and adequate knowledge of information technology is bound to be in demand. The broad basing of the information technology sector has led to the growth of this sector in the state.

Tamil Nadu has contributed significantly for the growth of the Indian Economy through software exports. Tamil Nadu has been amongst the top three states in terms of ICT investments and production. It has emerged as a hub for software, hardware and R&D. The number of Indian and Multinational organizations having presence in Tamil Nadu is a testimony to this. ICT Production in Tamil Nadu touched a high of Rs.36,680.40 Crores in 2008-09. Tamil Nadu's success in the software industry is due to the availability of a large pool of educated work force and the progressive policies of the Tamil Nadu State Government. This Government is determined to pass on

the benefits accrued from Information Technology to every part of the state. It is in this context that the State Administration has been actively promoting the establishment of Information Technology Parks at Chennai and Tier II cities viz., Coimbatore, Madurai, Tiruchirapalli, Tirunelveli, Salem and Hosur. The State has also focused its attention on improving the infrastructural facilities so as to attract more investments.

### **1.1 Information Technology being Demand Driven**

Information Technology has become vital to the development and progress of all fields. Earlier there was need for a special drive to 'computerise' activities which has given place to a massive push within each department to move to e-governance efforts.

The influence of the Information Technology has been felt in all departments ranging from Education, Cooperative Banking, Finance, Commercial Taxes, Social Welfare, Disbursement of Scholarships, Police, Rural development Municipal Administration etc. The sectors that have embraced Information Technology are reaping the benefits of IT. As such the IT industry not only

employs the people with Information Technology as their main subject of study but also professionals in all other fields which could also be non technical in nature. It has also paved way for the rise of thousands of new employment opportunities in emerging fields with the advent of new developments in the IT field.

### **1.2 Building Knowledge Base in Information Technology**

As a first step towards building the knowledge base in Information Technology the Hon'ble Chief Minister introduced computer education in the school curriculum during 1999-2000. Computer education has also been introduced in arts and science colleges, Law Colleges and Medical Colleges. Computer Training Centers have now been inaugurated in all Districts. These Training Centers have full-fledged training infrastructure. Departments ranging from cooperatives, commercial taxes etc have already undergone intensive training.

### **1.3 IT infrastructure in Government**

The Tamil Nadu State Wide Area Network is a communication infrastructure which connects Chennai

with District Headquarters, RDO offices, Taluk Headquarters and Block Headquarters. This entire Information highway is being maintained by multiple agencies under the supervision of the IT Department. A Data Centre has been commissioned for hosting all e-Governance applications at a cost of Rs.9.44 crores

#### **1.4 Private Public Partnership in I.T**

For the successful implementation of IT projects, Private Public Partnership is of prime importance. The ICT Academy of Tamil Nadu is a unique effort that combines the involvement of the Government of India, Government of Tamil Nadu and Industry represented by the Confederation of the Indian Industry (CII). While the Industry represented by major IT corporate take a prominent role in administering the ICT Academy, providing the curriculum content, ensure inflow of the latest teaching methodologies and anchor the program, the Government of Tamil Nadu and Government of India provide financial and other inputs to support the industry effort.

To improve the quality of teaching faculty and thereby ensuring that students passing out of institutes and colleges in Tamil Nadu and to make them industry ready and immediately employable in the ICT industry particularly in the ICT services and the ICT Manufacturing sectors, the ICT Academy of Tamil Nadu has been established under the Societies Registration Act, 1975.

The Information Technology Industry has been facing a severe shortage of quality manpower. The Tier II Cities of Tamil Nadu offer great potential in the area of IT manpower. In order to project the manpower potential of the Tier II cities and also to induce confidence among the student community, an event titled "**Empower IT**" is conducted every year. The aim of "**Empower IT**" Campaign is to bring together final year college students and IT Companies. This event is to create awareness and sense of competitiveness among the college students in the districts and to showcase the talent pool and human resources in this region to IT investors. CEOs of various IT companies from all over the country interact with the college students who participate in the above event.

ELCOT on behalf of the Government of Tamil Nadu organizes this effort in association with NASSCOM.

The Government of Tamil Nadu is firmly committed to spread the IT revolution to other parts of Tamil Nadu. IT parks are being built at the Tier II cities such as Coimbatore, Madurai, Tiruchirapalli, Tirunelveli, Salem and Hosur. These IT parks will create employment opportunities to qualified rural youth.

Business in Information Technology Services is a new chapter in ITES, where the Business Process Outsourcing work is done by educated rural youth. It will pave the way for promotion of more Rural Business in Information Technology Services in Tamil Nadu. The Department of Information Technology through ELCOT works actively to promote more businesses in such Information Technology Services in rural areas in all districts of Tamil Nadu.

### **1.5 E-Waste**

E-waste encompasses the ever growing range of obsolete electronic devices, telecommunication devices,

computer accessories, electronic components, industrial electronics, automobile electronic devices etc.

Technological advancement and increased usage of Telecom, IT, Electronic digital equipments and leisure/toy gizmos have created an alarming situation of increased stream of electronic waste (e-waste) globally known as Waste Electrical and Electronic Equipment (WEEE). In a digitized information technology world, the use of computers, cell phones, consumer electronic appliances and the like have reached enormous proportions, and have become an integral part of routine lifestyle. The high rate of obsolescence of these modern equipments and the fast changing technology gives rise to replacement of the products, thereby increasing e-waste. Developing countries including India also face the threat of the “replacement market” of developed countries by way of transboundary shipments of used electronic goods and items. The main reason why e-waste has become a global concern is the presence of toxic and hazardous substances in these equipments such as Lead, Cadmium, Mercury, Arsenic, Barium, Beryllium and Brominated Flame-Retardants (BFR). In the absence of an effective

method for collection of e-waste and managing the hazardous constituents, it is likely to be disposed off in land-fills resulting in high environmental risk and health hazards to human beings and animals or end up at the backyard units which recycle such wastes using highly polluting technologies.

The disposal of e-waste containing such hazardous substances in an environmentally sound manner has become a challenge in India and at the global level. Many countries have initiated steps for collection and safe disposal of e-waste. In India, the Ministry of Environment and Forests (MoEF), Government of India (GOI) has published “Guidelines for Environmentally Sound Management of E-waste” in March 2008. The guidelines are optional and not mandatory and a proposal for regulating e-waste through a set of rules that would govern the management of e-waste in an environmentally sound manner is under consideration at the GOI level.

Chennai being a major ICT Hub and with the ICT industry now expanding to Tier II, Tier III cities and Towns and indeed into villages in Tamil Nadu, it is imperative that a comprehensive policy for Environmentally Sound

Management (ESM) of e-waste is in place. As and when the National Policy or regulations on e-waste is introduced, the policy of the State shall be aligned to accommodate changes if required.

### **1.6 E-Governance Policy**

The convergence of Information and Communication Technology (ICT) in the recent years has presented an opportunity for the Government to change the way the Government integrates, leverages and values its information assets. With ease of access to information, targeted approach to mission delivery, enterprise resource management and Information Processing and dissemination – all of these can be raised to higher levels which in the past had a limited scope. Governments across the globe have realized that mere computerization alone will not realize the desired level of better Governance, as e-Governance includes People (Government staff and citizen), Process (Government Process Re-engineering) and Technologies (IT) which are all encompassing and hence the need for a separate e-Governance Policy.



In many instances, Government departments might have come across shortage of resources in one department and excess of resources in another. This could be due to non-availability of proper data and the required facilities to share available information. Even if Government departments are computerized and networked more for the purpose of internet usage and file/mail transfer, the information available in one department, which possesses the data, could not be utilized in other departments. This is because the information is stored in different formats, in different platforms and in different database systems.

By deploying the latest ICT, the Government departments can maximize access to the required information and also can bid farewell to the massive paper trail often associated with various Government agencies. Rather than providing non-detailed information to uninterested constituents, the Government departments can now direct the right information to the right people at the right time. Further, the enterprise-wide information can be an asset to the Government as well as to the entire

population. This will help the departments in micro level analysis and informed decision-making.

