Department of Electronics & Information Technology, (DeitY)
Ministry of Communications and Information Technology
Government of India

सत्यमेव जयते

राष्ट्रीय इ-गवर्नेंस योजना
National e-Governance Plan

एक कदम आपकी ओर
एक कदम आपके लिए

Public services closer home

Activities & Achievements


CONFERENCE OF IT MINISTERS &
IT SECRETARIES OF STATES/UTs
ON
"DIGITAL INDIA"
26TH AUGUST, 2014


राष्ट्रीय इलेक्ट्रॉनिकी
एवं सूचना
प्रौद्योगिकी संस्थान
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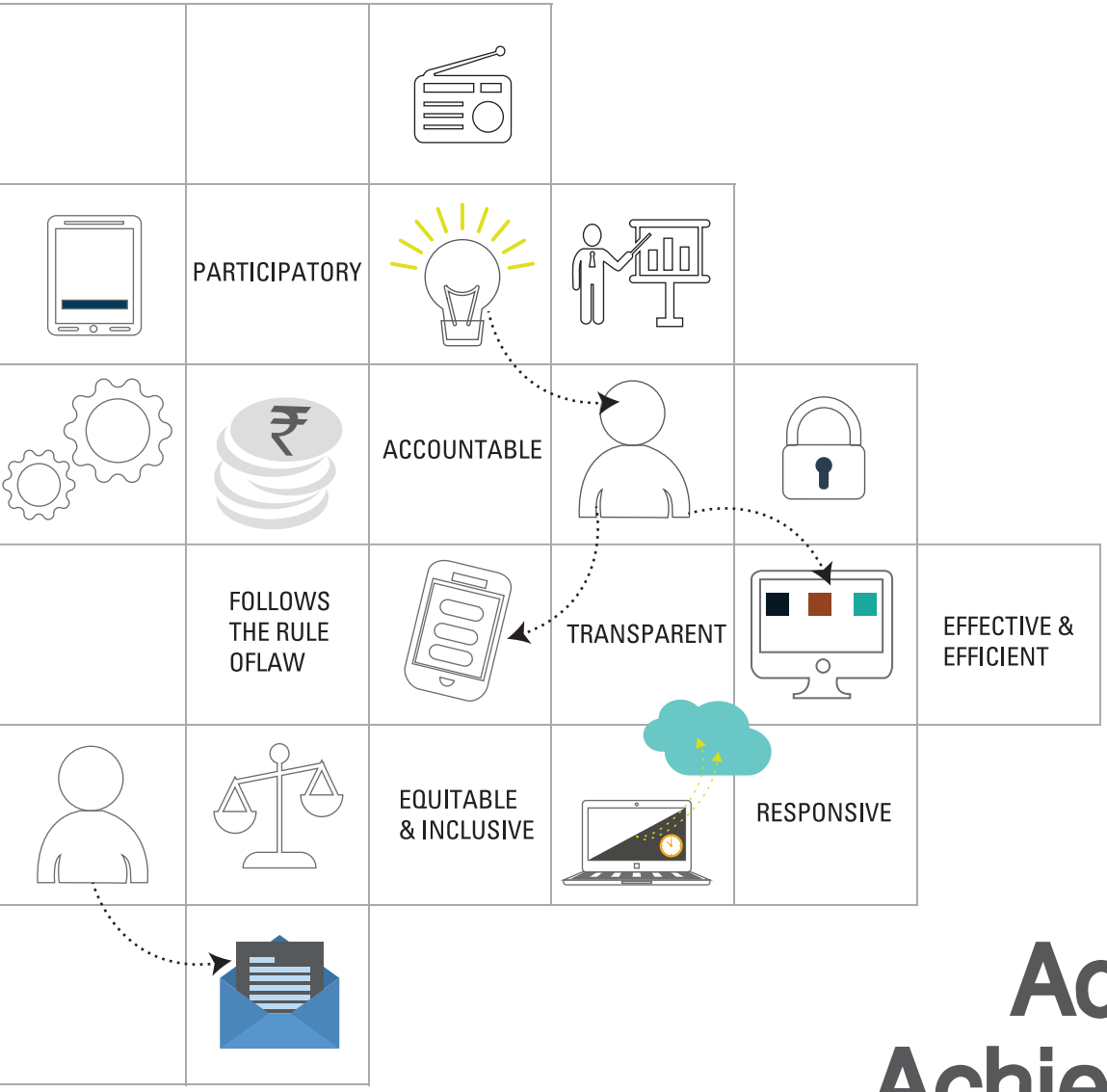

Activities & Achievements

This book is a concise and comprehensive collection of information on almost the entire array of e-Governance initiatives and schemes being under taken by the Department of Electronics and Information Technology (DeitY). To fully appreciate the scope and vision of these schemes and initiatives, details of each activity, organization and their projects have been included.

This book is an effort to spread awareness and facilitate knowledge- sharing on different architectures, governance structures, business models etc. which DeitY has developed for implementing these schemes and initiatives.

The book is also available for download from www.negp.gov.in

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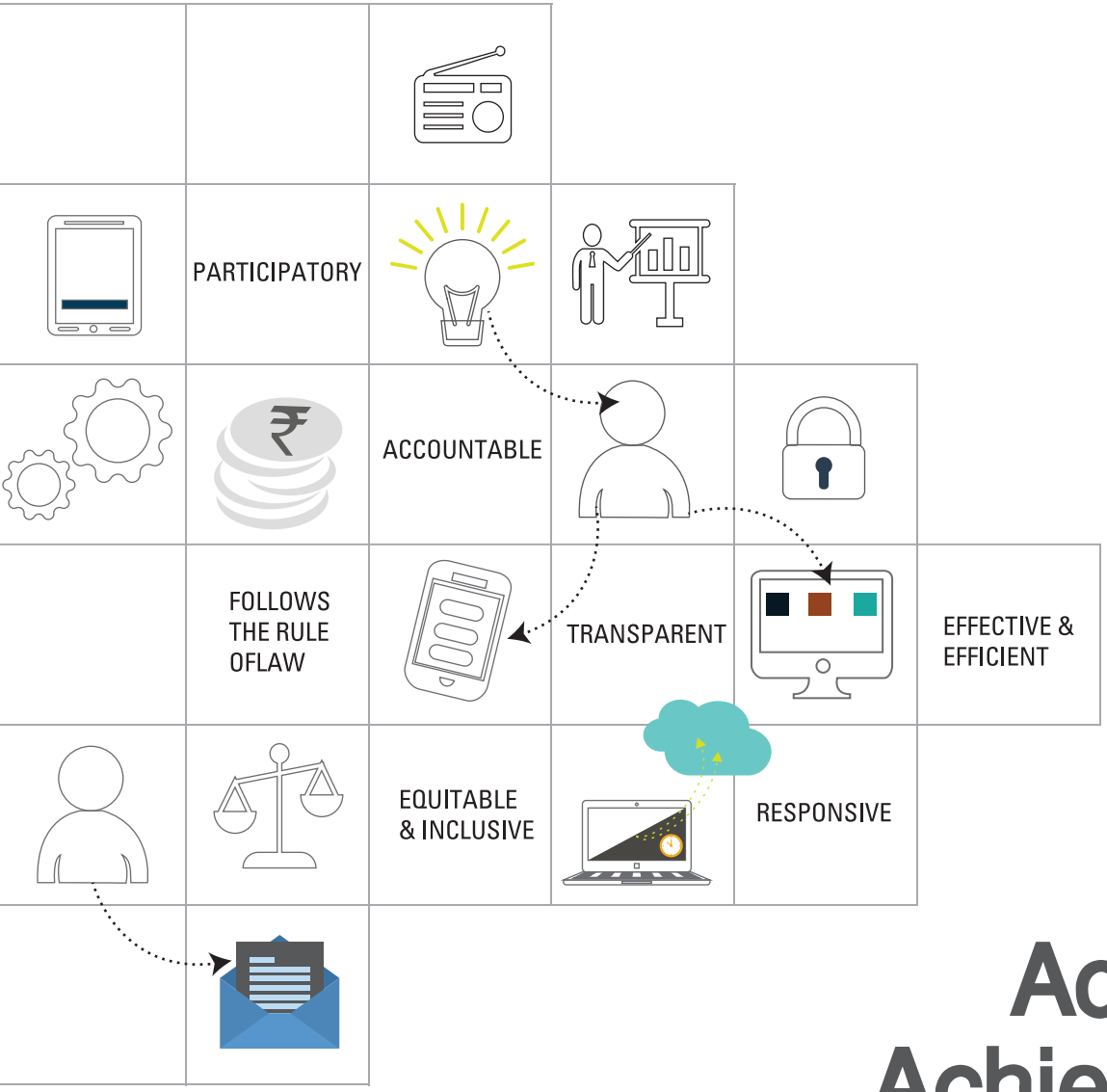
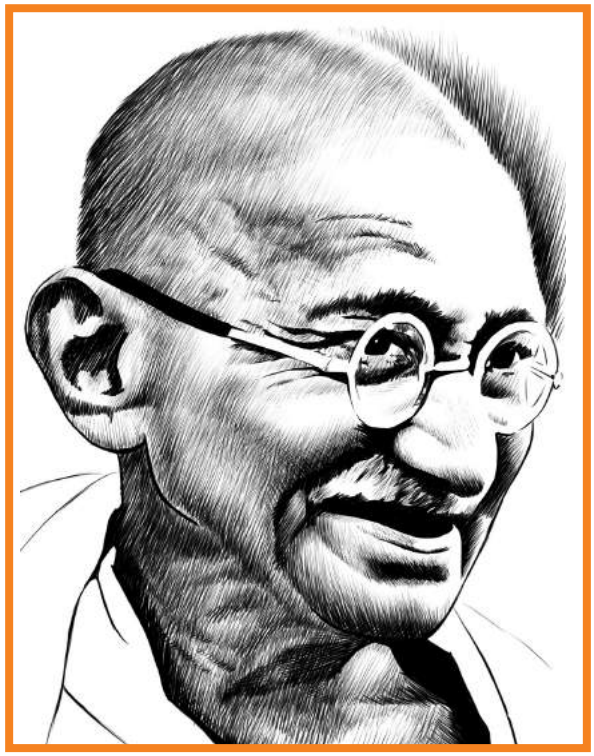
Public services closer home



Activities & Achievements



Do the policies help the poorest and weakest man? If yes, that is good governance.

— Mahatma Gandhi

Transparency is the key to good governance and e-Governance is the only effective way of transparent governance.

— Narendra Modi

Shri Ravi Shankar Prasad
Minister for Communications &
Information Technology
Government of India

Message from the Minister

Today, India sits on the cusp of a truly transformational digital revolution, one that promises to reshape the social, economic, political and cultural landscapes of the country. The convergence of cutting edge Information and Communication Technologies (ICT) in a democratic setup such as ours has the potential of creating a massive groundswell for participative governance. In such an environment, citizens find it both compelling and easy to connect with the government, which in turn becomes even more responsive to the needs of the citizens.

This is what lies at the heart of 'good governance'.

The thrust of good governance is on creating and sustaining an ecosystem which fosters strong and equitable development and where ICT are the tools of development and progress—all of which is the very ethos and purpose of e-Governance.

The recent rapid advances in ICT have made e-Governance a very potent tool for ushering in an era of good governance. Hon'ble Prime Minister has emphasised on more than one occasion that e-Governance is easy governance, effective governance and economical governance.

The ambitious Digital India programme promises to transform India into a digitally empowered society by focusing on digital inclusion, digital literacy, easily accessible digital resources, and collaborative digital platforms. Delivering services in a time-bound manner to citizens is an important objective of the programme. DeitY has taken a number of initiatives which promote good governance through e-Governance, and which are in various stages of development and rollout. Some early initiatives, such as MyGov, biometric attendance, Jeevan Pramaan, e-Sampark, and e-Greetings have already made their mark.

I am happy to present this ready reckoner of the various achievements and activities of DeitY in 2014. I also congratulate all the officers and staff of DeitY for embarking on these socially transformative initiatives and extend my heartfelt wishes to everyone on the proud occasion of Good Governance Day.

Jai Hind!

Shri R. S. Sharma
Secretary, Department of Electronics & Information Technology,
Government of India

Message from the Secretary

On behalf of all the members of DeitY, I would like to congratulate you all on the occasion of Good Governance Day.

At DeitY, our mission is to achieve the goal of 'Information Technology + Indian Talent = India Tomorrow (IT + IT = IT)' through e-governance. The tenets of accountability, transparency, responsiveness, effectiveness, efficiency, reasonability and inclusiveness become very visible when e-governance projects are designed and implemented correctly.

Under e-Kranti, which is the next phase of the National e-Governance Plan (NeGP 2.0), and an important component of the Digital India programme, we are scaling up and ramping up e-Governance initiatives across the country. We are enlarging the existing portfolio of e-Governance Mission Mode Projects to include newer domains such as the social sector schemes, legislature, women and child development and financial inclusion. We are also keenly leveraging the immense power and potential of emerging technologies such as the cloud and the mobile platform. To ensure that systems and solutions remain interoperable and universally accessible, we are also engaged in developing the necessary standards across various e-governance domains. We want to truly harmonize our various core ICT infrastructure components such as State Wide Area Networks, National Knowledge Network, National Optical Fibre Network, Mobile Seva's Mobile Service Delivery Gateway and Meghraj (GI Cloud) for optimum, efficient and on-demand provision of infrastructure.

This book is an effort to provide you with snippets of our various initiatives. As you will go through the book, you will see how DeitY is executing various schemes and you will also get a glimpse of the projects in the pipeline.

DeitY remains committed to empowering citizens through ICTs and e-governance.

Jai Hind!

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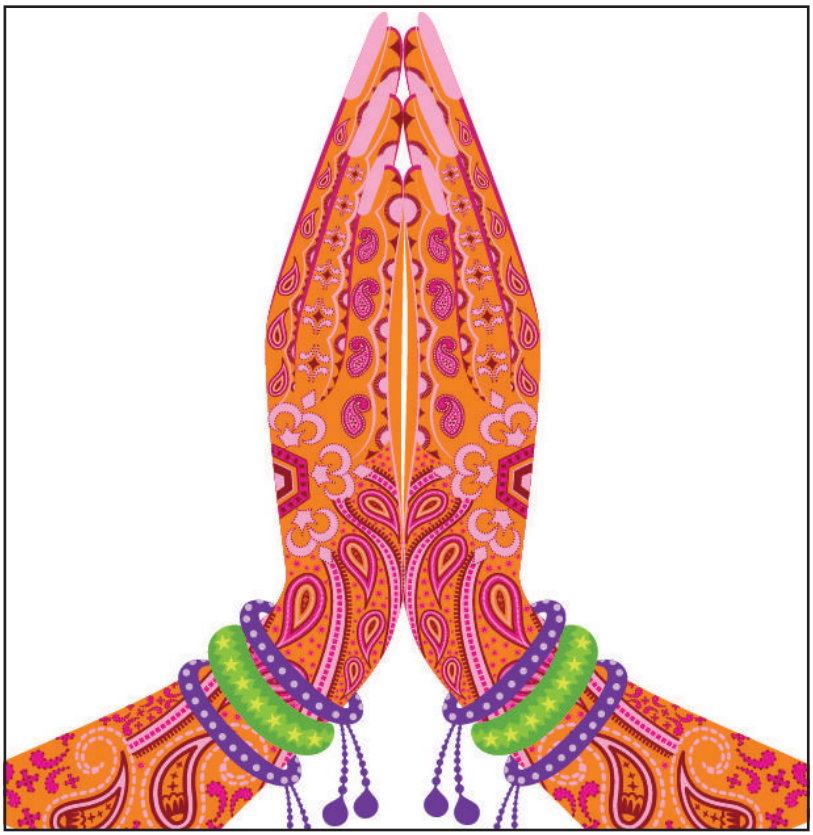

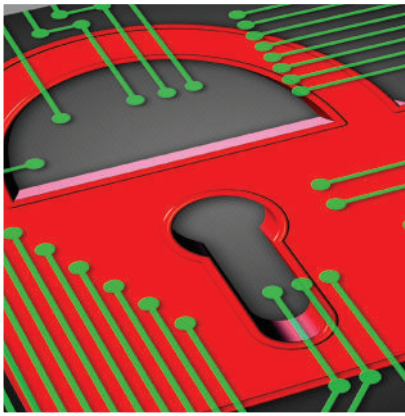

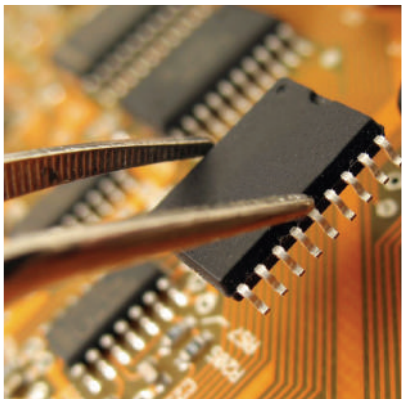

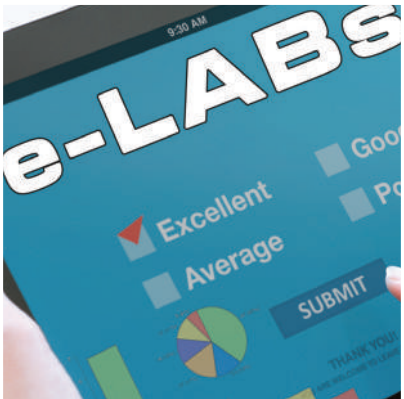
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e-LABS
Excellent
Average
SUBMIT

Information & Communication Technology in India

Information & Communication Technology (ICT) is one of the key sectors powering the growth of the Indian economy and scripting India's success story. For a developing country like India, it is very important to harness ICT skills for growth and human development. ICT can also help in promoting democracy by increasing public participation in governance, creating new opportunities to broaden public awareness about democratic issues and by establishing new platforms for interaction. With greater public participation in governance, governments will be under increasing pressure to provide accountable and equitable governance.

What is e-Governance? When ICT is applied to transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges within the various levels of the government, and to empower citizens through access and use of information, this is called e-Governance.

e-Governance is crucial for public transparency, accountability, efficiency and maintaining streamlined processes. Over the past few months, e-Governance has shown a lot of transformation. Earlier, e-Governance was solely a computing exercise. But today, it is about business process re-engineering and making things service centric.

India is on the road to become an Information Technology superpower and our Prime Minister Shri Narendra Modi envisions India to be a digitally empowered economy and knowledge society through an ambitious programme called 'Digital India'. The Department of Electronic and Information Technology (DeitY) has put in place a multipronged strategy and has launched a number of flagship initiatives under Digital India to facilitate and promote e-Governance, enhance use of Information Technology-Information Technology Enabled Services (IT-ITeS), create Innovation/Research and Development (R&D) infrastructure in ICT&E, build Knowledge Networks and secure India's cyberspace.

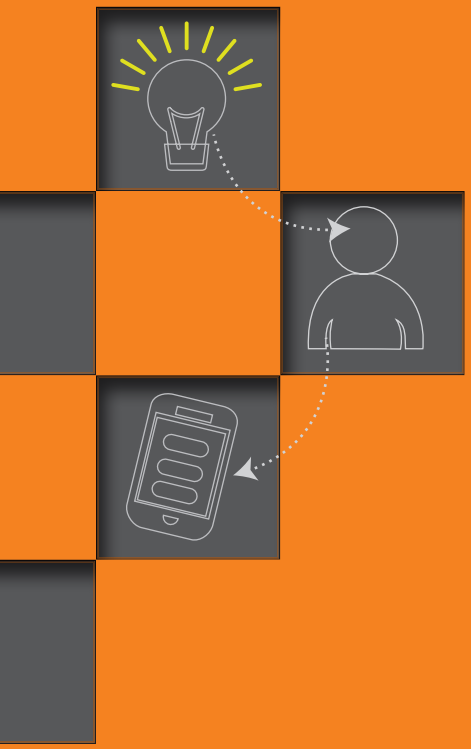
The Digital India programme pulls together many existing schemes like National Optical Fibre Network (NOFN), National e-Governance Plan (NeGP), Common Service Centres (CSC), and transforming these schemes and implementing them in a synchronized manner. Some of the upcoming services are Digital Locker (where citizens will be able to store their government records in a universally accessible government cloud), free Wi-Fi in schools, Wi-Fi hotspots, Open API platform, Digital Literacy and mobile-enabled delivery of e-Services.

Several early harvest projects envisaged under Digital India like MyGov platform, e-Greeting, Jeevan Pramaan, Biometric attendance, portal for lost and found children, etc. have been already launched and other projects are in various stages of development.

The increasing gap in demand and production will create a unique opportunity for companies in the Electronic System Design & Manufacturing (ESDM) sector to look at India as their next destination to cater to the domestic Indian demand as well as act as an exports hub. The government has initiated several initiatives for the development of the electronics sector in the country.

The digital literacy initiatives aim to promote knowledge about the digital sector and enhance the digital skill set in the country. In fact, the main object of these initiatives is to make one person in each household e-literate.

The multiplier effect of these ICT and e-Governance initiatives will ensure Good Governance fostering digital democracy and inclusive growth.



Initiatives and Achievements

Digital India

In order to transform the entire ecosystem of public services through the use of information technology, the Government of India has unveiled an ambitious Digital India programme with the vision to transform India into a digitally empowered society and knowledge economy.

E-Governance paves the way for good governance. It is what we need to take this idea of Digital India forward. E-Governance is easy governance, effective governance and also economic governance.

Vision areas of Digital India

1 Digital Infrastructure as a Utility for Every Citizen

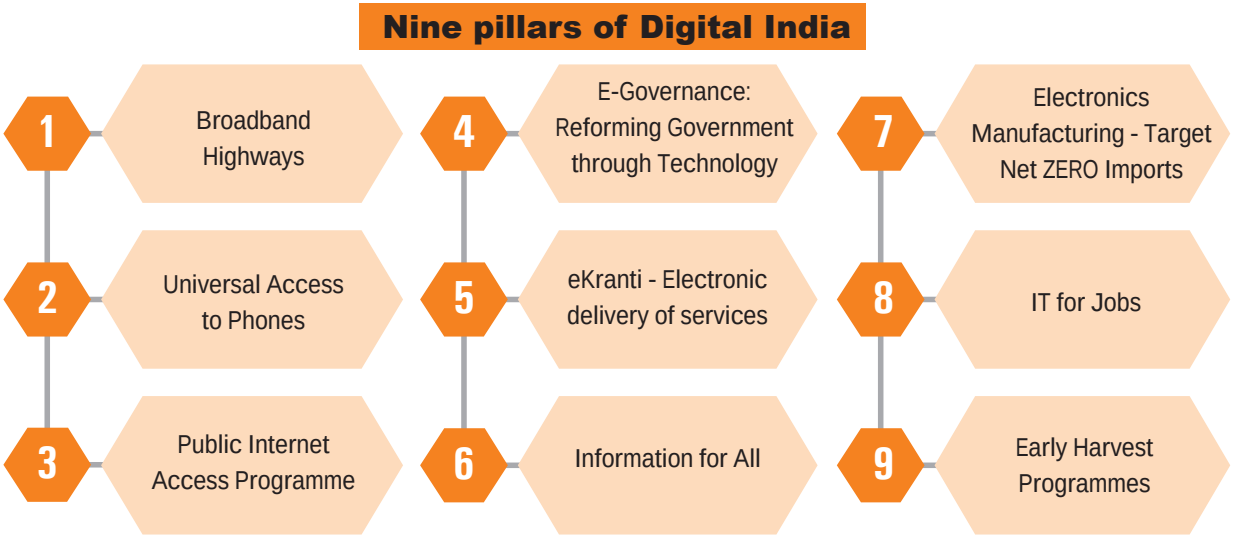
- Availability of high speed internet as a core utility.
- Cradle to grave digital identity that is unique, lifelong, online and authenticable to every citizen.
- Mobile phone and bank account enabling citizen participation in digital and financial space.
- Easy access to a Common Service Centre.
- Shareable private space on a public cloud.
- Safe and secure cyberspace.

2 Governance and Services on Demand

- Seamlessly integrated services across departments or jurisdictions.
- Availability of services in real time from online and mobile platforms
- All citizen entitlements to be portable and available on the cloud.
- Digitally transformed services for improving ease of doing business.
- Making financial transactions electronic and cashless.
- Leveraging Geographic Information Systems (GIS) for decision support systems & development.

3 Digital Empowerment of Citizens

- Universal digital literacy.
- Universally accessible digital resources.
- Availability of digital resources/ services in Indian languages.
- Collaborative digital platforms for participative governance.
- Citizens not required to physically submit government documents/ certificates.



Pillars of Digital India

This transformational programme is designed to build holistic capabilities across infrastructure, manufacturing, processes, skill sets and delivery platforms which in turn will lead to the creation of a self-reliant knowledge economy. The focus is on improving direct services to citizens as well as improving the country's ease of doing business. The nine pillars of Digital India are shown above.

Implementation Approach

Digital India is an umbrella programme that covers multiple government ministries and departments. It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal. Each individual element stands on its own, but is also part of the larger picture. Digital India is to be implemented by the entire government with overall coordination being done by the Department of Electronics and Information Technology.

All the initiatives, including establishing and expanding core ICT infrastructure, delivery of services, etc. under this programme, have definitive completion time targets. A majority of the initiatives are planned to be realized within the next three years. The initiatives planned for early completion (Early Harvest Programmes) and citizen communication initiatives (Information for All) have already started going live and are being completed.

The Digital India programme aims at pulling together many existing schemes. The schemes will be restructured and re-focused and will be implemented in a synchronized manner. The common branding of programmes as Digital India highlights their transformative impact. While implementing this programme, there would be wider consultations across government, industry, civil society and citizens to discuss various issues to arrive at innovative solutions for achieving the desired outcomes of Digital India. DeitY has already launched a digital platform named myGov to facilitate collaborative and participative governance.

e-Kranti or NeGP 2.0

The National e-Governance Plan (NeGP) was approved in 2006 with a vision to make all government services accessible to the common man in his locality through common services delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs.

There is a need to utilize emerging technologies such as cloud and mobile platform and focus on integration of services. In this context, the transformation and upscaling of NeGP, named as NeGP 2.0 or e-Kranti, has been conceptualized. The framework builds on the experience gained over the last eight years of implementation of NeGP.

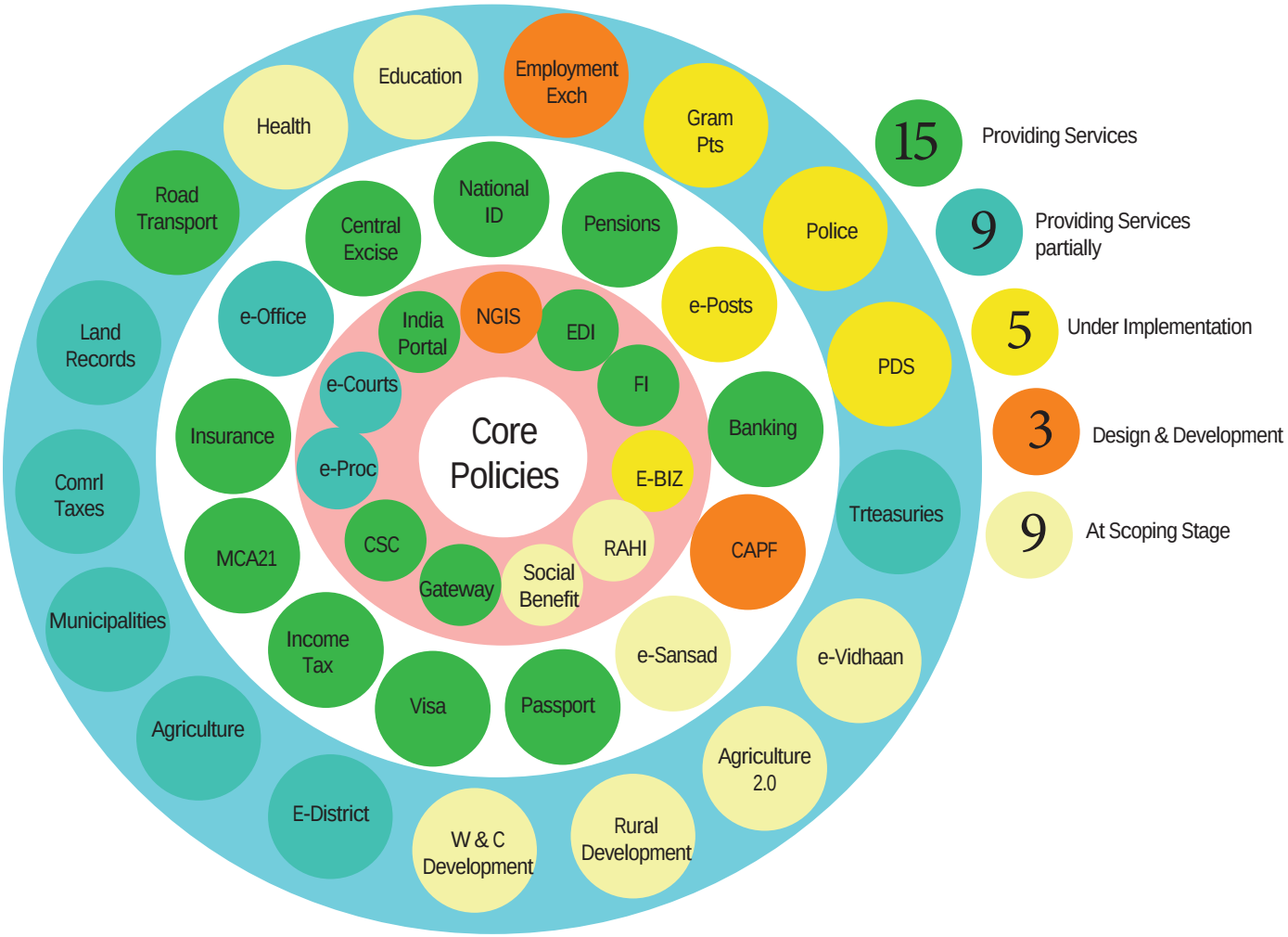
Principles of e-Kranti or NeGP 2.0

1. Transformation and Not Translation
2. Integrated Services and Not Individual Services
3. GPR to be Mandatory in Every MMP
4. Infrastructure on Demand
5. Cloud by Default
6. Mobile First
7. Fast -tracking Approvals
8. Mandating Standards and Protocols
9. Language Localization
10. National GIS
11. Security and Electronic Data Preservation
12. National e-Governance Academy
13. E-Governance Knowledge Portal
14. Create e-Governance Impact Index
15. Effective Use of Social Media

Implementation and Delivery

1. Transforming the Delivery Channels: It is reasonable to assume that at least for a decade to come, the citizens, especially those in the rural areas, will continue to have significant dependence on e-Kiosks operated by agents for availing e-services of various kinds.
2. Awareness and Communication: As mentioned earlier, NeGP could not garner name and fame so far, despite the large number of e-transactions happening, on account of the fact that NeGP did not have an appealing brand name. This should be overcome through popularizing an appealing name like e-Kranti.
3. Introduce New Business Models: One of the weaknesses of NeGP has been in the area of implementation and to some extent in the quality of service delivery. At a very gross level, it has been observed that the timeliness of implementation, quality of service and the impact created on the stakeholders have been much better in projects implemented on a PPP or on an outsourced model.
4. Focus on National Productivity: A major collective initiative has to be undertaken to inject tools of Information Communication Technology, preferably developed domestically, into all the major manufacturing sectors, with a special focus on Small and Medium and Enterprises (MSMEs).
5. E-Kranti has been included as one of the nine pillars of growth areas envisaged under the Digital India programme. The Draft Cabinet Note on e-Kranti is being revised to integrate it within the framework of the Digital India programme.
6. Inclusion of more MMPs covering awide range of services.