The service levels are increasing day by day. The service sector has become one of the important contributors for our Gross Domestic Product (GDP) and for the generation of newer employments. Many services, traditionally done by the Government through its own channels from its own offices are now demanded on public channels in multiple media deliveries and more importantly well beyond the regular working hours of the office. A common man wants services to be enabled online in every possible way thereby establishing a channel to interact with the Government. Therefore there is a need for an e-Governance Policy to ensure that in the maze of activity there is consistency in approach. Interoperability, upgradeability, security and the like will need to be defined so as to prevent repetitive work in the field of application development. Therefore, a comprehensive e-Governance Policy covering a wide range of issues such as technology type, architecture, framework standards, support infrastructure, software stack at the front-end middleware and back-ends together with the defined software

development cycle has been drafted and will be released after due process of approval.

### **1.7 M-Governance**

Mobile-Governance or M-Governance is the use of mobile technology and mobile services as a communication platform to improve the efficiency and effectiveness of Governance. This is largely used as a two-way communication services channel between the Government and citizens. Benefits of the M-Governance are projected to reach larger population especially those in remote areas and justify investments in delivering services through mobile technology and tools. The Government of Tamil Nadu proposes to leverage this powerful tool and make available valuable information to the people as and when they need it. The mobile platform would extend the reach for Government services to the citizens who do not have access to computers. New applications that are being developed for various departments are being provided with a mobile interface so that the status of the application etc can be accessed as and when required.

### **1.8 Welfare Board for Cable TV Operators**

The Government constituted the Cable TV Workers' Welfare Board for the welfare of the unorganized workers in the Cable TV industry in G.O. Ms.No.1, Information Technology Department dated 28<sup>th</sup> March 2008 under the Chairmanship of the Hon'ble Chief Minister with Official and non-Official members. Subsequently, Hon'ble Minister for Information Technology has been appointed as Chairman of the Welfare Board in G.O. (Ms.) No.1, Information Technology Department dated 05.01.2010. In the above Government Order, necessary guidelines for providing welfare measures to the workers of the Cable industry were also issued.

The scheme provides for the distribution of all welfare measures similar to that of other unorganized Welfare Boards through the Cable TV Workers' Welfare Board. The Special Deputy Collector (Distribution of free Colour Televisions) in the Districts has been entrusted with the work of identifying the families of the Cable TV Workers for the issue of Identity Cards. Those who have completed 18 years of age and who have not completed

60 years of age are eligible for registration in the Welfare Board.

The Government has released a sum of Rs.50 lakhs to the Welfare Board for 2009-10. All registered members of the Welfare Board are eligible for the benefits envisaged under “Chief Minister Kalaignar’s Insurance Scheme for Life Saving Treatments”

So far, 1522 applications from the cable TV workers hailing from various districts have been received , out of which 552 workers’ applications have been processed and Identity cards have been issued to 390 workers. The scrutiny of the remaining applications is under progress. Action is being taken for the disbursement of various welfare schemes including Educational Assistance to the Children of the members.

### **1.9 Rural Business Process Outsourcing(BPO)**

India is at the forefront of the rapidly evolving Business Process Outsourcing (BPO) market, having established itself as a “destination of choice. IT-BPO industry is expected to record a 5.5 per cent growth in exports to reach 49.7 Billion dollar in FY 2009-10. The

exports is projected to grow 13-15 per cent in FY 2010-11, while in domestic market, the growth would be about 15-17 per cent. The availability of low cost skilled manpower, English speaking population and appropriate infrastructure have been among the main reasons for the companies outsourcing their operations to India.

Tamil Nadu has attracted several BPO Units and this sector forms a significant part of IT Enabled Services here. Rural BPO is a new chapter in the ITES industry, where the Business Process Outsourcing work is done by educated rural youth.

The success of the Krishnagiri District administration in establishing India’s first rural Business Process outsourcing unit at Sanasandiram, Chennathur Panchayat, Hosur Block in 2007 has now paved the way for promotion of more rural BPOs in Tamil Nadu. The Information Technology Department will work actively to promote rural BPOs in all Districts of Tamil Nadu and a specific policy and implementation process for Rural BPOs will be defined shortly by the Department to enable ITES organisations to benefit from a cost advantage situation and thereby increase rural employment in the State.

### **1.10 Information Technology Department as a Facilitator Department**

The National e-Governance Plan (NeGP) formulated by the Government of India for implementation across the country, envisages the vision of making 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 cost. Currently, the IT Department is actively involved in over 15 Departments to build IT applications for delivering citizen centric services throughout the State. The IT Department is increasingly being seen as a knowledge Department with an increasingly complex nature of technology developments in the world thereby requiring that developments planned in various departments are not found to be obsolete due to the arrival of even more advanced technologies.

Further, with all departments involved in citizen centric services moving towards IT applications to facilitate their style of functioning, it becomes evident that a good

degree of convergence is necessary to prevent overlapping and wasteful expenditure. Hence, this Department would be acting as a Facilitator Department.

## CHAPTER – II

### Electronics Corporation Of Tamil Nadu Limited (ELCOT)

ELCOT is a wholly owned Government of Tamil Nadu Undertaking, registered under the Indian Companies Act 1956. ELCOT began its activities as a promotional organization in the field of electronics industry and transformed itself as an Information Technology arm of Government of Tamil Nadu since the advent of the Information Technology revolution in India. ELCOT, with the support of Government of Tamil Nadu, diversified its area of operations from Electronics to Information Technology, and began functioning under the Department of Information Technology, Government of Tamil Nadu from 1998 onwards. ELCOT has been providing hand holding support to Government of Tamil Nadu and its Departments, Organizations, Boards, etc. in the area of Information Technology, Information Technology related initiatives and e-Governance. ELCOT is the preferred nodal agency for hardware procurement and software development, major turnkey IT Projects of the Government. ELCOT has also implemented a major

project of the Government of India, the Tamil Nadu State Wide Area Network (TNSWAN). It is also currently implementing another GOI project, the State Data Centre (SDC). The popular scheme of Free Distribution of Colour Televisions was also entrusted to ELCOT. ELCOT is also ushering in the IT revolution to Tier I and Tier II locations of Tamil Nadu establishing IT SEZs at Madurai, Coimbatore, Tiruchy, Tirunelveli, Salem, Hosur and Sholinganallur.

### 2.1 IT Promotion

Tamil Nadu has been amongst the top three states in terms of ICT investment and production. It has emerged as a hub for software development. The Government of Tamil Nadu is actively promoting Information Technology in this State in order to become the ICT hub of South Asia by creating a knowledge driven ecosystem, leveraging entrepreneurship and promoting socially inclusive growth to achieve a 25% production share of the Indian ICT industry. The Government of Tamil Nadu involves itself actively with premier organizations like STPI, NASSCOM, CII, FICCI, MAIT etc. in promoting Information and

Communication Technology in the State. The Government of Tamil Nadu through ELCOT and TNeGA participates in a number of National & international IT events, and by doing so, it has managed to showcase facilities that are available in Tamil Nadu and the various incentives that are offered to the companies that invest in this State. "CONNECT" is a premier ICT event conducted by the Government of Tamil Nadu, ELCOT and CII. "Empower IT" is a campaign in association with NASSCOM to promote manpower potential by inducing confidence among the student community of Tier cities and to attract the ICT investments to the region. ELCOT and TNeGA organized "CeTIT 2009" (Citizen Empowerment through Information Technology) at Chennai in partnership with FICCI to promote e-Governance. The Government of Tamil Nadu has been an active participant and promoter in major ICT events like NASSCOM HR SUMMIT 2009, CONNECT – MADURAI 2009, EMPOWER IT 2009 AT TIRUCHY, PRAVASI BHARATIYA DIVAS 2010, NASSCOM INDIA LEADERSHIP FORUM 2010 - NASSCOM India Leadership Forum 2010 and CONNECT COIMBATORE

## **2.2 Prominent Projects implemented By ELCOT**

### **(i) Hardware procurement**

The Government has approved ELCOT as the optional procurement agency for all Government departments and their agencies to procure IT and IT related products from the market. An innovative e-procurement policy that is open and transparent and encourages competition among vendors has ensured high quality products at costs which is 20-30 % lesser than the market price. In the year 2008—2009, about Rs.500 crores worth of e-procurement has been done by ELCOT.

### **(ii) Software development**

ELCOT and TNeGA have been providing active support to the Government departments for their software needs by studying their requirements, preparation of RFP, floating of e-tenders and selection of software developers. ELCOT undertakes a Software Development Life Cycle (SDLC) approach, such that a complete documentation of the entire development to roll out is captured and documented.