MMPs under e-Kranti



The e-Kranti (NeGP 2.0) has been integrated with the Digital India programme. Pillar 4 and pillar 5 of the Digital India programme, namely 'E-Governance: Reforming Government through Technology' and e-Kranti (NeGP 2.0) pertains to eGovernance. Currently, 24 out of 41 MMPs are operational and providing services to the citizens and other stakeholders and remaining MMPs are at different stages of project development. 10 MMPs have been added to the e-Kranti framework on 18 March 2014.

The Figure above provides a summary of the current implementation status of the MMPs.

MyGov

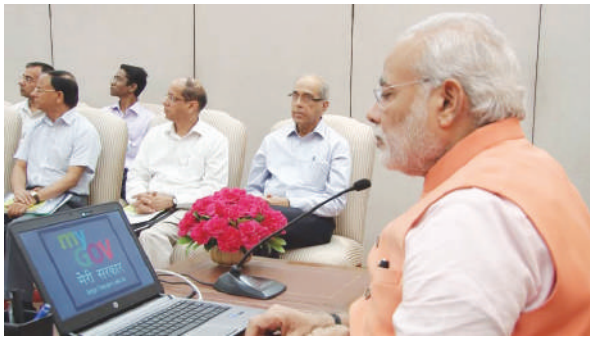
MyGov is an innovative platform to build a partnership between citizens and the government with the help of technology for the growth and development of India.

Let us join this mass movement towards Surajya, realise the hopes and aspirations of the people and take India to greater heights.

नरेन्द्र मोदी

It is envisioned that citizens from across India will come together to share their expert thoughts, ideas and suggestions with the government in areas related to various policies, programmes, schemes, etc. MyGov will empower citizens to work hand in hand with the government. This initiative was launched by the Honourable Prime Minister Shri Narendra Modi, as a platform that empowers the citizens of India to contribute towards Surajya. Speaking on the occasion, which also marked the completion of sixty days of the new government, the Prime Minister said the success of democracy is impossible without participation of the people.

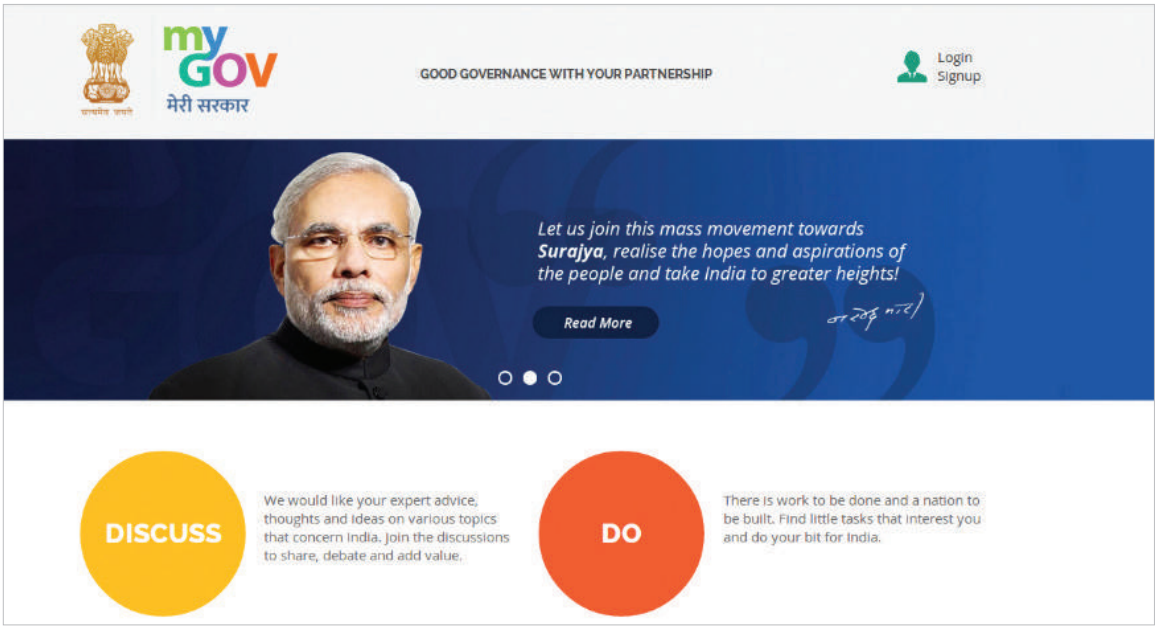
Through this platform, the Government aims to encourage Citizen Participation towards Good Governance by seeking their ideas, suggestions and grass roots level contribution. Citizens can participate in this unique initiative of nation building and for the very first time in the history of this country.



The Prime Minister, Shri Narendra Modi at the launch of "MyGov portal", an official portal of Government India, in New Delhi on July 26, 2014.

MyGov platform is a technology-driven medium that will provide citizens the opportunity to contribute towards good governance. Suggestions were invited to strengthen and improve the platform. It is intended that citizens will be able to collaborate through this platform for development and become a tool to fulfil the aspirations of the poorest of the poor.

The platform of MyGov presents an opportunity to the citizens to both 'Discuss' and 'Do'. There are multiple theme-based discussions on MyGov where a wide range of people can share their thoughts and ideas. Further, any idea shared by a contributor will



also be discussed on these discussion forums, allowing constructive feedback and interaction. For those who wish to go beyond discussions and wish to contribute on the ground, MyGov offers several avenues. Citizens can volunteer for various tasks and submit their entries. These tasks would then be reviewed by other members and experts. Once approved, these tasks can be shared by those who complete the task and by other members on MyGov. Every approved task will earn credit points for completing the task.

The platform will be implemented and managed by the National Informatics Centre (NIC), Department of Electronics and Information Technology (DeitY) to facilitate citizen engagement in good governance.

Currently, the platform has been divided into various groups namely Clean Ganga, Girl Child Education, Clean India, Skilled India, Digital India, Job Creation.

Each group consists of online and on-ground tasks that can be taken up by the contributors. The objective of each group is to bring about a qualitative change in that sphere through people's participation.

The inauguration of MyGov is a small step towards the larger mission of becoming a one-stop centre for citizen engagement towards good governance. Over time, the number of groups, tasks and discussions will increase. MyGov will also be used as a comprehensive knowledge repository, giving insights from the sharpest and brightest minds across India.

MyGov was launched on 26 July 2014 by the Prime Minister, and has already connected with over 6.7 lakh citizens who are actively participating in the discussions and other activities on MyGov.

Aadhar-based Biometric Attendance

As part of the Digital India programme of the Government of India, it has been decided to implement common Biometric Attendance System (BAS) in the Central government offices (Agencies) located in Delhi which may be extended to offices of state governments and other government institutions in future.

The proposed system would enable an employee to register attendance by simply presenting his/her biometric (fingerprint/iris). Government organizations are utilising the system across different locations.

The major challenge is to enable and manage the attendance of the government workforce across various locations keeping the Total Cost of Ownership (TCO) low. Presently, various government organizations have deployed proprietary biometric attendance solutions, which lack uniformity in technical architecture due to which these solutions are difficult to scale up and integrate with each other. Aadhaar-based biometric authentication for the purpose of attendance would ensure that the attendance of all government employees will be visible in real time on the common attendance portal ensuring transparency and accountability to bring efficiency.

This event will be authenticated online after one-to-one match with the biometric attributes stored in the UIDAI database against the employee's Aadhaar number. For implementing this project, the Central government organizations need to follow a structured approach in coordinating with different stakeholders. The purpose of this document is to serve as a handbook for the Central government organizations that are implementing biometric attendance system for their employees.

It is proposed to implement a common biometric-based attendance system across various government offices in New Delhi. This system is envisaged to have the following features:

- Cloud-based attendance software installed and operated from NIC and National Data Centre.
- Dedicated secure connectivity will be provided between National Data Centre and UIDAI Data Centre by NIC for authentication.

- All Ministries/Departments/subordinate organizations can access the system using the NIC network provided in the Bhawans.
- Offices using the system will install biometric-enabled terminals/devices to mark attendance; the number and location of required devices will be assessed by the offices; the offices concerned will be responsible for day-to-day maintenance of the devices.
- Connectivity of terminals/devices will be established through Wi-Fi/GPRS.
- Customized reporting formats for various levels of employees will be developed by UIDAI/NIC.
- Facility for centralized compilation and publication of attendance data in public domain will be provided as per requirements.

Salient Features

Following features are envisaged for common biometric attendance system:

- This system is based on Aadhaar authentication (fingerprint and iris-based authentication).
- It is an attendance system with real-time monitoring.
- The system has comprehensive Management Information System (MIS).
- This is a lightweight system which does not require any special hardware or algorithm.
- It is compatible with multiple platforms (Windows, Android, etc.) and form factors (laptop, desktop, Tablet, etc.).
- It is a robust system that is self-sustained for small power cuts as it uses tablets at the front end.
- Time taken to record attendance is as low as 1-2 seconds on Wi-Fi and 8-11 seconds on GPRS (SIM).

Following activities completed during Phase I:

- A common biometric attendance portal viz. attendance.gov.in has been developed. The attendance portal is hosted in NIC data centre. These centralized back-end servers are common which will be used by all Central government organizations for biometric attendance system.
- In the first phase of implementation, approximately 150 Central government organizations have registered more than 55,000 employees on the common attendance portal attendnace.gov.in.
- UIDAI team has developed back-end portal software and client side attendance software.
- 1000 wall-mounted biometric terminals and 5000 desktop STQC - certified fingerprint devices have been installed in various Ministries/Departments located in about 100 Bhawans/buildings in Delhi.
- For Phase I all the devices have been procured and installed by NIC by UIDAI funding.

In Phase II, it is proposed that government organizations that could not register in Phase I shall register on the attendance.gov.in portal for the implementation of biometric attendance system. All the Central government organizations shall use the common back-end infrastructure installed at NIC data centres.

First step towards using biometric attendance system will be to appoint a nodal officer from each organization and register all their employees on-line at attendance. gov.in. This will undergo two steps of verification, first the Aadhaar verification by UIDAI and second verification by the appointed nodal officer. After that, the employee will be able to mark his/her attendance from the biometric terminal to be installed at the user location.

Jeevan Pramaan

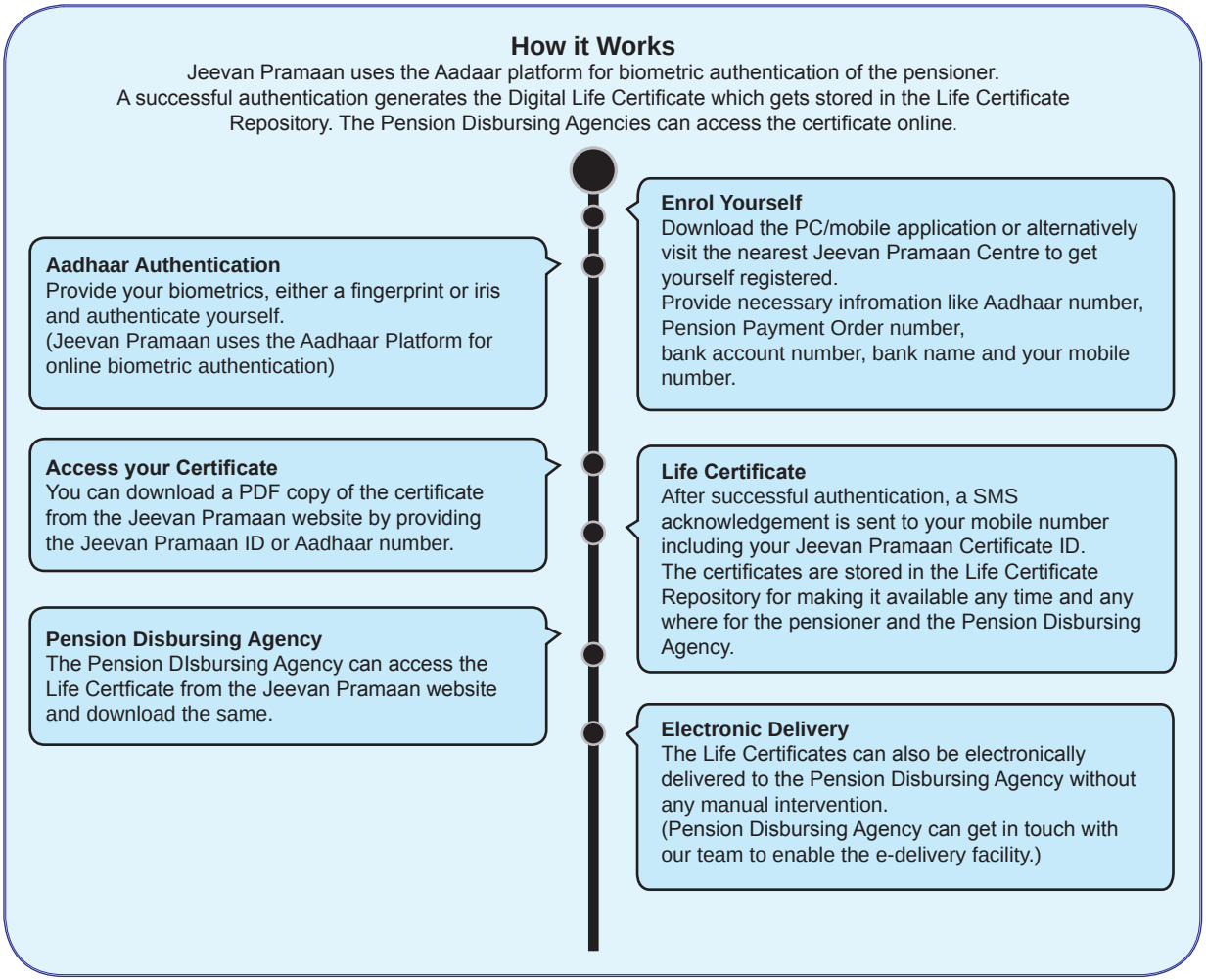
Prime Minister Shri Narendra Modi recently launched Jeevan Pramaan, which is an Aadhar-based Digital Life Certificate for pensioners, in a move that could eventually benefit over a crore pensioners. in a move that could eventually benefit over a crore pensioners. The Prime Minister said that after the push towards self-certification, this digital life certificate was another enabling mechanism which would benefit the common man.

OBJECTIVES

- The proposed digital certification will do away with the requirement of a pensioner having to submit a physical Life Certificate in November each year, in order to ensure continuity of pension being credited into his account.
- The Aadhar-based Digital Life Certificate will go a long way in reducing hardship, which so many senior citizens have to go through to produce a Life Certificate every year.

The Department of Electronics and IT has developed a software application which will enable the recording of the pensioner's Aadhar number and biometric details from his mobile device or computer, by plugging in a biometric reading device. Key details of the pensioner, including date, time and biometric information will be uploaded to a central database on real-time basis, ultimately enabling the Pension Disbursing Agency to access a Digital Life Certificate. This will conclusively establish that the pensioner was alive at the time of authentication.

The earlier requirement entailed that a pensioner either personally presents himself before the Pension Disbursing Agency or submits a Life Certificate issued by authorities specified by the Central Pension Accounting Office (CPAO). At present, 50 lakh individuals draw pension from the central government



alone. A similar number draw pension from State and Union Territory Governments. Several PSUs also provide pension benefits. Over 25 lakh retired personnel draw pension from the Armed Forces. The software application system will be made available to pensioners and other stakeholders on a large scale at no extra cost. It can be operated on a personal computer or a smartphone, along with an inexpensive biometric reading device. This facility will also be made available at Common Service Centres, and other Aadhaar-enabled centres for the benefit of pensioners residing in remote and inaccessible areas.

Digital Locker

A platform that enables citizens, availing services, to securely share their documents with the service providers who can also directly access public documents in electronic mode by issuing authority through an authenticated route.

Under the Digital India programme, the National Digital Locker is being launched to minimize usage of physical documents and encourage documents to be uploaded in electronic formats making them easy to share and access across multiple agencies. This will also eliminate usage of fake documents, certificates, degrees, etc. via stringent mechanisms to verify authenticity of documents digitally.

The Digital Locker ecosystem would have a collection of repositories for issuing authorities to upload their electronic documents in a standard format. Personal locker provided to citizens would also act as a platform for storing the links for accessing the documents directly from theserepositories. This platform enables citizens who are availing services to securely share their documents with the service providers who can also directly access public documents from the issuing authority through an authenticated route.

The Digital Locker Technical Specifications (DLTS) have been developed to ensure smooth functioning of the process flow and to develop architecture for the system. As part of the Digital Locker Implementation Strategy, DeitY plans to start with two pilot projects of digital locker.

The first pilot project is being undertaken by the Government of Maharashtra as an augmentation of their existing e-Locker application. Another pilot project is proposed to be undertaken by the National Securities Depository Limited(NSDL) which would be built on architecture as proposed in specifications. The two pilots will be scaled up for roll out at the national level.

e-Bhasha

e-Bhasha Mission Mode Project

The e-Bhasha Mission Mode Project (MMP) builds on the experience gained over the years through the Technology Development for Indian Languages (TDIL) Programme.

The mission of e-Bhasha is to develop and make available computing technologies and tools in Indian languages for content creation, knowledge sharing and delivery of public services in Indian languages through Information and Communication Technologies. Wider access of the e-Governance initiative can be achieved only through localization of initiatives and e-Bhasha intends to play a key role in achieving the greater objectives of Digital India. The State governments in coordination with the Central government can implement the various strategies planned under e-Governance by leveraging tools and technologies developed so far.

VISION

To promote the usage of Indian languages in information and communication technologies

One of the main thrust areas of e-Bhasha is to aid the objective of e-Kranti, which is to accelerate the implementation of localized e-Governance in the country. The major objectives of e-Bhasha are as follows:

- Localized capacity building at various levels.
- Identify gaps in technology areas for fuelling further research, especially speech and mobile technologies.
- Evolving Localized Software Development Life Cycle (LSDLC) as a comprehensive reference for facilitating internationalized architecture software design and implementation.
- Mentoring, hand-holding and support to industry as well as academia for implementing localization on the ICT products, applications and services.
- Creating a repository of standards and best practices and showcasing of tools and technologies to facilitate single window information delivery.
- Innovative multilingual product designs and engagement with Micro, Small and Medium Enterprises and start-ups for local markets access mechanisms for bottom-of-pyramid markets.

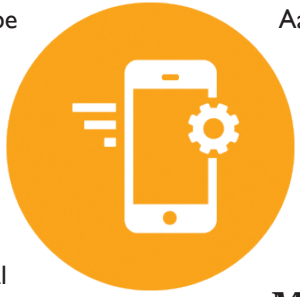
e-Bhasha MMP is an overarching MMP which will mentor all e-Governance MMPs by providing tools, standards and training for implementation of the MMPs in local languages. A Centre of Excellence for Localization in Indian Languages (CoE-LIL) is proposed to be setup for implementing e-Bhasha MMP.

This initiative will aid development and proliferation of ICT-based multilingual and localization tools for effective implementation of localization in e-Governance projects having all-India footprint being implemented through PPP initiatives. The e-Bhasha MMP is being planned for obtaining necessary government approvals.

Mobile as Digital Identity

The Digital India Initiative of Government of India envisages providing a digital identity to all individuals to facilitate online delivery of public services through their electronic authentication. Also, such digital identity should be unique, lifelong, online and authenticable.

While high mobile penetration can be leveraged to use mobile as digital identity for public service delivery, mobile digital identity may not limit itself to a mobile phone. Rather, in a broader sense, it also means to enable mobility while establishing a person's identity.



For usage of mobile as instrument of digital identity three possible mobile ID solutions are:

Mobile linked with Aadhaar

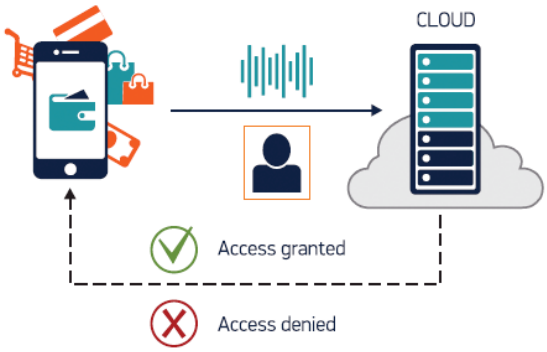
Online authentication using Aadhaar, which is already being offered as an authentication mechanism by Unique Identification Authority of India (UIDAI), can be made seamless if mobile numbers of individuals are linked to their Aadhaar numbers. This would do away with users providing Aadhaar number for every transaction as their mobile numbers would represent their Aadhaar number. Linking mobile numbers with Aadhaar can happen at UIDAI, at government or trusted public service providers or at the Telecom Service Providers (TSP) through SMS gateways using Aadhaar-based KYC. The Mobile-Aadhaar combination can be further strengthened by adding other factors like One-Time Password (OTP) and PIN known only to the user.

Mobile Digital Signatures

Digital Signatures Certificates (DSC), legally valid as per Indian IT Act 2000 and IT (Amendment) Act 2008, and currently used widely through USB devices, can also be provided by storing them on SIM of mobile phones. This is called Mobile DSC. In such cases, the user's private key is stored on SIM (Cryptographic SIMs) of the mobile phone using various embedding technologies that provide secure data transmission from a mobile device. This would provide a very high level of assurance for authentication and also allow to digitally sign documents (on smartphones) which has a legal acceptance. To enable seamless use while providing mobility, the private key may also be stored on a secure cloud and allowed a demand-based secure access to the subscriber.

Voice Biometrics on Mobile

Since a person's voice is unique, Voice biometrics has emerged as a strong method for online authentication with advancement of technology in the field.



In recent times, a number of countries have adopted it as a method of authentication for various applications. Voice biometrics, when combined with the mobile number of the individual for a text-dependent verification, provides for even stronger authentication which can parallel Level 3 or greater authentication specified in e-Pramaan framework with considerable ease of use. However, before its usage, the person's voice needs to be captured and stored against his mobile number.

Mobile for Financial Inclusion

In the existing approach the focus is on deployment of ATMs/Micro ATMs in rural areas, but it is a challenge on account of availability of power, associated cash management, security and inadequate cash-in/cash-out points. On the other hand, technology of mobile and mobile services distribution network of TELCOs can address all such issues. It is proposed that that any no-frill bank account (Financial Inclusion Savings Bank Account) opened by banks must be operable through mobile phones.

All these solutions were evaluated against some parameters such as ease of implementation; levels of assurance; challenges and risks; existing and required institutional and legal frameworks; and the market ecosystem.

e-Basta

From School Books to e-Books

In line with the government's Digital India initiative, this project has created a framework to make school books accessible in digital form as e-books to be read and used on tablets and laptops. The main idea is to bring various publishers (free as well as commercial) and schools together on one platform. In addition to the portal, a backend framework to facilitate the organization and easy management of such resources has also been made, along with a web based application that can be installed on tablets for navigating the framework.

Target Users

- Publishers can display their resources on the portal, for use by schools.
- Schools can browse, select and compile their choice of resources from this pool, as e-basta for different classes.
- Students can then download such e-bastas from the portal, or the school may distribute them through media like SD cards.

The framework, implemented as a portal, brings together three categories of stakeholders: the publisher, the school and the student. It provides them with the following primary functionalities:

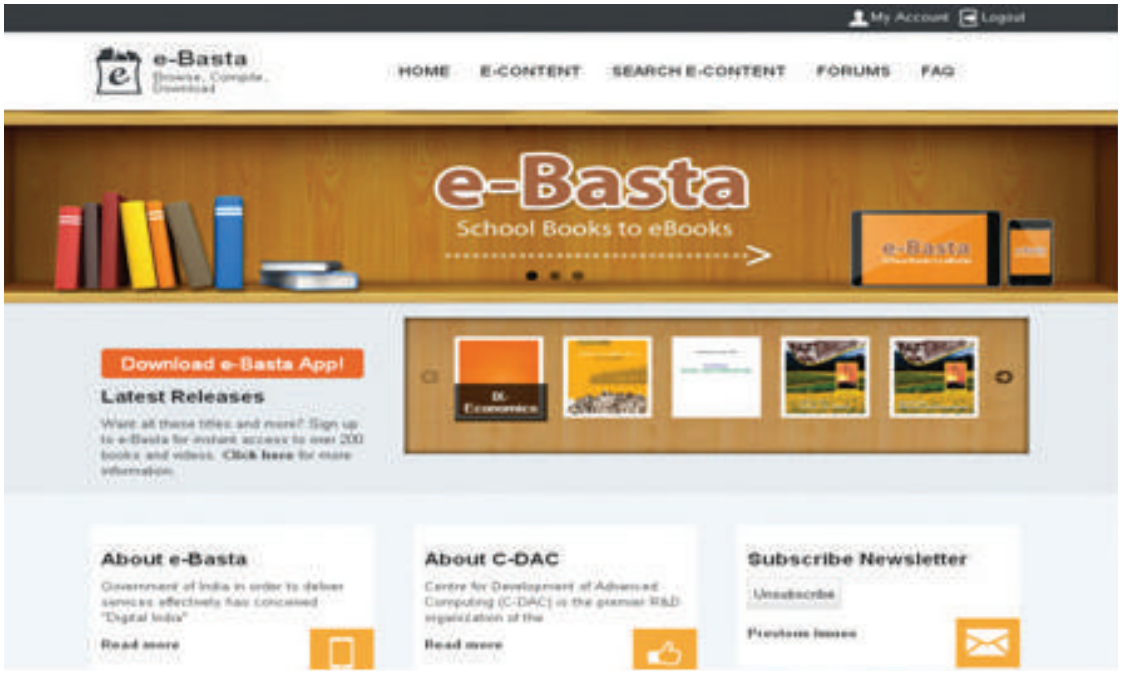
Publisher: Upload e-content along with metadata covering class, language, subject, price, preview pages, etc. Pre-publication content can also be uploaded for review and these will not be available for download. Publishers can also view comments and ratings given by the users of the portal, as well as download-statistics of the various e-contents.

School: Schools, typically through authorized teachers, can access the portal to compile resources for each class as per their preference. After browsing through the e-contents uploaded by various publishers and searching for the right contents, the school may organize them into a hierarchical e-Basta. One may create an e-Basta from scratch or by modifying another e-Basta existing on the portal. Every e-Basta is assigned a unique name, which may be given to students so that they may download the e-Basta on their own.

Students: Students can come to the portal to download a prescribed e-Basta or explore e-Bastas and contents available on the portal and download those that they need. If the set of contents to be downloaded includes paid resources, they will be taken to a payment portal to complete the payment. Then they will be given access to download the contents. In the case of e-Bastas, they are expected to use the e-Basta app to access the contents.

eBasta App

The e-Basta app, downloadable from the portal, runs on any Android tablet. It can access the e-Basta created using the portal, and render it for easy navigation by the student. The content considered by the app is as defined by the teacher/school in the e-Basta framework,



irrespective of what resources are on the SD card or storage. The app can be invoked by clicking the .ebs file associated with an e-Basta. The background colour, logo etc can be customised through the portal.

Technologies used

The portal has been built using Drupal CMS version 7.33. It has been extended to handle e-Basta structure and associated functions. The e-Basta app has been built afresh in Java 7 on Android 5.0 API Level: 21.

Advantages

Schools

- Teachers can choose and bundle content according to their teaching preferences.
- A rich variety of resources are available including animations, audio books and videos.
- Faster access to updated editions of contents.
- Aid schools with lesser teaching resources to gain from the resources of better schools.

Students

- Reduce the burden of physical books.
- Easy access to structured resources created by the school.
- Long-term reduction in cost.
- Access to a richer variety of resources including animations, audio books and videos.
- Access to e-Bastas of other schools.

e-GCF

e-Governance Competency Framework

The Capacity Building (CB) Scheme was approved by the Government of India on 10 January, 2008 to bridge capacity gaps in the State governments for the implementation of e-Governance projects. State e-Governance Mission Teams (SeMTs) have been set up to provide professional support to the States in the programme management and monitoring of NeGP.

The objective of e-Governance Competency Framework (e-GCF) is to strengthen capacity building by identifying and defining competencies required for different roles under e-Governance projects. e-GCF is being published in an implementation toolkit that provides easy-to-follow steps about how to structure an e-Governance team and how to conduct fact-based training needs analysis for competency benchmarking.

E-GCF provides standardized definitions of a gamut of competencies required in successfully performing e-Governance job roles. The objective of moving towards a competency-based system is to ensure that each e-Governance job role is performed by a person who has the required competencies for that role.