### **(iii) ERP Software Development**

ELCOT has developed an ERP (Enterprise Resource Planning) solution in Linux open platform, enabling all operations of ELCOT in a web based solution. The ERP has been implemented progressively from 01.04.2009 in ELCOT. The integration of all the functions is in the final stage. This web-based application may be rolled out to other Government departments after due assessment and customisation.

### **(iv) AGRISNET Project**

The Agriculture Department has entrusted the task of developing and hosting AGRISNET (Agriculture portal) application software aims at delivering single window information and services to the farmers. This will improve the Government-Farmers interface and deliver the Agriculture related services nearer to them. Four modules have been completed so far. The development of SMS alert to farmers regarding crop information, climatic conditions etc is under progress.

### **(v) Hiring Services of IT consultants for Design, Developing and Implementing Enterprise Information Management System (EIMS) for TNIAMWARM**

The Irrigated Modernization and Water Bodies Restoration Management (IAMWARM) project is a multidisciplinary project conceived by the Water Resource Organization (WRO) with the aim to improve the performance of irrigated agriculture. The project necessitates use of an Enterprise Information Management System (EIMS).

ELCOT has been nominated by the Government to invite tenders and select an EIMS consultant for design, develop and implement EIMS in Tamil Nadu. The tender has been invited as per World Bank norms and being processed. The work is expected to commence from June 2010.

### **(vi) Civil Supplies Department e-Governance Software Development**

ELCOT has created a state level Family Card Database for the entire 2 crore families, and has hosted

the same online at the ELCOT server. Currently, the District Collectors have started using it for various purposes. It is expected that during the ensuing years, ELCOT would be in a position to provide online transaction services to the citizens for and on behalf of Civil Supplies Department using the Centralised database. The printing of family cards is done using this database at District level and updation of Data base is done at Taluk level. SMS Alert facility has been provided when new cards are issued.

#### **(vii) Central Co-operative Banking Software**

ELCOT has developed web based application software for automating the operations of the District Central Co-operative Banks and Urban Co-operative banks. This web based Total Banking Application software is being implemented all over Tamil Nadu by the Registrar of Co-operative Societies. This software has been installed in more than 800 DCCBs/UCBs and installation in the balance 200 banks is expected to be completed by June 2010.

ELCOT has also developed web based application software for automating the operations of the Primary Agricultural Co-operative Societies (PACS). This will be implemented in 4500 PACS across Tamil Nadu.

#### **(viii) Automation Software for Directorate of Town and Country Planning**

DTCP has entrusted the development of application software to ELCOT for automating its operations in the area of Layout Approval and Building Plan Approval. The DTCP Software with full citizen interface is developed through an Outsourced Software developer and the User Acceptance Test is in progress.

#### **(ix) Software for Commercial Taxes Department**

The Commercial Taxes Department has entrusted the task of developing and hosting application software enabling the Commercial Tax Dealers to register online and to file their monthly VAT Returns online. ELCOT has already developed the software which is under pilot run by the Commercial Tax department. During early 2010-2011, this application software will be hosted online from



ELCOT's Main Frame Server Data Centre thus enabling the Commercial Tax Dealer Community to get the best of online services from Government. The following modules have been developed and currently under User Acceptance testing

- Enforcement
- Check post
- Territorial
- Appellate

#### **(x) Web-based Application Software for Employment and Training Department**

The Directorate of Employment and Training has entrusted the development of web based application software to ELCOT for registration of Job seekers, vocational guidance, periodical collection and compilation of data and implementation of unemployment Assistance Scheme. The Software development is under progress and will be completed and launched by September 2010. The significance of the application is that this will serve as a virtual employment exchange that will benefit job seekers, the corporate sector and the Government. This

portal will transform the manual process into online process and due to this the jobseekers can register themselves at the employment Portal online without visiting the offices personally. This employment portal will capture all the registered data including profiles, scanned copies of certificates and facilitate the end users. Various reports can be generated based on the particulars of those who have registered themselves at the employment portal. The statistics collected from the Employment Portals can be used by the Labour and Employment Department in formulating new policies and strategies in providing employment.

#### **(xi) Web-based Application Software for Construction and Manual Workers Board**

Construction and Manual Workers Board has entrusted the development of web based application software to ELCOT for executing the various welfare assistance schemes and pension schemes. The software was launched during September 2009. The migration of Legacy data has also been successfully completed.

**(xii) Web based application for Chennai Corporation**

ELCOT has developed a comprehensive software application through a consultant for Chennai Corporation. This Software application covers a wide range of activities ranging from Municipal accounting, Works Management, Property Tax, Asset Management, Inventory and Stores Management, Land and Estate Management and so on.

**(xiii) Computer Training Centre (Linux and Application Software)**

Computer Training has been established with 300 seater capacity at Chennai and 25 seater capacity at the district headquarters. About 18,000 Government employees have been trained during 2009-2010.

**(xiv) Scheme to provide Free Colour Television**

In Order to sensitize people on the policies and programmes of the Government and to increase the aspiration levels of the people, a unique scheme of free Distribution of Colour Television sets (CTVs) to the household not having Colour Television sets was commenced on 15<sup>th</sup> September 2006 commemorating the

birth anniversary of Perarignar Anna and Thanthai Periyar. A committee of Legislators comprising representatives of all political parties under the Chairmanship of the Hon'ble Chief Minister presides over the tender process, and this has ensured transparency in procurement and distribution of Colour Television sets. In the first four phases 1,12,80,000 CTV's have been procured and distributed to households in Tamil Nadu. With a view to cover the entire eligible households in Tamil Nadu, orders have been placed for procurement of 40,00,000 more CTV's in Phase V . A sum of Rs.500 crores has been allocated in the Budget 2010-2011 for the continuous implementation of this scheme.

**(xv) Hand Held Billing Machines**

The procurement and supply of Hand Held Billing Machines to 28,500 retail outlets and Kerosene bunks under the Control of Registrar of Co-operative Societies and Tamil Nadu Civil Supplies Corporation was entrusted to ELCOT. ELCOT has supplied Hand held billing machines to 1411 ration shops and kerosene bunks in Chennai city. As on date, ELCOT has received orders for

supply of Hand Held billing machines to 1156 Rations Shops in Krishnagiri and Thiruvallur districts

**(xvi) Crime and Criminal Tracking Network System (CCTNS)**

The Police Department is in the process of planning a new software application viz. Crime and Criminal Tracking Network System (CCTNS) by networking all the Police Stations in Tamil Nadu to track the activities of the criminals in the State of Tamil Nadu and to contain the same effectively. ELCOT is the State Programme Management Consultant (SPMC) for this Rs.100 crores project.

**(xvii) Health Management Information System (HMIS)**

ELCOT has signed a Rs.60.00 crores Memorandum of Understanding (MoU) with the Health Systems Project for rolling out a Health Management Information System (HMIS) for rolling out a centralised web-based health management information system for all government-run secondary care hospitals and medical colleges under Tamil Nadu Health Systems Project. The broad objective of the project is to use ICT in improving

the ability to collect, store and analyze accurate health data across the state. The project was conceptualized to provide critical health data across the health chain for quick and timely intervention by health directorates. Currently, 43 secondary care hospitals have been brought under TNSWAN connectivity, and ELCOT expects to connect 272 hospitals in 2010-2011.

**(xviii) Seamless communication**

The Fisheries department has entrusted the implementation of the “Seamless Communication Network” project to ELCOT. This Rs.7.00 crores project will provide communication using VHF sets between fisherman boat and shore station especially in times of distress, enabling better search, rescue and relief operations. Field trial have been carried out in the high seas off Ramanathapuram District, and the tests have been successful. This project is expected to be completed in 2010-2011.

**(xix) TN IT Help Desk**

The Hon’ble Minister for IT had announced in the floor of the Assembly that a helpdesk will be set up to

assist entrepreneurs in setting up IT units in Tamil Nadu. A virtual helpdesk is to be launched shortly.

**(xx) Data Management system for Chennai Metro Rail project**

Chennai Metro Rail Limited has entrusted this project to ELCOT. The successful tenderer will have to develop application software for document and information sharing among all project participants. It will ensure document storage, retrieval, consulting, reviewing, communication etc.