In the framework, 19 provisional e-Governance job roles have been identified, which are classified into two broad categories: administrative/managerial roles and technical roles. The toolkit contains a set of end-user knowledge areas required for government employees.

Each e-Governance role in the toolkit contains a detailed outline of the role, knowledge elements with expected depth levels and a set of professional skills along with suggested training courses and certifications. For defining behavioral competencies, e-GCF has referred to the Competency Dictionary developed by Department of Personnel and Trainings (DoPT). It is important to note that the e-Governance roles are title, position, person or designation agnostic. A person may perform more than one role or one role may be performed by several persons depending upon the needs of the project.

The toolkit is useful for any e-Governance initiative that has requirements such as conducting training needs analysis, structuring project or programme teams, creating virtual cadres, improving the recruitment processes and outcomes, writing effective job advertisements and job descriptions, reviewing job performance, or developing training courses, etc. It includes four case studies illustrating the value and benefits of appropriate e-GCF interventions in MMPs and e-Governance teams. The toolkit can be leveraged by any e-Governance project in any stage of implementation. A mapping of e-Governance Project Lifecycle (e-GLC) stages with the relevant e-Governance roles and competencies is provided for reference.

As a next step, it is proposed that a web-based application will be developed to establish a continuous improvement process to ensure e-GCF remains up-to-date. The 19 provisional e-Governance roles, which have been developed using the e-GCF, are evolving, and we look forward to active feedback from users and stakeholders.

Virtual IT e-Governance Cadre

In-service officers selected for identified e-Governance functions based on competencies, may be considered for grant of separate set of incentives to attract and retain officers with e-Governance specialization on the lines of Training Allowance to officers deputed to training institutions based on the recommendations of the Sixth Central Pay Commission.

Need

1. Provide to the States and Union Territories , resources with updated knowledge/skill-set at different levels and for different competencies.
2. Provide flexibility to match demand based on the project lifecycle and requirement of Departments.

In-service officers selected for identified e-Governance functions based on competencies, may be considered for grant of separate set of incentives to attract and retain officers with e-Governance specialization on the lines of Training Allowance to officers deputed to Training Institutions based on the recommendations of the Sixth Central Pay Commission. Considering the above recommendation, the following model is suggested for the consideration of the State Ggovernments and Union Territories:

Constitution of Virtual Cadre: The officers for the Virtual Cadre shall be selected from the existing State Ggovernment Eemployees at the State Secretariat, Directorates, District and Sub-district levels as considered appropriate and capacities built to lead and guide the e-Governance initiatives in the sState.

Dedicated Officers for Mission Mode Projects: Full- time Mission Leaders may be appointed for implementation of IT projects with outlays greater than rupees 50 crores. The Mission Leader shall work exclusively for implementation of e-Governance Mission Mode Project. They shall be part of the State Virtual IT- e-Governance Cadre.

Strength of the Cadre

- About 2%-5% of the existing strength of officers and staff at different levels, could be selected into the Virtual Cadre.
- Endeavour should be made to ensure that each department has adequate representation of employees in the Virtual Cadre in accordance with its employee strength.
- The State may also consider appointment of officers empanelled in the vVirtual cCadre for transfer/ deputation to other Departments.

The above proposal is suggestedive based on best practices from various sStates. States such as Maharashtra and Madhya Pradesh have already implemented this scheme.

Open Application Programming Interface (API)

Consultative Workshop on Guidelines for Implementation of Open API Policy on 30 October 2014 held at DeitY

API is a set of functions and procedures that other applications can use provided they are running under the same technology stack in which APIs are developed. On the other hand, open APIs allow scaling procedures, functions and services developed in one type of technology onto another application running on another website in different technology. Open API enables machine-based interaction between the websites using Representational State Transfer, (REST), SOAP, JavaScript and other web technologies.

The objective of building the Open API platform is to facilitate service providers to expose their APIs and enable the service consumers to discover them centrally. The key objective behind building Open APIs is to achieve the following:

- **Open Architecture:** Allows communication between different technologies as well as different gateways and applications to interact.

- **Focus on core functionality:** Enables departments to focus on core functionalities.
- **Interoperability:** Enables interoperability and integration among different aspects of the e-Governance system.
- **Collaboration and Horizontal Integration:** As of now, there is minimal horizontal integration amongst departments. APIs facilitates departments to share data and services
- **Scalability:** APIs allow architecture to scale out horizontally.

There are three types of shareable elements that can be exposed as open APIs for potential users:
Services: Departments can provide APIs for the services they are already offering to the users.

Workflow: Certain workflows such as Aadhaar/PAN verification followed by integration with payment gateway or SMS gateway can be provided as an API to enable the department to incorporate the entire workflow in their applications without having to develop these components on their own, thereby expediting the development of applications and also providing savings.

Data: Departments can provide their departmental data publicly for any user to integrate and fetch. This data can be provided via an API or can even be provided as a file in case of large data.

E-Sangam

E-Sangam was put in production in August 2008 and will progress to Phase II in April 2015. E-Sangam aims to address specifically the key principles of eKranti which seeks to enable delivery of integrated eGovernance services to citizens.

The policy on Open APIs for Government of India aims to encourage the formal use of Open APIs in government organizations. The e-Sangam framework facilitates the policy objectives by providing support for the interoperability among the technologically varied, heterogeneous and legacy services. The project outlay has been estimated as Rs. 26.28 crore.

Currently they are 29 services registered in production and it is deployed in 25 States and Union Territories.

Key Activities

E-Sangam acts as Middleware or Service Oriented Architecture in eGovernance:

- Facilitator of invisible functions necessary but time consuming: messaging load management, offline message delivery, audit logging and monitoring.
- Reusability of components readily available.
- Departments can focus on the function of the software.
- Single point for seamless creation of workflows among the registered services.

Features

- Open platform and no vendor locking.
- Supports synchronous as well as asynchronous message exchange patterns.
- Secure
  - Authentication and authorization of SAP Application
  - PKI support
  - Two-way SSL for securing the message flow between client and gateway
  - XML signature support
  - Audit Logging and Time Stamping
  - ISO/IEC 27001:2005 (ISMS) compliant
- Business continuity with zero data loss.
- Scalable architecture
- Guaranteed delivery and transaction log.

Mobile Seva

Mobile Seva is an innovative initiative aimed at mainstreaming mobile governance in the country. It provides an integrated whole-of-government platform for all government departments and agencies in the country for delivery of public services to citizens and businesses over mobile devices through various channels such as SMS, USSD, IVRS and mobile applications.

Mobile governance is a key thrust area of DeitY, an outcome of realization that penetration of mobile phones in the country is much higher compared to access to computers and internet, especially in rural areas. Mobile can significantly enhance access to electronic services, especially for rural population. Mobile devices are ideally suited as alternative access and delivery channels for public services in these areas. Mobile devices can also provide certain unique solutions, such as location-based services.

The overall strategy aims at making India a world leader in harnessing the potential of mobile governance for inclusive development.

DeitY has developed and notified the framework for mobile governance in February 2012, which now acts as a prime driver for government departments and agencies across the nation towards adoption of mobile governance.

Mobile Seva is a revolutionary whole-of- government mobile governance initiative of DeitY, enabling government departments and agencies across the nation to deliver public services to citizens and businesses through mobile devices across various mobile-based channels such as SMS, USSD, mobile apps and voice.

Mobile Seva aims to provide a one-stop solution to all Central and State government departments across the nation for all their mobile service delivery needs. The objective of the initiative is to provide a centrally hosted mobile enablement platform that allows government departments and agencies to expeditiously start offering their services through mobile phones without having to create their separate mobile platforms.

Mobile Seva enables integration of mobile applications with the common e-Governance infrastructure for delivery of services to users. Availability of government-wide shared infrastructure and services enables rapid development and reduced cost for integrating departments.

As part of Mobile Seva, a centralized Mobile Service Delivery Gateway (MSDG) was operationalized in July 2011 and has now become the core infrastructure of choice for enabling the availability of services through mobile devices. The SMS channel under MSDG was launched in July 2011.

Pull SMS is a citizen-initiated SMS in a predefined format. It is operational on 51969 (all telcos), 166 (major telcos) and 9223166166 (all telcos) offering more than 380 services. Push SMS has seen massive adoption by government departments/agencies at the Centre, States and Union Territories. More than 1900 departments/agencies are on board and more than 200 crore SMS notifications have been sent to citizens/ businesses.

The Mobile Seva portal was launched in January 2012 and is available round the clock for both departments and citizens with live up-to-date information on all features and solutions. From the Department Services tab on the portal, interested departments/ agencies can quickly register themselves online for availing Mobile

Seva services. The Mobile AppStore of the MSDG was launched in January 2012 as a centralized government AppStore for mobile apps around public services. It currently hosts more than 315 free to download mobile apps.

Mobile Seva is a winner at United Nations Public Service Awards (2014) under the category "Promoting Whole-of-Government Approaches in the Information Age". It is the only winner from India in 2014.

National Information Infrastructure

Background

The country has seen significant progress in terms of realizing the vision of the National e-Governance Plan of Government of India to provide citizens with easy access to government services at affordable costs by using Information and Communication Technologies (ICT). Core infrastructure of State Data Centres, State Wide Area Networks, Common Service Centres and State Service Delivery Gateways facilitate bringing of public services closer to citizens, besides supporting Government to Business and Government to Government services. Other ongoing initiatives such as the National Optical Fibre Network (NOFN), National Data Centres, NICNET and National Knowledge Network (NKN) are also expected to play an important role in the overall e-Governance and ICT landscape of the country.

NII shall leverage emerging technologies such as cloud computing to meet increasing demand for network bandwidth, storage and IT applications arising from greater e-enablement of government services. NII shall also effectively address the challenges that remain in the current infrastructure—capacity constraints, cyber security vulnerabilities, non-availability of robust last mile connectivity and limited network redundancy.

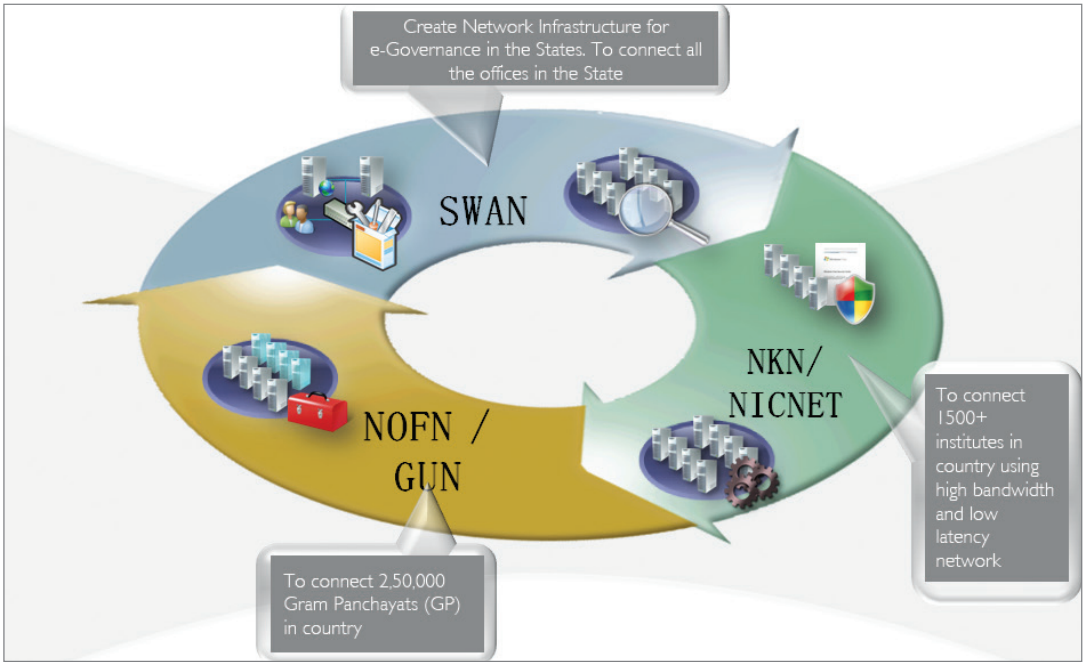
The vision of NII is to provide a secure, scalable and on-demand public information infrastructure to government agencies and citizens. It will leverage existing ICT and human resources available in the country at all levels to minimize capital investment and operating expenditure.

The main objectives of NII include:

- Creating an integrated and secured communication network from the current fragmented infrastructure that will provide data, voice and video services on the same platform. This would also fully integrate the GI Cloud (MeghRaj) platform.
- Establishing an appropriate institutional structure that addresses the requirements of coordination amongst different authorities owning infrastructure and also amongst the users of such infrastructure.
- Evolving and enforcing a standard security framework across government data centres and networks.
- Ensuring privacy protection of all users and service providers to the extent required by legal provisions.

NII Architecture:

- NKN and NOFN will be fully leveraged to provide necessary bandwidth at state capitals, districts, blocks and Gram Panchayats.
- NKN and NOFN networks will be interconnected to provide seamless connectivity from state capital to Gram Panchayat. This integration will be done at districts using Government User Network (GUN) over NOFN being established by DoT in collaboration with the Ministry of Rural Development.
- Integration of the existing networks, data centres, upcoming compute centres along with creation or upgradation of additional information infrastructure, as and when necessary, will provide NII with the required capabilities to provide the desired 'information infrastructure on demand' to various stakeholders.



- NII would incorporate the Government of India (GI) Cloud i.e. MeghRaj. The Government of India Cloud will be accessible through NII connectivity and through TSPs broadband network. Applications can be hosted by the user ministries/state Governments and other Government organizations on the unified NII infrastructure (SDC/ GI Cloud/ Data Centres of Government departments or other Clouds under MeghRaj

Implementation strategy

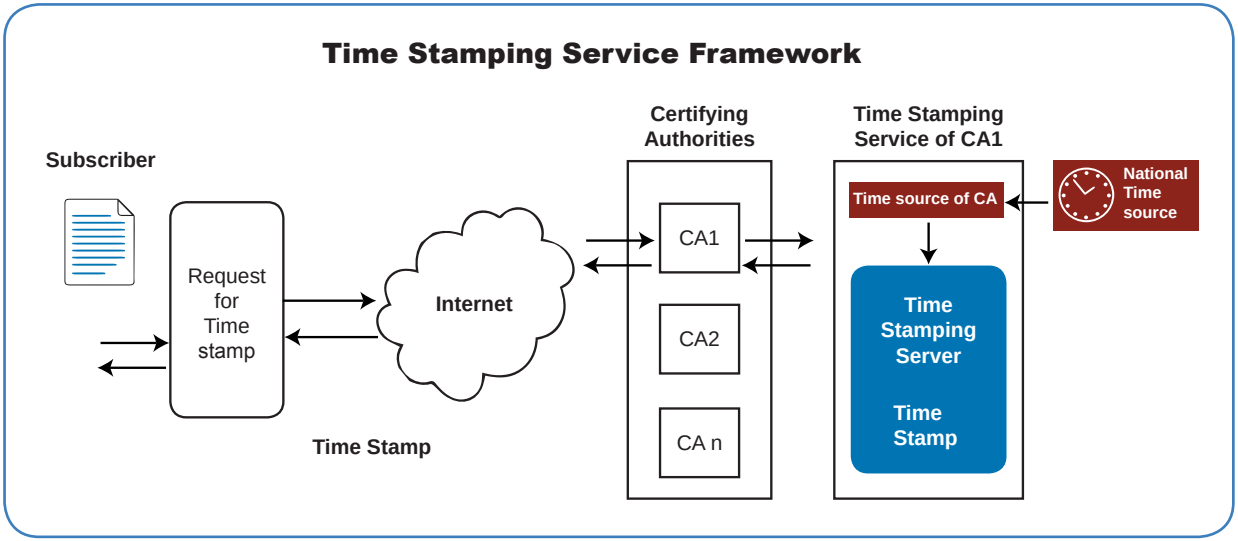
Creation of NII under the federated structure would necessitate meticulous planning from conception to implementation and monitoring thereof of various core aspects. Various activities therefore, would be implemented in phases with specific timelines.