**(xxi) Broadband connectivity**

ELCOT tendered for and obtained a highly competitive rate of Rs.550/month with unlimited download facility, for broadband for Government Offices that do not need TNSWAN for their connectivity requirements. This rate has been communicated to all Government departments. This has enabled a large number of offices to connect to the internet at low rates.

**(xxii) State Data Center**

The ELCOT Main Frame Data Centre is already in operation and many Government applications are already

running on it. In addition to the above, the new State Data Centre based on GOI guidelines also will be implemented during the year 2010. The new SDC will be the nerve center for all e-Governance applications. The 5 year cost of the project is Rs.55.00 crores, and is being implemented by ELCOT

**(xxiii) Tamil Nadu State Wide Area Network (TNSWAN)**

TNSWAN backbone network has been operational from 1.12.2007 onwards. After the successful implementation of the TNSWAN Vertical Network, ELCOT is providing horizontal connectivity to some of the key Departments viz. TWAD Board (70), Commercial Taxes Department (209), Tamil Nadu Health Systems Project (276), Registration Department (266), Treasuries and Accounts Department (247), Employment Directorate(49), Survey and Settlement (25), Tamil Nadu Medical Services Corporation (25), and Agriculture Department, expected to reach 5000 last mile offices. This connectivity is expected to bring to the last mile offices of many departments use the back bone Network for rolling out G2C (Government to Citizen) and G2G (Government to Government) services.

## CHAPTER – III

### **Tamil Nadu E-Governance Agency**

Government of Tamil Nadu has taken several initiatives in Information Technology and was ranked as one of the Leading States in terms of the e-Readiness Index in the Country. The Government has taken several initiatives to build institutional framework of Governance to promote, popularize, conceptualize, program manage and implement e-Governance programs. To institutionalize the existing structure and to drive e-Governance by creating a Special Purpose Vehicle (SPV) for bringing in unhindered focus into framing and implementation of the State's e-Governance initiatives, the Tamil Nadu e-Governance Agency (TNeGA) has been created as State's Nodal Agency for all e-Governance initiatives. TNeGA would act as the support agency of the Government of Tamil Nadu in all areas of e-Governance and help in programme management of the schemes with Capacity Building. The mission of TNeGA is to achieve a factor enhancement in the quality and pace of

implementation of e-government program in the state.. The vision of TNeGA is to establish itself as a centre of excellence in e-government and to become the focal point of major e-government activities in the State of Tamil Nadu. TNeGA is an autonomous society established with a plan to raise social awareness of smart governance and the economic opportunities it offers to the citizens, firm and the government through appropriate awareness, education and Capacity Building programs. It will strive to position itself as an institution dedicated to promote electronic governance by combining the best that the specialized institutions in the country have to offer into a holistic program. It will act as the principal mechanism to channelise private competencies - including financial, technical and managerial – into national electronic governance efforts. It will also ensure that a statewide strategic architecture and groundwork is in place, in line with the National agenda so that they can play a robust and effective part in developing a national environment for electronic governance. It will act as a 'force multiplier' to design IT leveraged policies and programs that

efficiently and effectively respond directly to the citizen's most pressing needs, including education, health and employment on a continuing basis. It will offer services to Government Departments in three streams viz., Architecture, Consultancy, Training and suggest high impact e-governance applications which can be viably implemented by specifying commercially viable mechanisms. Selection and empanelment of vendors/consultants/agencies and contracting of external agencies/persons/services are some of the major functions of the TNeGA.

### **3.1 Common Service Centres**

The National e-Governance Plan (NeGP) formulated by the Government of India for implementation across the country, envisages the vision of making 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. Accordingly, 5440 rural locations have been identified to establish these Common Service

Centres in Tamil Nadu. M/s.SREI Infotech, one of the two Service Center Agencies, has launched the project successfully in 4 districts. The roll out and certification of Centres are progressing. Out of 5440, around 1000 centres have been fully rolled out and providing services to citizens. In other locations, the centres are being identified by the Service Center Agencies A State Portal on the State Portal Framework with online services is created and it will be utilised by the Common Service Centers for the benefit of the citizens. The CSC's role is to provide all citizen centric services including Business-to-Citizen services (B2C), Business-to-Business services (B2B), Government-to-Citizen services (G2C) and Government to Government (G2G) services. It will act as a Citizen - Government Interface to provide services to rural citizens. Some of the range of services that may be offered through the CSCs include Agriculture, Banking, Education and Training, Telemedicine, Forms downloading, Ticket reservation, Digital photos, DTP work, Web Surfing, Photocopy, CD burning, etc. There is a huge potential for CSCs to act as data collection points in the village

for research and government agencies. This could also increase the local employment opportunities in the village. The CSCs will be viewed as a front delivery point for delivery of end-to-end rural solutions.

### **3.2 E - District Project**

Districts are the primary delivery channels for government administration to deliver a large number of services to the citizens; therefore e-governance can significantly improve government service delivery at the grass root level. The e-District program is aimed at "delivering more than 75% of the services of the Collectorate electronically". e-District has been envisaged by Government of Tamil Nadu as automation of workflow and internal processes of District Administration with the possibility of seamless integration of various departments including Revenue, Adi Dravidar and Tribal Welfare, BC & MBC Welfare, District Social Welfare, etc., for providing services to the citizens. This project is of paramount importance to the State as it would help in creating an automated workflow system for the district administration and help

in providing efficient departmental services. The Department of Information Technology, Ministry of Communication and Information Technology, Government of India have accorded administrative approval for implementation of the "Pilot e-District Project" for implementation in five Districts of Thiruvavur, Krishnagiri, Perambalur, Ariyalur and Coimbatore at an estimated outlay of Rs.12.58 crores. M/s.WIPRO has been engaged as the Project Consultant and Implementation Support Agency through NIC. TNEGA is the coordinating agency. As of now, 62 services under 9 departments have been identified for implementation. For the successful implementation of the 'e-District' project, State Project Committee and the District Level Monitoring committee have been constituted and work has been completed in two distinct phases of identifying 'As is' processes in the identified services and projecting the 'to be' processes so as to reengineer existing procedures and make them deliverable electronically. Proposal for inclusion of Tirunelveli and the Nilgiris districts has been prepared by TNeGA and sent to the Department of Information

Technology, Ministry of Communications and Information Technology, Government of India.

### **3.3 Enhancing E-Services In Tamil Nadu**

The following pilot projects in e-Governance have been sanctioned by Department of Information Technology, Government of India for enhancing e-Services in Tamil Nadu and are being implemented through NIC, Chennai.

#### **1. E-Services of Civil Supplies & Consumer Protection Department of TamilNadu**

The primary objective of the project is for offering improved and efficient delivery of services to citizens by implementing web based systems and providing connectivity to Taluk Supply Offices, District Supply Offices and all related offices. The systems will enable offering of various web based services.

#### **Applications Systems developed**

##### **Applications for Public Use:**

The following Application systems have been implemented and are in use:

- Consumer Grievances Redressal
  - Register Grievance relating to PDS as well as non-PDS
  - Automated email acknowledgments to the citizen
  - View Reply by citizen
- Facility for Consumer to know Allotment details of any Fair Price Shop.
  - Register email-id along with Fair Price Shop identification for receiving automated emails on monthly basis
  - Facility to unsubscribe.

The following Application systems have been designed and developed for public use, and are to be launched:

- Online Application Related to Family Cards
  - Application for New Ration Card
  - Application for No Card Certificate
  - Application for Non Inclusion Certificate
  - Application for Change in LPG Status
  - View Status of Application
  - Online Help
- Online Application Related to Permits & Licence



- Application for Bulk Permit
- Application for Wholesaler Licence
- Application for RRC Licence
- View Status of Application
- Ration Card Search
- Locate your Taluk Supply Office

**Applications for Departmental use for monitoring delivery of services:**

Corresponding modules for office use have also been implemented as a workflow system, for responding to the online applications / grievances received through the Citizens interface. These have been enhanced for more efficient back office processing.

**G2G applications**

The following G2G applications have been implemented that are being used over the infrastructure established. These have been enhanced with the introduction of a number of new modules/ reports:

**Monthly PDS Allotment System**

A web based work-flow application has been implemented for generating Monthly PDS shop wise Allotment Statements for Taluks / Zones.