NKN and NOFN will be fully leveraged to provide bandwidth requirements from States to all the Panchayats in the country.

The existing network infrastructure will continue to be managed by respective owners of infrastructure like NIC for NKN and BBNL for NOFN. NKN and NOFN will serve as bandwidth service provider at their PoPs.

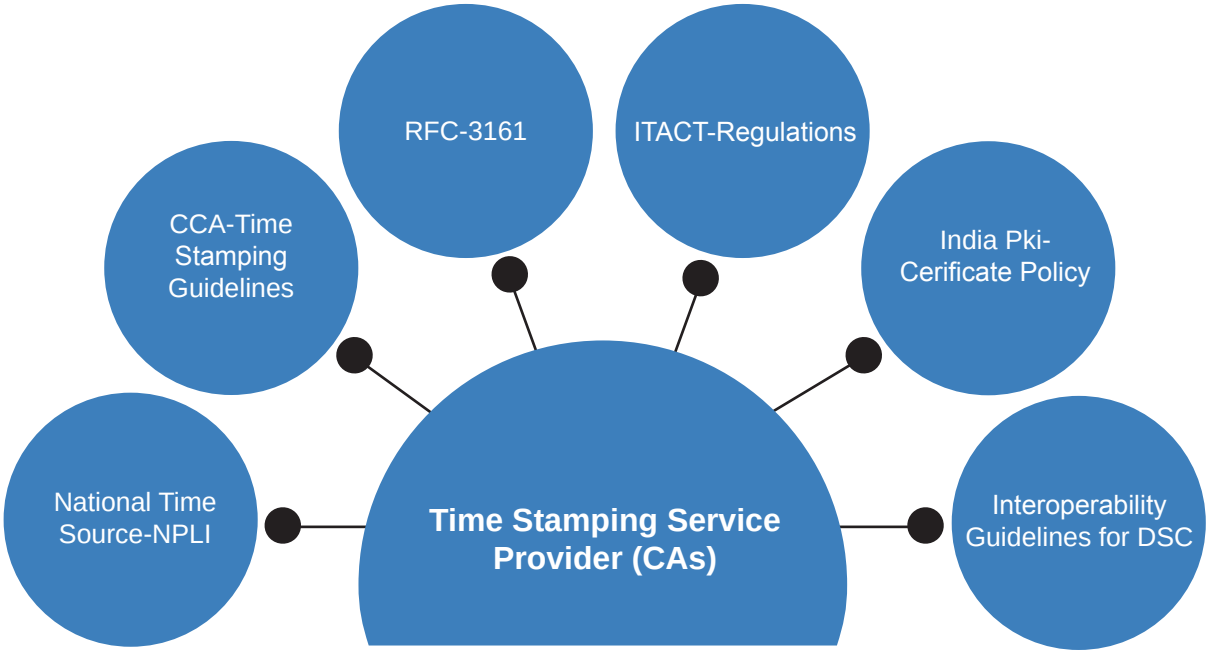
Digital Signature-Time Stamping

In the current scenario where many government departments are providing online services and allowing citizens to transact electronically, the time of a transaction cannot be established in a foolproof manner.



At each intermediate computer or network device the local time is appended to the transaction. In the event of a dispute, none of these times will stand scrutiny in a court of law. With the impetus towards creating Digital India, it is imperative that the time attributed to an electronic document or transaction is legally established. Applications such as e-Tendering, where time of receipt of bid is crucial to the entire process and e-Patents and e-Trademarks, where ownership of an idea or product hinges on the time of its registration, are examples of areas where legally valid time stamps are of immense importance. The Time Stamping Service that is being launched aims to address this requirement. Certifying Authorities licensed under the Information. Technology Act, 2000, issue Digital Signature Certificates to subscribers. The time stamping service has been created and is ready to be launched by three Certifying Authorities (CA): (n) Code Solutions, eMudhra and SIFY. The Regulations under the Information Technology Act, 2000 mandate that the Certifying Authorities shall provide Time Stamping Service for its subscribers. Time Stamping legally establishes time of any reference that requires a time stamp. The reference could be documents, transactions, certificates, contracts, etc. The digital signature function integrates with the time stamping process to mathematically link the reference with time derived from a designated national time source to generate a time stamp. These time stamps.

Time Stamping Policy and Time Source Frame Work



Time Stamping Policy and Time Source Frame Workcan be verified to establish the time attestation required for references.Time Stamping Service enables attestation of time stamps to electronic documents and transactions by virtue of integration of Digital Signatures with time obtained from the National Time Source (National Physical Laboratory).This will further strengthen transparency that is already being achieved in various services that have moved online.

Digital Literacy Initiatives

Financial Assistance for setting up of Electronics and ICT Academies

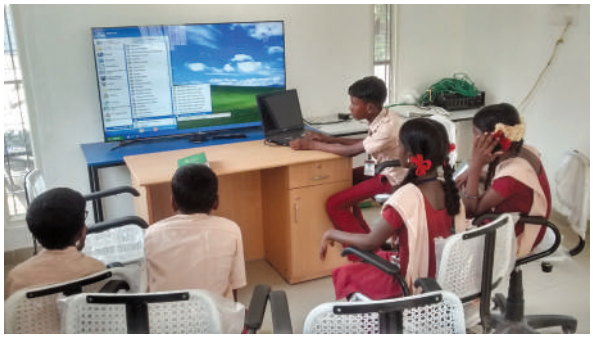
The objective of the scheme is to set up seven Electronics and ICT Academies as a unit in IITs, IIITs, NITs, etc., for faculty and mentor development to improve the employability of the graduates in various streams. The Electronics and ICT Academy would aim to provide specialized training to the faculties of the engineering, arts, commerce and science colleges, polytechnics and other institutions by developing state-of-the-art facilities.

These academies would focus on continuous training and re-training of the faculty in various emerging technology areas of Electronics and ICT as well as emerging industry/ market requirements as indicated in the NPE 2012 and NPIT 2012.

National Digital Literacy Mission

The objective of the National Policy on IT 2012 is to make one person in every household in the country e-literate, a scheme for National Digital Literacy Mission. The scheme aims to train 10 lakh persons at two levels of literacy, one in every eligible household in selected blocks in each State and Union Territory of the country.

The scheme duration has been targeted as 18 months with a budget of Rs. 97.02 crore. It has been launched in August 2014. The common citizens of the country including disadvantaged segment of the society would e-learning classes for students as part of Digital Literacy Mission be empowered through IT Literacy training at two levels depending upon the need of individual.



e-learning classes for students as part of Digital Literacy Mission

Digital Saksharta Abhiyan (Disha) under Digital India

Digital Saksharta Abhiyan (Disha) intends to make 42.5 lakh persons digitally literate in selected households throughout the country. Digital empowerment of citizens by providing Universal Digital Literacy is an integral component of the Honourable Prime Minister's vision of Digital India.

Out of the overall target, four lakh candidates are to be trained by the industry, NGOs and others through their own resources under Company Social Responsibility paradigm and remaining 38.5 lakh candidates would be supported by the government. The approved budget for this project has been estimated at Rs. 380 crore.

Productivity and Employment Generation

Centre of Excellence for Large Area Flexible Electronics (CFlexE)

Objectives

- Research and Development: Conduct basic studies and scientific investigations relevant to field of large area flexible electronics.
- Manufacturing: Developing partnership with industry and with a view that potentially leads to manufacturing.
- Ecosystems: Facilitate formation of industrial ecosystem by addressing various aspects, products, materials and machines and academic ecosystem by engaging with reputed centres internationally and individuals nationally.
- Entrepreneurship: Incubate small scale industry related to flexible electronics.
- International Partnerships: Build strategic partnerships that hasten the development cycle.
- Human Resources: Undertake human resource development in relevant area.

The initial products identified and listed below have socio-economic impact towards good governance, through an ecosystem for the new electronic industry segment:

- Printable electronic tags
- Anti counterfeiting for medicine package
- Flexible solar module
- Circuit lab on paper
- OLED lighting
- Flexible temperature sensor and conductive inks

The Centre is initiated by DeitY for pan-India use and is planned to be launched under the list of Digital India programmes in February 2015, for an emerging new electronic industry segment.

National Centre of Excellence in Technology for Internal Security (NCETIS)

NCETIS was evolved to nurture the Centre as a new national nodal facility to cater to the requirements of homeland or internal security technology requirements, in support of Electronic System Design and Manufacturing (ESDM) requirement of homeland or internal security sector and the associated ecosystem. NCETIS will nurture innovation projects pertaining to technology aspects of internal security under its umbrella of activities with police and paramilitary and industry as stakeholders, facilitating rapid prototyping of products useful for internal security purposes.

The immediate focus areas of innovation/research and the technology developments by NCETIS in the first five years are as follows:

- Broadband wireless communication system for public safety.
- Explosive detectors for landmines, chemical and biological warfare.
- Ground Penetration Radar (GPR) for landmine detection.
- Unmanned vehicles
- Video surveillance and analytics
- Thermal imaging
- Product design, product interaction design, prototyping and testing of internal security devices.

Hardware Manufacturing

Under the Digital India programme of the government, a roadmap has been laid out to transform India into a digitally empowered society and knowledge economy. One of the pillars of this programme is promotion of electronics manufacturing.The Government had approved the National Policy on Electronics (NPE) 2012 on 25 October 2012 with this vision.

It has been estimated that demand of electronics products and systems in India would grow to about USD 400 billion by 2020.At the conventional rate of growth of domestic production, it would only be possible to meet demand of about USD 100 Billion by 2020. The government attaches high priority to electronics and IT hardware manufacturing. It has the potential to generate domestic wealth and employment, apart from enabling a cyber-secure ecosystem. The total budget for the project is Rs. 9,509 crore for 12th Year Plan of which Rs. 85 crore has been earmarked for Year 2014-15.

To create a globally competitive electronics design and manufacturing industry to meet the country's needs and serve the international market.

Key Activities

1. The National Policy on Electronics 2012 has been notified with a vision to create a globally competitive Electronics System Design & Manufacturing (ESDM) industry to meet the country's needs and serve the international market.
2. Modified Special Incentive Package Scheme (M-SIPS) that will provide financial incentives to offset disability and attract investments in the sector. In all, the 53 proposals worth Rs 17,390 crores in investments have been received seeking incentives. Fourteen meetings of Appraisal Committee (AC) have been held so far.Till now,AC has recommended 30 cases of worth nearly Rs 6,548 crores. Based on recommendations, 23 proposals worth nearly Rs. 2,525 crores have been approved.
3. Setting up of two semi-conductor wafer fabrication (FAB) manufacturing facilities in India. The draft cabinet note for re-constitution of Empowered Committee, which was set up to identify technology and potential investors for establishment of Semiconductor Wafer Fabs in India, has been circulated for inter-ministerial consultations in November, 2014.
4. A policy for providing preference to domestically manufactured electronic products in government procurement is under implementation. The nine products namely Desktop PCs, Dot Matrix Printer, Tablet PCs, Laptop PCs, Smart Card, LED products, Biometric Access Control/Authentication Devices; Biometric fingerprint sensor and biometric iris sensor under the scheme have been notified in 2014. The template for inclusion of the policy provision in the procurement tenders by the Ministries has been issued in furtherance of the policy. A meeting of the Committee of Secretaries regarding the implementation of policy was also convened in November, 2014.
5. The draft Cabinet Note for formulating the policy of Electronic Development Fund (EDF) to support Daughter Funds in the area of Electronics System Design and Manufacturing, Nano-electronics and IT

for promotion of innovation, product development and within the country in the specified fields of ESDM, nano-electronics and IT was circulated for inter-ministerial consultations on 16 May 2014. The Cabinet has considered the proposal in early December, 2014 and approved it.

6. Mandatory compliance to safety standards has been notified for identified electronic products with the objective to curb import of sub-standard and unsafe electronics goods. As of now, 30 electronic products are under the ambit of this order.
7. To strengthen the conformity assessment infrastructure, DeitY notified a Scheme for setting up/upgradation of electronic product testing/ Quality Control Laboratories on 25 August 2013 with the objective to encourage setting up testing facilities by institutions which will be used for evaluating goods under the Electronics and Information Technology Goods. The scheme for Grant-in-Aid is open for setting up and upgradation of up to 15 labs.
8. Approvals for all foreign direct investment up to 100% in the electronic hardware manufacturing sector are under the automatic route.
9. Steps have been taken for the development and implementation of the Indian Conditional Access System (CAS) to promote indigenous manufacturing of Set Top Box (STB) for Cable/DTH TV, keeping in view the huge indigenous requirement on account of roadmap for digitalization of the broadcasting sector.
12. Under the Electronics Hardware Technology Park (EHTP) Scheme, approved units are allowed duty free import of goods required by them for carrying on export activities, CST reimbursement and excise duty exemption on procurement of indigenously available goods, as per the Foreign Trade Policy.
10. Under the Focus Product Scheme of the Foreign Trade Policy, exports of listed electronic products are entitled to duty credit scrip equivalent to 2%-5% of FOB value of exports.
11. The tariff structure has been rationalized to promote indigenous manufacturing of electronic items.
12. A new initiative has been taken to recognize the achievements of successful industry by presentation of National Awards in the Electronics System Design and Manufacturing (ESDM) sector, to encourage entrepreneurs and to encourage new investments and innovation in the sector.
13. National Centre of Excellence in Large Area Flexible Electronics is being set up in IIT, Kanpur with the objectives to promote R&D; Manufacturing; Ecosystems; Entrepreneurship; International Partnerships and Human Resources and develop prototypes in collaboration with industry for commercialization.
14. A project for setting up of incubation centre for development of ESDM industry at a total estimated cost of Rs. 47.10 crore including a Grant-In-Aid of Rs. 22.10 crore from Department of Electronics and Information Technology and contribution of Rs. 25 crore by the State Government of Bihar has been approved and administrative approval issued early in December, 2014.The project will be implemented by IIT, Patna, for Development of Product and IP creation in the ESDM sector especially in medical electronics.

Electronic Design and Manufacturing

ELECTRONICS INDIA
Billion Needs Million Chips

Rationalization of Tariff Structure in Budget 2014-15

Investment linked deduction was extended to Semiconductor Wafer Fabs units, BCD on telecom equipment not covered under the IT agreement of WTO increased from 0-10%. The excise duty was exempted on EVA sheets and back sheets and specified inputs used in their manufacture, excise duty on LED drivers and Metal Core Printed Circuit Board for use in manufacture of LED lights was reduced to 6%, and the SAD was exempted on import of inputs/components used in the manufacture of personal computers.