**Online Price Monitoring System**

A web based system has been implemented for daily/weekly/ fortnightly transmission of prices of essential commodities and vegetables, which are monitored by the Price Monitoring Cell of the Civil Supplies Dept.

**Online Reporting System for Seizures**

The online software for Reporting of Seizures allows Taluk Supply Officers / District Supply Officers and other senior officers or CCS squad to enter complaints regarding Seizures from their respective locations. The consolidated Complaint Reports may be viewed online by Commissioner's Office, in sorted order of Offender Name, or sorted order of Complaint Date.

## **Online Reporting System for TNCSC**

A web based application has been developed for online reporting of daily stock, allotment, liftment, and procurement details from all regional offices of TNCSC.

## **2. E-Services of Taluk Offices**

The primary objectives of this project are the following:

- For enabling web based systems for improved and efficient delivery of services to citizens by providing connectivity to Taluk Offices
- To apply online for services
- Providing Acknowledgement to the Citizen
- Facility to view application processing status

## **Applications Systems developed**

Application Systems have been designed for offering following services to Citizens:

- a) The services that are offered to the citizens are as under :

- View Chitta Extract by citizens
  - View A Register Extract by citizens
  - Verify Chitta Extract for Agencies
  - Verify A Register Extract for Agencies
  - Verify whether land is Government or Private
- b) Training has been given to District and Taluk Officials
  - c) Services related to Land Records
    - To view and apply for the Chitta details
    - To view and apply for the A Register details
    - To apply for Patta Transfer
    - View the application processing status

A total of 685551 transactions have been carried out in the Any Time / Any Where eServices .

511020 Chitta extracts have been generated through this system.

81917 A-register extract have been generated.

60198 times land parcels ownership have been verified.
  - d) Applications relating to Certificates
    - To view and apply for the Birth / Death Certificates details

- To view and apply for Community / Income / Nativity / No Graduate / Deserted Women Certificate.
  - View the application processing status
- e) Public Grievances
- Register a Grievance
  - View the Grievance Petitions processing status
- f) The servers have been procured and installed in the NIC State Data Centre.
- g) TNSWAN connectivity to Taluks has been established.

**Web based Certificate Management System:**

This system facilitates the taluks offices in maintaining a repository of Certificates issued and the details are given below:

Sl.No	Certificate Name	No. of entries as on 8/4/2010
1.	Birth Certificate	356027

2.	Death Certificate	344831
3.	Income	240951
4.	Nativity	107980
5.	Community	23793
6.	Legal heir Certificate	52342
	Total	1125924

Provision has also been made in the system for providing the “name of the child” after the registration of birth. Provision for changing the address has also been made. These transactions, however follow a two stage process. The Assistant enters the details and the same are approved by the concerned Tahsildar and then the transaction is complete.

**3. E-Services of Municipalities and Town Panchayats**

The primary objectives of this project are the following:

- The primary objective of this project is to provide

an improved and efficient service delivery to the citizens by providing connectivity at ULB's and enabling web enabled services.

- Collect Property tax, Water Charges, Professional Taxes, Company Taxes etc.,
- Receive application for Birth / Death Certificates
- Receive applications for booking of Community halls.
- Receive applications for Trade Licences
- Receive application for Water / Drainage Connections
- Receive applications for Building permissions
- Monitor status of applications
- To register a grievance petition and view application processing status

#### **Application Systems developed for public use**

The following Online citizen services have been designed for public use:

- Online Application for New Water Connection
- Submission of Application and Monitoring the status

- Online Application for repairs related to Water Connection
- Submission of Application and Monitoring the status
- Online Application for Booking of Common Facilities
- Online booking of Community Halls
- Online Booking of Auditorium etc.,
- Replication of birth & Death details from 148 Municipalities to the central server on a daily basis to facilitate viewing of birth & death certificates online to the citizens
- Online Collection and reconciliation of Under Ground Drainage Charges and Water Charges through Banks on a Pilot basis for Avadi Municipality.
- Online View of Birth Certificate
- View and obtain Death Certificates
- Trade Licence
- View Property Tax Details

- Public Grievances
  - Register Grievance
  - View Reply

**Applications for use at Department level for monitoring delivery of services:**

Provision to update the details of Water Connection status is made available for the department user. Similarly, provision to update the allotment details of Community halls is also available. The grievances monitoring and updation can be done online by the concerned department user.

**4. E-Services of Transport Department in Tamil Nadu**

The objective of the project is to provide connectivity at RTO/Unit Offices of State Transport Authority and Reservation Centres of State Express Transport Corporation for enabling web based systems for improved and efficient services delivery to citizens. The systems will offer the following web based services:

a) Regional Transport Offices

- Request for time and date to appear in driving Test
- Request for time and date for learner Licence
- Block Fancy numbers
- E-payment facility
- Apply for those services where physical presence is not required
- Monitor the status of the application
- Implementing Dedicated LLR Online Test Centre
- Register Grievance and view the status of Grievance
- View Vehicle Owner Details
- View Driving Licence Holder details
- View Permit Holder details
- View Theft/Stolen vehicle details
- View Conductor Licence details
- Jurisdiction of RTO offices

## **Applications Systems developed**

### **Applications for Public Use:**

The following Application systems have been designed and implemented for the public use:

- Booking appointment for Driving Licence related transactions
  - Fresh Driving Licence
  - Renewal of Driving Licence
  - Additional Endorsement in Driving Licence
  - Change of Address in Driving Licence
  - Change of Name in Driving Licence
  - Issue of Badge
- Booking appointment for Learner's Licence related Transactions
  - Fresh learner Licence
- Public Grievances
  - Register Grievance
  - View Reply status
- Locate RTO office based on Jurisdiction
- Provision made for Dealers to update the New vehicle Details for registration to avoid

delay in issuing Registration Certificates to Citizens

- View Details of the following by the Transport Department and Police officials
  - Owner details of a Vehicle
  - Driving Licence Holder Details
  - Theft/Stolen Vehicle details

### **Applications for Departmental use for monitoring delivery of services:**

Applications have been developed and implemented for the Department officials of Transport department for making reply to the online booking of appointments / grievances received through the Citizens interface. The system also helps the Officials of Transport and Police Department, to view the Vehicle and Licence information.

The following facilities are enabled in the applications:

- Update status of applications received online
- Reply to Public Grievances
- Search on Vehicle Chassis Number

- Search on Vehicle number/Owner name/Vehicle class/Vehicle Type
- Convicted Licence details
- Issue of NOC for Driving Licence
- Provision to download New vehicle registration data
- View tax paid for a vehicle
- View Driving Licence Details
- Search on Licence holder name and Date of Birth
- MIS reports on Grievances registered and appointments booked in RTOs

### **5. Computerisation of services in Collectorates**

Several certificates are being issued by the Revenue department at the Taluk, Divisional office and Collectorate level. A detailed study has been conducted of these services in which issuing of certificates are a major activity. The current process that is being followed has been mapped through the Process Mapping method. Further, the existing process has been studied and a list of suggested modifications has been made in order to improve the efficiency of granting such certificates. Among

the certificates, that are being processed with the help of Information Technology the following are being considered and are at various stages of development:-

- Issuance of Birth certificate,
- Death Certificate
- Solvency Certificate
- “No Graduate in the family” Certificate,
- Certificate for destitute children for admission in orphanages
- Destitute Widow certificate for priority in getting job opportunity
- Destitute Women certificate
- Inter Caste Marriage Certificate for getting assistance from Government and admission in the School
- Deserted Women Certificate
- “No Government Servants in the Family” Certificate

and so on. In some of these, the applicant can also monitor the status of the application. The Common

Service Centres that are being setup will also assist the citizen to the extent possible.

**6. Computerisation of services for BC, MBC and Minority Welfare Department.**

Educational Assistance is being provided to the BC/MBC students studying in Government/ Government Aided Arts and Science Colleges by way of Scholarship. Educational Assistance is also provided to the BC/MBC students who wish to pursue professional Courses. Similarly, Educational Assistance is offered for Graduates and Polytechnic students. The BC& MBC department has decided to computerise the following services.

- Issuance of Post Metric Scholarships
- Educational Assistance to the students in Professional courses
- Educational Assistance to graduates.
- Educational Assistance to Polytechnic students.