Setting up of Electropreneur Park

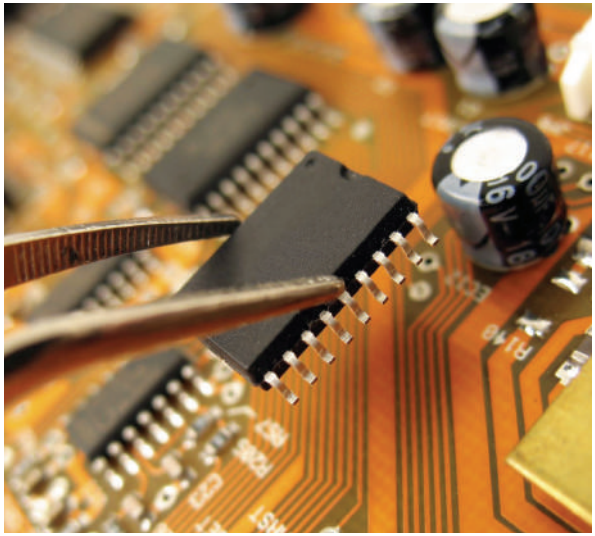
Approved on 5 June 2014 at an estimated cost of Rs.21.10 crore, this would be implemented by STPI, jointly with Delhi University and India Electronics and Semiconductor Association, Bangalore, for development of product and IP creation in the ESDM sector.

Electronic Development Fund (EDF)

The draft note for the Cabinet formulating the policy of Electronic Development Fund (EDF) to support Daughter Funds, including Early Stage Angel Funds and Venture Funds in the area of Electronics System Design and Manufacturing has been sent to Cabinet Secretariat for seeking the approval of the Cabinet on 5 November 2014.

Electronics Manufacturing Clusters (EMC)

The foundation stone for infrastructure development in two Greenfield Electronics Manufacturing Clusters



at Badwai, Bhopal and Purva, Jabalpur in the state of Madhya Pradesh was laid by Honorable Minister for Communications and Information Technology on 6 October 2014. Three new areas (Ramanagara, Karnataka, Ernakulam, Kerala, South 24 Parganas, West Bengal) have been identified and notified for Electronics Manufacturing Clusters for the purpose of MSIPS on 22 September 2014.

Modified Special Incentive Package Scheme (M-SIPS)

In the month of October, 2014, two new applications with investment of Rs. 702 crore in automotive electronics and solar photovoltaic have been received. The approval orders for six applications worth investment of Rs. 275 crore have been issued.

Global Innovation and Technology Alliance (GITA)

A proposal to fund Global Innovation & Technology Alliance (GITA) for a scheme to provide funding and support to industry and academic institutions for doing collaborative research has been approved to fund nine projects with a total contribution of Rs.15.56 crore over a period of two years. The focus areas for Call of Proposals include:

(a) Electronic products including Nano-electronic products and Telecom products
(b) Electronic Manufacturing Services

Special Manpower Development Program for Chips to Systems

This scheme will provide more than 50,000 industry-ready skilled manpower in the area of VLSI/ASIC Design, system on chip and system design at different levels of qualification.

Scheme for Skill Development in ESDM for Digital India

The initiative taken towards providing financial assistance to States and Union Territories for Skill Development in ESDM sector will provide job opportunities to students and fulfil the manpower requirements of the ESDM sector.

Visvesvaraya PhD Scheme for Electronics and IT

The PhD Scheme will give a thrust to research in areas of Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES), and would be focused on themes that have direct relevance to the NPE 2012 and the NPIT 2012.

Skill Development in ESDM Sector

The scheme for financial assistance to select eight States and Union Territories for Skill Development in the ESDM sector has recently been approved, with a budget of Rs. 113.77 crore. The objective of this initiative is to facilitate skill development in ESDM sector focusing on students and unemployed youth beginning from senior secondary school level to ITI, diploma, non-engineering graduates, etc. to increase their employability to work in Manufacturing and Service Support functions. The state of Karnataka has launched one course already and the other selected states and the three key implementing agencies are in the process of identifying state-level training agencies in the respective states for launching these courses very shortly. The initiative will provide job opportunities to students and fulfil the manpower requirements of the ESDM sector.

R&D in Electronics

Special Manpower Development Programme for Chips to System Design

This scheme has been envisaged in order to build capacities in the area of VLSI/microelectronics, bring in a culture of System-on-Chip (SoC) /System designing by developing working prototypes with societal applications using mostly in-house designed Application Specific Integrated Circuits (ASICs)/Integrated Circuits (ICs). The proposed programme will not only aim at broadening the VLSI design base in the country by generation of expertise and development of specialized manpower in this area but also take up new anddistinctive initiatives which will ensure moving up the value chain in the System Design Space. The proposed programme will be implemented at 60 institutions, including all IITs, all NITs, government-funded IIITs, CEERI, Pilani, IISc, Bangalore.

Intelligent Transportation System (ITS) Endeavour for Indian Cities

The main objective is to develop technology and product in the field of Intelligent Transportation System (ITS) in a collaboration mode with academies and industries. This project has led to development of indigenous ITS technologies suitable for Indian traffic conditions and demonstrated their benefits to the end users agencies and industries. Various products and solutions have been developed for Traffic control/ management, Intelligent Parking Lot Management System (ePARK), Red Light Violation detection, Traffic Information System. The technology of Wireless Traffic Control System (WiTraC) has been transferred to 8

manufacturers for commercial production. WiTraC technology is already being manufactured by the SMEs in the country. Thus this can be treated as a small contribution in the direction of the Make in India initiative of the government.

Technology Incubation and Development of Entrepreneurs scheme (TIDE) at Institutions of Higher Learning

To strengthen the Technology Incubation Centres and thus nurture technology entrepreneurship development, promote product-oriented research and development, encourage and accelerate development of indigenous products and packages and bridge the gap between R&D and commercialisation, financial support in the form of Grant-in-Aid is being given to incubating companies. Under this scheme, 27 TIDE centres have been set up at IITs/IIMs/NITs/premier institutes all over India, and 121 startups benefited out

of which 286 entrepreneurs emerged out which 34 are women entrepreneurs.

Magnetic Resonance Imaging (MRI) System

The Magnetic Resonance Imaging (MRI) technique is widely used for medical diagnostic imaging. The alternate technologies such as X-rays to image the body doesn't provide much information. The image is gray and flat. The overall contrast resolution of an X-ray image is poor. In order to increase the image contrast, medium such as barium or iodine-based contrast media is injected. The principal advantage of MRI is its excellent contrast resolution. With MRI it is possible to detect minute contrast differences in (soft) tissue. Another advantage of MRI is the possibility to make images in every imaginable plane.

This initiative of DeitY, Ministry of Communications and Information Technology will lead to development of a very sophisticated and important diagnostic tool for the people of India at a reasonable price and will also reduce dependance on foreign suppliers for such machines and save considerable amount of foreign exchange.

Development and Deployment of 6MV Medical Linac for Cancer Treatment

Developed for Radiotherapy for cancer treatment, the Linear Accelerator (LINAC) system developed by Society for Applied Microwave Electronics Engineering

& Research (SAMEER) for cancer treatment has been commissioned at Indian Institute of Head and Neck Oncology, Indore, Madhya Pradesh after seeking the requisite clearances from Atomic Energy Regulatory Board (AERB). The treatment of the first patient on this indigenously built LINAC was performed on 2 June 2014. The inauguration of the LINAC system was done by Honourable Speaker of the Lok Sabha and Honouruable Health Minister on August 26 2014. SAMEER has successful developed, deployed and transferred the technology in respect of LINAC to M/s Panacea Medical Technologies, Bangalore for commercialization on non-exclusive basis.

Cloud Services, MeghRaj

In order to utilize and harness the benefits of cloud computing, Government of India has embarked upon an ambitious initiative called GI Cloud also named MeghRaj. The focus of this initiative is to accelerate delivery of e-services in the country while optimizing ICT spending of the government.

The national cloud will help the government departments to procure ICT services on demand in the OPEX model rather than investing upfront on the CAPEX . The cloud services available on the national cloud are Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) and Storage as a Service (STaaS). Some of the features of the national cloud include self-service portal, multiple cloud solutions, secured VPN access and multi-location cloud. Required policies for the cloud usage by government, shall be prepared like application hosting framework, Cloud Security Policy, Risk Assessment Framework contractual templates, Service Level Agreements, On-boarding process, pricing and payment mechanism, etc.

A national cloud service portal will be developed for MeghRaj and portals of all the national clouds, dedicated and public clouds, e-Governance Appstore under MeghRaj will be integrated with this portal to give a unified access to all the users.

Features of National Cloud

- **Multi-Location Cloud:** The multiple cloud nodes will be set up across National Data Centers of NIC. This will give its users edge for optimal hosting or deployment of their applications and their management from the same cloud hosting control panel.
- **Self-service Portal:** Users can deploy and manage their cloud resources with ease.
- **Secure Cloud:** Multi-layered secured infrastructure being managed and monitored by highly skilled cyber security teams of NIC.
- **Secured Access:** Users can access cloud solutions using their own devices from anywhere at any time over the highly secured network using VPN.

National Cloud Service Offerings

The catalogue of cloud service offerings provide users the option to choose from preconfigured Web, Applications and Database Servers with Commercial/ Open Source System Software or bare minimum servers and storage. Application systems which are generic in nature for use by multiple government organizations are offered under Software as a Service (SaaS) model. Following are the services which are being offered:

- Web Server
- Application Server
- Database Server
- Development Server
- Basic Server
- Storage as a Service
- Software as a Service

e-District

e-District is one of the 31 Mission Mode Projects (MMP) under the National e-Governance Plan (NeGP). Department of Electronics & Information Technology (DeitY) is the nodal Department for e-District, which will be implemented by State governments through their designated agencies.

The Mission Mode Project (MMP) envisages leveraging and utilizing the four pillars of e-infrastructure namely, SDCs, SWANs, SSDGs and CSCs, optimally to deliver public services electronically to citizens at their doorsteps. Initially, only those high volume citizen-centric services will be taken up for implementation which have high priority for the State.

The following key principles were considered while implementing the e-District MMP National Rollout project.

1. **Making e-District Project service-oriented and Transaction-oriented:** Success of any MMP will be measured in terms of number of G2C transactions delivered per month across all services in the portfolio.
2. **Minimizing the Time to Benefit:** This objective is in terms of compressing the project timelines from conceptualization to completion, to deliver all the selected services across the entire State.
3. **Ensuring the Optimal Use of Infrastructure:** The objective is to optimally leverage the infrastructure created in the form of SDC, SWAN, SSDG, CSC and the other ICT infrastructure.
4. **Leveraging the Existing Applications:** In several States, there are already applications developed by NIC or by the respective departments internally or through private agencies. These could be part of an MMP project or a non-MMP Project. Irrespective of the lineage of such applications, the effort should be to leverage them and deliver the services through a single front-end i.e. either through State portal or through e-District portal, preferably through a unified delivery mechanism at the ground level.
5. **Attempting Rapid Replication:** Every State/ Union Territory should aim to take advantage of the successful implementation of applications that have become fully mature in other States or have been successfully implemented on a pilot basis within the same State.
6. **Redesigning the e-District Architecture:** The strategy should be design/redesign the e-District Architecture as per the above principles. Designing the right architecture is the key to success in the e-District rollout.
7. **Providing Flexibility in Implementation:** As the requirements vary widely across the States/ UTs as also the progress in e-Development, a key principle is to provide a degree of flexibility in implementation of the e-District MMP.

Common Services Centre 2.0

The Common Services Centres (CSCs) Scheme was approved by the Government of India in September 2006, to be implemented over a period of 5 years with viability gap funding to rural CSCs as per the 1:6 ratio for a period of 48 months. The scheme aimed for the establishment of 1 lakh ICT-enabled front-end service delivery outlets, equitably spread across rural India in the ratio of one CSC per six villages, thereby covering all 6 lakh villages. The current status as of 30 June 2014, a total of 135,598 CSCs is operational and out of which 134,956 CSCs are connected and offering various G2C and B2C services.

The impact assessment study was undertaken by independent agencies on functioning of CSCs indicating zones affected by left wing extremism, as well as in areas lacking broadband connectivity, reliable power supply, no standardization of services being rendered, concerns between relationship among implementations agencies (PPP) and VLEs, non-involvement of local government, inadequate infrastructure at CSCs, etc.

The Way Forward: The CSC 2.0 proposal has been formulated in pursuance of the government's commitment to set up CSCs in all 2.5 lakh panchayats to provide public services to citizens in rural areas. It is anticipated that the Electronic Service Delivery Bill which requires public authorities to deliver all public services electronically within a maximum mandated period, will shortly be passed into law. There is a push to make a large bouquet of online services available to rural citizens, including e-District services, that are already available in over 300 districts and expected to be made available in all districts in the next two years.

DeitY is also in the process of finalising a programme to implement the National IT Policy objective to make one person in every household digitally literate. The proposed CSC 2.0 Scheme envisages toinclude, strengthen and integrate the 1 lakh CSCs already operationalised under the existing CSC Scheme and operationalising an additional 150,000 CSCs. It is proposed to set up CSCs within the Gram Panchayat Office or Rajiv Gandhi Seva Kendra or point of termination for the National Optic Fibre Network (NOFN) or other appropriate public building. An integrated approach is proposed for four core components—the CSC Network, the State CSC Services Portal, a State-level Help Desk and the Technical Service Provider.

Open Government Data Platform

A data is said to be open if it is free to USE, REUSE AND REDISTRIBUTE by anyone

data.gov.in

Open Government Data (OGD) Platform India or data.gov.in is a platform for supporting Open Data initiative of Government of India. The portal is intended to be used by Government of India Ministries/ Departments in their organizations to publish datasets, documents, services, tools and applications collected by them for public use. It intends to increase transparency in the functioning of government and also open avenues for many more innovative uses of government data to give different perspectives.

The base Open Government Data Platform India is a joint initiative of Government of India and US Government. Open Government Data Platform India is also packaged as a product and made available in open source for implementation by countries globally. The entire product is available for download at the Open Source Code Sharing Platform, GitHub.

Open Government Data Platform India has four major modules as detailed below, implemented on a single Drupal instance, an Open Source-based Content Framework Solution.

- **Data Management System (DMS):** Module for contributing data catalogues by various government agencies for making those available on the front end website after a due approval process through a defined workflow.
- **Content Management System (CMS):** Module for managing and updating various functionalities and content types of the Open Government Data
- Platform India Platform.
- **Visitor Relationship Management (VRM):** Module for collating and disseminating viewer feedback on various data catalogues.
- **Communities:** Module for community users to interact and share their zeal and views with others who share common interests.