The e-district portal for BC & MBC Scholarship (<http://edistrict.tn.gov.in>) was developed and inaugurated by Hon'ble Minister for Backward Classes and

Hon'ble Minister for IT on November 24, 2009. The complete workflow system at three levels namely state, district and institution was developed using Open Source technology. The new system not only cuts down the delay in the issue of scholarship but also makes the status of the scholarship application available through the website to the student.

The Current Status of BC / MBC Scholarship System as on 16/04/2010

<b>Activity</b>	<b>Numbers</b>
Institutions Registered	<b>1,087</b>
No. of Scholarship Applications Received Online	<b>2,97,758</b>
Demand Raised by the Institution	<b>81,63,36,059</b>
No. of Applications Processed by District Office	<b>2,83,426</b>
No. of Applications Sanctioned by District Office	<b>2,80,090</b>
Amount Sanctioned by District Office	<b>76,11,24,063</b>
Cheque Prepared for Institution	<b>60,82,92,144</b>



The dashboard features are incorporated in BC & MBC portal and it enables us to move down the chart from State -> District -> Institution -> Student Scholarship.

SMS services for the BC MBC scholarship system with the National SMS-Gateway with a test account of NIC-OTC was carried out. The services were demonstrated to Secretary, BC&MBC, Commissioner –BC(i/c), Commissioner – Adi Dravidar, Commissioner – Technical Education and Chief Executive Officer, TNeGA. It was decided that the BC & MBC Department would finalise the alert requirements and the content in each case so that all the required SMS alerts can be implemented. TNeGA was initiated to send a formal request to NIC for an SMS account which will be used for implementing the actual SMS alerts in the e-District project.

## **7. Computerisation of services for Adi Dravidar and Tribal Welfare Department**

Educational Assistance is offered to Adi Dravidar students by way of scholarships. The process of issuing scholarships is done in a manual way. The existing system does not provide the information on the status of the application or when the applicant will receive the assistance. In order to streamline the process, the Information Technology Department in the Government of Tamil Nadu along with the active support of the Adi Dravidar Welfare Department has proposed to computerize the following services:-

- Scholarship for SC students, offered for by Government of India.
- Scholarship for ST students, offered for by Government of India
- Post Metric Scholarships for ST students, offered by the State
- Special Post Metric Scholarship , offered by the State
- Educational Assistance to SC/ST/SCC Students upto Degree
- Educational Assistance to SC/ST/SCC Students studying PG
- Higher Education Special Scholarship Scheme.

Customisation of the scholarship system developed for BC and MBC Department is being carried out for the Department on the web based Scholarship system for the BC & MBC.

#### **8. Computerisation of services in Commercial Tax Department**

The Information Technology Department in the Government of Tamil Nadu along with the active support of the Commercial Taxes Department has proposed to computerize the following services

- Enforcement
- Check post
- Territorial
- Appellate

The first two modules have been completed and the third module is under progress. First batch of training is to be given to the users of pilot locations. The software for e-filing and e-payment services has been developed and implemented by NIC. The software maintenance will be done through NIC.

More Than 1,80,000 Returns are being filed by Dealers online every Month and Tax amount of Rs 1200 crores per month is being collected through e-Payment

#### **9. Computerisation of services in Social Welfare Department**

A computerized workflow system has been developed, as a part of the e-District portal, for the end-to-end processing of applications submitted through Citizen Service Centres for availing services of the Social Welfare department. The processing of the application-forms involves:

1. Movement of application from CSC to Block office
2. Recording of field verification details
3. Forwarding to DSWO by BDO after scrutiny of application and verification details
4. Approval by DSWO
5. Generation of Sanction Proceeding

The services identified to be implemented under e-District project for Social Welfare Department are:

- i) Moovalur Ramamirtham Ammaiya Ninaivumarriage Assistance Scheme

- ii) E.V.R. Maniammaiya Ninaivu Marriage Assistance Scheme for Daughters of Poor Widow
- iii) Annai Theresa Ninaivu Marriage Assistance Scheme For Orphan girls
- iv) Dr. Dharmambal Ammaiya Ninaivu Widow Remarriage Assistance Scheme
- v) Anjugam Ammaiya Ninaivu Intercaste Marriage Assistance scheme
- vi) Sivagami Ammaiya Ninaivu Girl Child Protection Scheme.

Of these, the first three have been taken up for initial implementation in four select districts and then roll-out to all the districts.

#### Features

- The citizen can make an application to avail any of the above services, by registering for it through the nearby Citizen Service Center which would reduce the travel time for the citizen.
- On submission of the application, the citizen would be provided an Application ID using which the citizen can track information about the status of his/her

application at any time. Thereby transparency will be brought about.

- Automation of workflow and internal processes of DSWO and BDO office will increase functional efficiency. All the functionaries of the system such as District Social Welfare Officer, Block Development Officer and Block Development Assistant are included in the workflow system.
- Records of all steps of the workflow are maintained by the system for any future reference and auditing purposes. This will bring about accountability in operations.
- It reduces the time to prepare sanction proceedings/reports and maintenance of accounts. The scheme-wise fund allotment to the district is kept track of by the system during preparation of Sanction Proceedings.
- It enables decision makers to view MIS reports for monitoring of performance and service delivery quality.

## **CHAPTER IV**

### **4.1 State Portal, State Service Delivery Gateway And E-Forms**

The Government of Tamil Nadu through TNeGA is adopting a State Service Delivery Gateway (SSDG) which will act as an interface between Government and Citizen for the exchange of information and to deliver integrated government services to the citizens. This along with the State Portal and e-forms will ensure a seamless interfacing between the Government and the Citizen. The Government has constituted a "State Project Committee" to oversee, guide and assist in implementation of this project for delivery of various Government services through CSCs. The project cost is of Rs.16.13 crores and will be implemented in 2010-2011.

### **4.2 Capacity Building Programme**

TNeGA is implementing the Capacity Building Programme in building the capacity of various stake holders including the Government employees at various levels of the Government departments. A State e-Mission Team (SeMT) has been established at TNeGA with

specific professional skills to assist the Government departments in providing professional consultancy services in capacity building and rolling out Government services to citizens. This SeMT will also help the departments in setting up their "Project e-Mission Team (PeMT)" at the Department level to take ownership and roll out the project to deliver the citizen services effectively. TNeGA has scheduled the Training Programme on Database Management, Hardware and Network Administrations in Windows Operating System and imparted training to the officials of Registration, Civil Supplies and Consumer Protection and Commercial Taxes departments. Another Training programme named Basic and Specialised Level Computer Training has been imparted to the staff of the Tamil Nadu Health Systems Project at Dharmapuri District. 'Orientation Programme' for the e-Team of Civil Supplies and Consumer Protection and Commercial Taxes departments has also been given.

### **4.3 ICT Academy**

The ICT Academy of Tamil Nadu (ICTACT) was formed as a society by a consortium of the Government of

India, Government of Tamil Nadu and Confederation of Indian Industry. It is a non-profit autonomous organization, registered under the Tamil Nadu Societies Registration Act, 1975 with 7 Patron / Founding Members, which has embarked on the novel path of improving the quality of students passing out of educational institutions in Tamil Nadu, the focal point being to make them industry ready and immediately employable in the ICT industry comprising the ICT services and the ICT Manufacturing sectors.

The Academy will meet the skill requirements of the industry and generate more employment in the State, especially in Tier – II and Tier – III cities. To improve the skill level of students in the state, ICTACT will develop and maintain a world class ICT industry related curriculum and content in close association with Academia and provide specialized training to the faculties in the Engineering, Arts and Science Colleges, Polytechnic and ITI across the State. It will also encourage Curriculum related research in collaboration with leading institutes in India and abroad.

The immediate objective of ICTACT is to train around 5,000 faculties across Tamil Nadu in three years.

By training these teachers, the direct benefit is that over 2,50,000 students will be industry ready.

The Academy was inaugurated by the Hon'ble Chief Minister on 08.04.2008. The Government have nominated the Secretary to Government, Information Technology Department and the CEO, TNeGA as members of the Governing Board of the Academy.

The Secretary to Government, Higher Education Department, Secretary to Government Labour & Employment Department and the Secretary to Government, Industries Department have been nominated as the representatives of the Government of Tamil Nadu to the Advisory Board of the Academy.

The Government of India have approved a sum of Rs. 600 lakhs for the above project and released a sum of Rs. 400 lakhs to the State. This amount has been released to the ICT Academy of Tamil Nadu.

The Hon'ble Chief Minister launched the 1<sup>st</sup> programme of ICTACT at Madurai through video conferencing from his chambers on 27.08.2009 at 11.00 am.

ICTACT has trained 1623 faculty members from Engineering and Arts and Science colleges from the 536 colleges across Tamil Nadu till 31<sup>st</sup> March 2010. ICACT has also conducted 6 workshops and 12 seminars in various locations to benefit faculty members and students.

Tamil Nadu Adi Dravidar Housing Corporation (TAHDCO) has associated with the ICT Academy of Tamil Nadu, to train around 70 faculty members as master trainers across Tamil Nadu. These ICTACT trained master trainers would further train around 1200 SC/ST students in various engineering colleges to make them industry ready and help in enhancing their employability skills.

#### **4.4 IT Finishing School**

All the top 10 IT companies of India have major operations in Tamil Nadu. The IT/ITES industry is in need of a large number of quality manpower for its operations. Recognizing the importance of the need for quality manpower, the Government provided training for students in IT Finishing Schools in Chennai and in all the District Headquarters which would then improve the employability

of the students awaiting employment. The training was carried out by a professional training agency, Sun-i-tech.

The focus is on students belonging to Adi Dravidar and Tribal Welfare, Most Backward and Backward Classes and other weaker communities of the society. Much of the funding will be generated from schemes available in the Backward Classes, Most Backward Classes & Minorities Welfare Department and Adi Dravidar & Tribal Welfare Department. About 7000 candidates sponsored by Tamil Nadu Adi Dravidar Housing and Development Corporation (TAHDCO) have been trained throughout Tamil Nadu.

#### **4.5 Society For Electronic Transactions And Security (SETS)**

SETS is a specialized organization, registered as a non-profit society, set up for the purpose of developing technologies that can protect the information wealth of the country. The Principal Scientific Advisor to the Government of India is the present Chairman of this organization.

Membership: - The membership comprises of Government, the Public and Private sectors of Corporate, R & D and academia. Also SETS has individual members with expertise in the field of information security. SETS has a Board with Members from Research and Technology Development Advisory Council which provides expert advice on its activities in order to achieve the goals of SETS.

The prominent features and details are enumerated below:-

- Activities such as Cryptoanalysis, analysis & design of cryptography and other security algorithms
- Analysis and design of cryptology protocols
- Analysis and design of secure information systems and security policy

SETS works with industry and other collaborators on specific projects, either on a one-to-one basis or on a consortium R & D basis. SETS participate in the prototype development activities on a project-basis with a concept called 'project stream'.

Government of India has sanctioned the creation of an Advanced Facility for Information Security and Cryptology (AFISC) at a cost of Rs.24.50 Crores and the Government of Tamil Nadu has provided 2.9 acres of land at MGR Knowledge City, Taramani under a long term lease agreement for construction of a building. The Building for SETS has been completed. The Government of Tamil Nadu is represented on the Board of SETS and is benefited by valuable inputs due to this association in areas concerning electronic security. SETS have moved to its new building in Taramani.

#### **4.6 Indian Institute Of Information Technology, Design And Manufacturing (IIITD & M), Kancheepuram**

IIIT (D&M) Kancheepuram is a centrally funded world class National Technical and Research Institution set by the Ministry of Human Resource Development, Government of India. The Department of Information Technology, Government of Tamil Nadu is represented on the Board of Management and is actively associated in facilitating and setting up of IIIT(D&M).

The Institute is fully funded by the Government of India and offers undergraduate, post graduate and research programs in computer, electronics and mechanical engineering with specialization in engineering product design and manufacturing from 2007. The institute focuses on education and research, in the areas of IT design and manufacturing using state of the art concepts, tools and the latest global practices in this field. The Institute is admitting students based on the ranks scored in AIEEE. The Institute currently functions from IIT, Madras Campus.

The Hon'ble Union Minister of Human Resource Development requested the Hon'ble Chief Minister for the complete transfer of identified land at free of cost. Government of Tamil Nadu allotted 25 acres of land at Melakottaiyur and Nallambakkam villages in Chengalpattu Taluk, free of cost to IIIT(D&M), Kancheepuram. Currently 150 students have enrolled.

## CHAPTER-V

### **Arasu Cable TV Corporation Limited**

Arasu Cable TV Corporation Limited was started on 04.10.2007 by the Government of Tamil Nadu with a view to provide high quality cable TV service at a reasonable cost to the general public through the Local Cable Operators.

The Thanjavur Head End was inaugurated by Honourable Chief Minister on 15<sup>th</sup> July 2008. Similarly the Coimbatore, Tirunelveli and Vellore Head Ends were commissioned subsequently. The Corporation has put up a mini analogue Head End at Vikravandi in Villupuram District.

Arasu Cable TV Corporation Limited has been providing signals with 80 channels including Free and Pay channels through the Head Ends mentioned above covering the entire State of Tamil Nadu. To implement this scheme, Arasu Cable TV Corporation Limited has



received Rs.25 crores towards Share capital and Rs.36.35 crores as Loan from the Government.

The Government has constituted a welfare board for the well being of the Cable TV workers. About 30,000 persons are expected to be benefited under the scheme. The Government has allocated a sum of Rs.50 lakhs for this scheme. The above workers are eligible to avail the benefits under the Kalaingar Health Insurance Scheme.

## **CHAPTER – VI**

### **International Academy for Internet Tamil (formerly Tamil Virtual University)**

This Government has started Tamil Virtual University in 2001, to provide internet based education in Tamil for the Tamil Communities living in different parts of the globe as well as others interested in learning Tamil and acquiring knowledge of history, art, literature and culture of Tamils.

So far 8838 candidates from 63 Countries have registered for different courses and 458 certificates, 15 Higher certificates, 211 Diplomas and 83 Higher Diplomas and 53 Degrees were issued so far.

All Diploma / Higher Diploma / Degree Programme Lessons are completed and made available in the Academy's website

36 Study Centres in the following 15 countries namely USA, Canada, Malaysia, Sri Lanka, Mauritius, Switzerland, Germany, La Reunion, Australia, France,

Myanmar, South Africa, Singapore were established for the benefit of those interested in learning Tamil, a majority of whom have roots in Tamil Nadu.

A new facility, Virtual Class Room with world-class equipment has been added to International Academy for Internet Tamil. Moreover studio equipments for producing multi media CDs of lessons are being acquired now.

In order to assist foreigners travelling in Tamil Nadu, an internet based language learning programme called "Tourist Tamil" was hosted in Academy's web-site.

A Digital Library with 395 books, Dictionaries, Glossaries is available for anybody's use free of cost. The availability of the entire Sangam and Post-Sangam literature and unique search facility is a specialty. A video Gallery on Saiva, Vainava, Buddha, Samana temples, Churches and Mosques is also available.

International Academy for Internet Tamil has also tested 20 packages developed by the Tamil Software developers for compatibility with TAM / TAB (Tamil Mono / Tamil Bilingual) Standards:

### **6.1 Thirukkural in Cell phones:-**

Thirukkural with search facility has been developed for use in cell phones.

### **6.2 Tamil Text corpus Analysis:-**

A Software for corpus analysis of Tamil words is developed now. This software is also capable of pronouncing and giving paradigms of a word. This will help in development of a machine translation.

### **6.3 International Academy for Internet Tamil Building under construction :-**

Government of Tamil Nadu has given 2 acres of land at Kottur village and Rs.1 Crore for constructing a building for International Academy for Internet Tamil. PWD has called for quotations to construct the building for International Academy for Internet Tamil. PWD award committee after considering the quotations has finalized the contractor. International Academy for Internet Tamil building construction work has just begun and is expected to be completed by June 2010.

#### **6.4 Palm leaf in Internet:-**

25000 palm leaves used by Dr U.V.Swaminathalyer are also available along with readable text in the e-library with zooming and search facilities.

#### **6.5 Publication of Technical Glossary:-**

In an effort to make Tamil the medium of instruction, a project for preparation of technical terms in Tamil was launched by Government of Tamil Nadu and Universities were given funds for preparing the technical terms in various disciplines. The technical terms prepared by Universities are being standardized and edited for publication in 14 volumes by the International Academy for Internet Tamil. Till date, first six volumes have been published.

#### **6.6 Committee constituted to declare Unicode as current standard of Tamil Encoding.**

Government of Tamil Nadu has constituted an eight member committee to examine the possibility of declaration of Unicode as the standard of Tamil Encoding by the Government of Tamil Nadu.

#### **6.7 Conversion from TAB/TAM into Unicode:-**

As per the recommendation of the Board all lessons of the International Academy for Internet Tamil have been converted from TAB/TAM into Unicode. Now e-books are being converted into Unicode.

## **CHAPTER - VII**

### **Information Technology Parks In Tamil Nadu**

As per the policy directive of Government of Tamil Nadu, ELCOT has been promoting Information Technology Parks in Tier I and Tier II cities. viz Madurai, Tiruchy, Hosur, Salem, Coimbatore, Tirunelveli, Vellore and also at Sholinganallur, Chennai. The sector is now looking up following the economic downturn. Major players in the industries are again evincing interest in locating their IT Parks in SEZs. The Government has also taken a policy initiative to promote smaller players by suitably modifying the eligibility criteria.

#### **7.1 Sholinganallur IT/ITES SEZ**

Major multinational companies M/s. HCL, Wipro, Satyam, Cognizant Technology Solutions and Sutherland Global Services have been allotted with lands in this SEZ. While Wipro commenced its operations in 2008 and is currently employing 11,000 IT professionals, HCL has completed construction of 10.00 lakh sq.ft, and will commence operation by June 2010. Mahindra Satyam has

resumed its construction activities. ELCOT has completed all common infrastructural works in this SEZ costing Rs.38 crores. The IT park as a whole is to be inaugurated on 13.5.2010.

#### **7.2 Coimbatore IT/ITES SEZ**

Wipro and TIDEL Coimbatore have put up IT parks in this SEZ. TIDEL Coimbatore is expected to complete the construction of 17 lakhs sq ft park by June 2010 and will commence its operation by September. 2010. ELCOT has completed all common infrastructural works in this SEZ. Costing Rs.17 crores.

#### **7.3 Madurai IT /ITES SEZ**

In Madurai, 28.91 acres of land in Ilandhaikulam Village and in Vadapalanji 245.17 acres of land were alienated to ELCOT for establishing two IT SEZs by the Government of Tamil Nadu. In the Ilandhaikulam IT SEZ a 50,000 sq.ft. IT cum Administrative building at a cost of Rs.15.00 crores is under construction and is expected to be completed by September 2010. Creation of common

infrastructure facilities is nearing completion at a cost of Rs.7.50 crores. Creation of common infrastructure facilities at a cost of Rs.14.20 crores in Vadapalanji IT SEZ is under progress and 75% of work has been completed.

#### **7.4 Tirunelveli IT/ITES SEZ**

ELCOT purchased 500 acres of land from SIPCOT in Gangaikondan Village, Tirunelveli Taluk, Tirunelveli to establish this IT / ITES SEZ. The Government of India issued SEZ notification for 100 Acres.

The creation of Common Infrastructure facilities at a cost of Rs.10.00 crores in 100 acres is under progress and is expected to be completed by the end of December 2010. The construction of a 50,000 sq.ft. IT cum Administrative Building at a cost of Rs.14.00 crores has commenced and will be completed by November 2010

#### **7.5 Tiruchy IT/ITES SEZ**

The Government alienated 147.61 acres of land in Navalpattu Village in Tiruchirappalli Taluk to ELCOT. The creation of Common Infrastructure facilities at a cost of

Rs.14.00 crores is under progress and is expected to complete it by December 2010. The construction of a 50,000 sq.ft. IT cum Administrative Building at a cost of Rs.14.00 crores has commenced and is expected to be completed by November 2010.

#### **7.6 Salem IT/ITES SEZ**

Government alienated 164.26 acres of land to ELCOT in Jagir Ammapalayam Village, Salem Taluk, Salem. Government of India notified in the Gazette, 164.26 acres of land of the IT SEZ on 30.04.2008 as Special Economic Zone. Initially the creation of Common Infrastructure facilities at a cost of Rs.10.00 crores in 53 acres is under progress and is expected to be completed by December 2010.

#### **7.7 Hosur IT/ITES SEZ**

Government alienated 174.47 acres of land to ELCOT in Viswanathapuram Village in Hosur Taluk, Krishnagiri District. Honorable Chief Minister laid the foundation stone on 26.02.2008 for this IT SEZ. The common Infrastructural works is expected to commence shortly.

## **CHAPTER VIII**

### **NEW SCHEMES FOR THE YEAR 2010-2011.**

#### **Purchase of High end Server for implementation of E-Office under Secretariat Knowledge System**

The Government of Tamil Nadu is in the process of developing e-office under Secretariat Knowledge System in all its Departments which will envisage seamless digital work flow within and between Secretariat and other Departments. To implement this scheme a high end server is mandatory. A sum of Rs.12.00 lakhs has been allocated in the Budget 2010-2011 for implementing this scheme

#### **Purchase of Copier and Photocopier**

A sum of Rs.1.50 lakhs has been allocated in the Budget 2010-2011 for the purchase of a copier and a photocopier for the use of Information Technology Department in Secretariat

#### **Replacement of old computers in Information Technology Department with new computers and accessories**

A sum of Rs.5.50 lakhs has been allocated in the Budget 2010-2011 for the purchase of 15 computers with latest Anti-Virus Software and UPS of 5 KVA capacity for the use of Information Technology Department in Secretariat.

#### **Conversion of International Academy for Internet Tamil Digital Library Books from TAB/TAM Encoding to Unicode**

Due to some useful features, International Academy for Internet Tamil has decided to convert all the digital library content from TAB/TAM encoding to Unicode.

1. User can view the content in Unicode format easily because no need to download the TAB/TAM font.
2. Search Engine Crawlers like Google, Yahoo etc. are not included in the TAB encoding so the users are not able to search the International Academy for Internet Tamil's content easily.
3. Tamil sorting order is available in Unicode format.

In order to get the facilities, International Academy for Internet Tamil has decided to use Tamil Unicode encoding scheme to the Academy's website content. A sum of Rs. 10.00 lakhs has been allocated in the Budget 2010-2011 for implementing this scheme.

#### **For Modernization of International Academy for Internet Tamil's Computer Centre**

A sum of Rs. 17.50 lakhs has been allocated in the Budget 2010-2011 for replacing the obsolete computers with the state of the art computer hardware and software.

#### **Production of e-Lectures for Degree subjects offered by International Academy for Internet Tamil**

The Government of Tamil Nadu allotted Rs.25,00,000/- for procurement of e-studio equipments for International Academy for Internet Tamil, under the Part-II Scheme for the year 2007-2008 and these e-studio equipments are commissioned already. It is now proposed to produce e-Lecture Series on Degree subjects offered by International Academy for Internet Tamil using

these equipments and to make them available in the Academy's website and as CD's. So that students throughout the world can make use of this facility. A sum of Rs.10.00 lakhs has been allocated in the Budget 2010-2011 for implementing this scheme.

#### **The Geographical Information System (GIS)**

This is a tool for managing, analyzing, decision making by seamlessly combining both spatial and non-spatial data. In Tamil Nadu, a vast spatial data have been generated through GIS projects undertaken by several projects like Education, Water resources, Public Works, Watershed development, Remote Sensing, Forest, Land use patterns, etc.

The basic issue in these projects is to utilize huge volume of existing data sets for decision making process. Different Agencies are developing GIS on different platforms leading to inability to scale up and is also not cost effective.

Hence the project TNGIS is conceived with an ultimate objective to create a generic model of GIS and easily

integrate with available data sets. This will set uniform GIS platform for our State.

There is a huge task involved in standardizing the GIS Platform and migration of the existing Initiatives done by the individual department. This requires a huge funding for the standardization, GIS Development, State level infrastructure creation and migration. The GIS maps with multi-user facility will be procured by Tamil Nadu Road Sector project. Hence it is proposed that the task of creating the standard GIS platform in the State would be taken up with an initial budget estimate of Rs.43.50 lakhs. An amount of Rs.43.50 lakhs has been allocated in the Budget 2010-2011 for this scheme.

**Dr.Poongothai**  
**Minister for Information Technology**