KEY FEATURES

- Responsive web layout design
- Better user experience and efficient discoverability of resources
- Usage trend in Tag Cloud
- Organized cataloging of similar resources (Datasets/Apps) like time series datasets of Consumer Price Indexes (CPIs) comes under a catalogue
- Additional options to search and filter resources by Frequency, Sectors, Coverage etc.
- Catalog revisions with time stamp
- Enhanced User Experience for time series-based browsing through the Visualization Gallery
- Dedicated Event Section for contests and showcasing community contributed apps
- New map-based interface for World Wide Datasites
- Supports Semantic Web standards using RDF
- Application Programming Interfaces (APIs) to query within datasets
- New Enhanced Visualization Platform
- Separate instance for its demo site with role-based credentials to have a first-hand feel of the workflow
- Option to enable SMS and Email alerts

World Bank Project

E-delivery of Public Services Development Policy Loan

The Government of India received a loan from the World Bank towards programme management and financial support for the National e-Governance Plan (NeGP), for an amount approximately Rs.700 crore.

"The new government would like India to return to a growth rate of 9 percent and the World Bank fully supports this growth"

Jim Yong Kim, President World Bank Group

The loan is envisaged to support NeGP's countrywide plans of increasing online services for citizens in their locality, to improve the quality of basic governance in areas of concern to the common man.

DeitY has issued detailed guidelines to support other Ministries and Departments as well as States and Union Territories in formulation, development and funding of suitable project proposals. These guidelines provide a comprehensive framework including a detailed Project Report Template for submission of proposals based on indicative policy areas which are as below:

Policy Reform Areas

- Policy for institutional strengthening of State Governments.
- Policy for Public Private Partnerships to improve service delivery.
- Policy on use of Open Standards to ensure interoperability and avoid vendor lock-in.
- Policy for Inter-agency Coordination, Monitoring
- Policies for access to citizen services through mobile platform and increasing the pace of broadband penetration.
- Policy for mandating increased participation of users.
- Policy on service orientation for government processes and officials.
- Electronic Service Delivery Act
- Policy on uniform and predictable verification of e-service users.

World Bank Group president Jim Yong Kim meets Narendra Modi in New Delhi

Indicative Targets

- Strengthening State institutions
- Development of technical standards for e-Governance
- Improved inter-agency coordination and monitoring of e-Governance

Preferred areas of possible intervention

Policy	People	Technology Platforms
National IT Policy Implementation Support: E-Literacy: Pilot projects on different models for e-Literacy; Mandatory Delivery and Affordable Access: Urban CSCs – project preparation and implementation support; ICT for Education, Health, Rural Development, RD and Financial Services (pilots)	Capacity Building including training programmes to enhance the capacity of government officials at all levels	Language and Localization
Model ESD Rules including guidelines for implementation of ESD Rules in states	Empowerment of grass root level functionaries	Cloud – IaaS, PaaS, SaaS including implementation of projects on rapid replication basis
Recognition as CSCs	Knowledge Management	GIS including pilots on use of GIS platforms in e-gov applications
Mobile Enablement	HRMS at Centre/States	e-Authentication, Mobile , Standards, Document /Certificate repository
		Web Portal Services including improvement and certification of government web sites

- Improving access to services by using the mobile platform while increasing the pace of Internet penetration
- Facilitating increased participation of users in design and evaluation of e-Governance projects
- Improving service orientation of government processes and officials
- E-Services Delivery Act (ESD Act)
- Uniform and predictable verification of e-service users

The programme has gained considerable momentum. DeitY has received several project proposals relating to varied areas/sectors ranging from Health, Education, GIS, Mobile Enablement, Cloud, etc.

Project Development Fund (PDF)

To provide assistance for project formulation and development to Ministries/Departments of Government of India and to States/Union Territories, a corpus fund titled Project Development Fund (PDF) with an initial contribution of Rs. 20 crore has also been set up by DeitY to cover the following initiatives:

- Initiatives associated with new Mission Mode Projects (MMPs)
- Initiatives associated with areas other than the existing MMPs
- Pilot or prototype projects for e-Governance
- Other innovative projects

E-Greetings and e-Sampark

E-Greetings and e-Sampark are innovative path-breaking initiatives for enabling productive government and citizen engagement in governance. e-Sampark is the first dedicated initiative to create a unified database of all government officials, elected representatives and other professionals. The e-Greetings initiative provides a much needed in-house facility to enable various levels of the government to connect in a personalized manner.

E-Greetings

The e-Greetings portal aims to promote a contemporary and eco-friendly method of sharing greetings for national holidays and other national occasions by government officials and agencies to colleagues and friends.

The portal allows users to select and send greetings from multiple occasion-specific templates. Departments can also customize the greetings by adding taglines and messages related to their programmes and schemes. Similarly, users can observe national and international Days and disseminate informational messages along with greetings related to such occasions, facilitating the circulation of educational and informational messages to citizens.

e-Sampark

e-Sampark aims to create a repository of the contact details of all elected representatives, government officials and professionals across India. It has two components:

1. Enabling nodal officers across various ministries, departments, States and Union Territories to upload contact details.
2. Enabling dispatch of mailers and SMSs to the officials included in e-Sampark. The mailers and SMSs can be tailored to specific target audiences based on various categories, for example their profession, ministry, geographical location and so on.

Both initiatives will have a huge impact on citizen engagement. Currently, there is no provision for any Department or Ministry to reach out to its employees, since no unified database of contact details of government officials is available. Creation of a single repository will provide the e-Governance framework a platform to reach out to specific target groups and optimally use them in capacity building of the government.

Other Projects

National Cyber Security Coordination Centre

It will be set up to ensure secured cyber-space within the country.

Continuous Evaluation and Rapid Assessment

Continuous evaluation and assessment of various e-Governance services are proposed. This will give regular feedback about delivery of electronic services, which would be used to improve the service delivery.

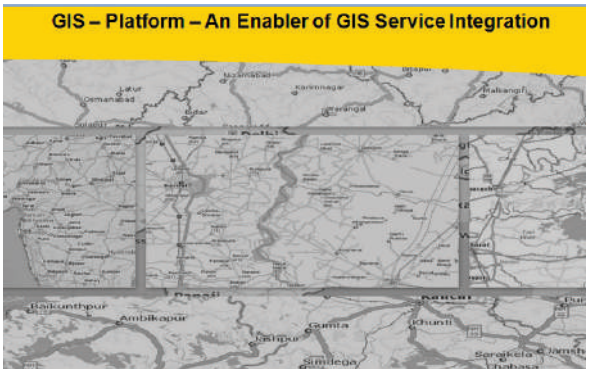
Virtual Classrooms

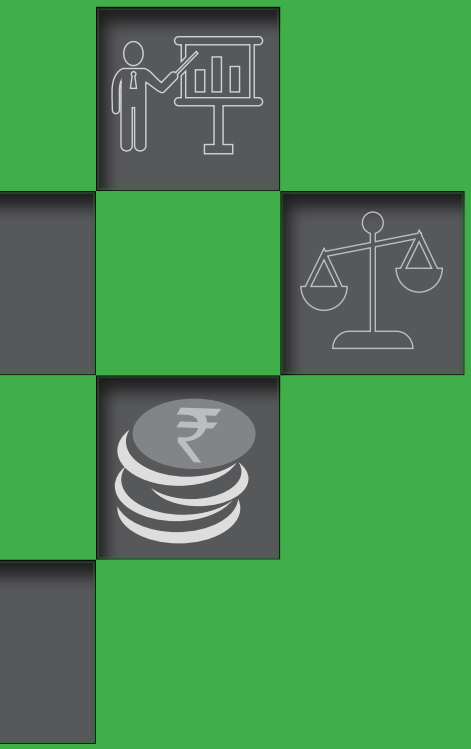
Government of India has undertaken an initiative on enabling all schools with Virtual Classrooms as learning support services including ICT-enabled training, teaching and assessment services. The working committee has recommended the project for implementing virtual classrooms in 3500 schools and 50 DIETS .

Geographic Information System (GIS)

Various government services can be offered in a better way by proper use of GIS technology in the e-Governance applications. National Geographic Information System (NGIS) is being implemented to integrate geo-spatial data available with a number of organizations such as Survey of India, National Informatics Centre (NIC), NRSA and Ministry of Earth Sciences (MoES) to develop a GIS platform for e-Governance applications.

This GIS platform will be leveraged as a service for the benefit of various Mission Mode Projects and other e-Governance initiatives. NGIS can also be leveraged for monitoring the physical progress of projects, disaster management and specialized needs of public safety agencies.





Attached Offices and Autonomous Organisations

National Informatics Centre (NIC)

National Informatics Centre (NIC) was established in 1976, and has since emerged as a prime builder of e-Governance applications up to the grassroots level as well as a promoter of digital opportunities for sustainable development. NIC, through its ICT network, NICNET, has institutional linkages with all the departments of the Central government, 35 State governments and Union Territories, and about 648 District Administrations of India. NIC has been instrumental in steering e-Governance applications in government departments at the Centre, States, Districts and Blocks, facilitating improvement in government services, wider transparency, promoting decentralized planning and management, resulting in better efficiency and accountability to the people of India.

Informatics-led development programme of the government has been spearheaded by NIC to derive competitive advantage by implementing ICT applications in social and public administration. Various projects undertaken by NIC are:

Krishi Video Advice

The main objective of Krishi Video Advice is to provide video-based interaction on agro-advisory service between farmers and scientists at Kisan Call Center of States. The project is a software-based solution to provide live video-conferencing facility of farmers with the scientists sitting at KCC from Common Service Centers, National Optical Fibre

Network Nodes, and also high-end smartphones from villages. The project is primarily based on high-speed 3G network connectivity to enable the clear live video-conferencing with experts by the farmers. The web-enabled application helps in capturing farmer call details along with photos and video of farmers and facilitates organization of video conference with scientists. The call data is examined by the expert at KCC for providing advice on the issues on live video chat using web-based video conferencing tools.

E-Labs

When an equipment or material has to be tested, time is often a critical factor. So the entire testing has to be carefully planned, taking into consideration the standards on one hand and required attributes of the equipment or material on the other hand. E-Labs software lets users plan tests, record and generate the test results as well as compare them.

The testing functions can be distributed to a team. It has the facility to generate unique 2D bar codes for each test material, equipment or part of the equipment to be tested. The same 2D bar code can be used for time series analysis. Critical test criteria required for a particular material or equipment, if defined once need not be repeated again. Same software can be used for material testing, equipment testing, any other testing or quality control purposes.

Curriculum Monitoring Information System (Cmis)

This is an initiative of Andhra Pradesh Nurses, Midwives, Auxiliary Nurse—Midwives and Health Visitors Council (APNMC) to strengthen monitoring and implementation of Nursing and Midwifery curriculum across all government and private institutions in Andhra Pradesh. The project is a joint effort of APNMC, NIC and SNEH. The CMIS can track a student from the day of admission to passing out, registration details and future qualifications obtained if any.

EDSoft

EDSoft is an online collection and monitoring of electricity duty in Odisha. The idea was initiated by the Government of Odisha in 2011 because of disputes with CPP/IPP leading to huge revenue loss to the Government of Odisha. The Odisha government partnered with NIC for the cause. The focus of EDSoft was to make available required basic data, which was lost due to frequent change of office building/office/officers etc., convincing consumers about calculation of ED dues with different conditions of payment and metering status, overcome acute shortage of manpower for meter reading/inspection and maintenance of various information etc. and Verify Treasury challans received by Inspectorate officials and Reconciliation.

Electronic Medical Records (EMR)

e-Hospital is a state-of-the-art Information and Communication Technology-based solution to manage the ever expanding volume of health information and for harnessing the latest in Information Technology for the benefit of patients, doctors, nurses, paramedical personnel and other professionals, administrators and providers of healthcare in hospitals. It facilitates the management of medical records of patients at various stages even during his stay in hospitals. It generates statistics and reports to support better planning. It also facilitates online documentation and biometrics-based digital signature.

Girl Child Protection Scheme

This project is aimed at preventing gender discrimination by empowering and protecting the rights of girl children through direct investment from the government. The Girl Child Protection Scheme enhances the status of the girl child and promotes adoption of small family norm by ensuring holistic development of the girl child for a bright future. The project ensures registration, verification and authentication of enrolments, generation of certificates, grievance management, etc.

Gram Vikas (Smart Village)

Gram Vikas (Smart Village) is a software for rendering various services at the village level. The software provides various services like Tele-Education, Tele-Agriculture, Tele-Veterinary, Tele-Medicine, m-Bazar, application for certificates, application for benefits (financial and social), etc. It also provides support services like translation of knowledge into local language, counselling, marketing of improved products and services produced by local communities, tendering, bidding, auctioning and e-sales.

HORTNET

The HORTNET software of National Horticulture MISSION (NHM), has been developed as a farmer centric portal, nhm.nic.in, to accomplish e-Governance in NHM envisaging total transparency in all the processes of workflow i.e. online application filing, authentication, processing and online payment to the beneficiary's bank account, SMS-based

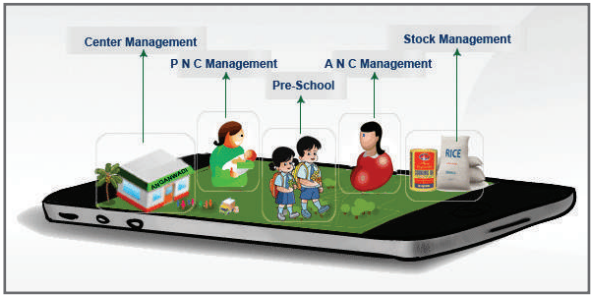
e-alerting etc. The project enables all stakeholders to gain access to information and data on real-time basis for ensuring better delivery mechanism and efficient administration of various schemes. It has a single sign-on which can be extended to farmer-centric schemes of horticulture, agriculture and allied sectors.

m-Supply-Chain

The main objective of mFoods project is to ensure timely supply of fortified nutritious food to 223 ICDS projects benefiting 30.62 lakh children and women throughout the state of Andhra Pradesh. In this project the Anganwadi workers/CDPOs can generate the indent and send it via SMS. A centralized system keeps track of indents along with date and time; in response the supply schedules are updated. Corresponding alerts go to the field and transporters. The Anganwadi workers/CDPOs can acknowledge the food items received through mobiles. Delays, wrong indents, non-indents, non-supplies, wrong supplies, delayed supplies can be tracked by the stakeholders. Thus the entire supply chain is becoming efficient and streamlined. This project is being successfully implemented by AP Foods (a Government of Andhra Pradesh enterprise) for the food supply chain management to the Anganwadis.

Mobile Applications for Anganwadis

The MAA project has been implemented to support and closely monitor the status of improvement of the nutritional and health status of children in the age group of 0-6 years. It also supports and monitors the Anganwadi activities for proper psychological, physical and social development of children. In addition to the above it also helps to monitor mortality, morbidity,



malnutrition, school dropout, health education activities. MAA bridges the communication gaps and ensures timely flow of information among the stakeholders in real-time, effectively and efficiently.

CDAC

Centre for Development of Advanced Computing

PARAM Shavak - Supercomputer in a Box Solution

The product PARAM Shavak, Supercomputer in a Box solution, aims to provide computational resource with advanced technologies to perform high-end computations on a larger scale for scientific, engineering and academic programmes. This will address research using modelling, simulation and data analysis. The system consists of at least two multicore CPUs each; with at least 10 cores along with either one or two n of many core or GPU accelerator cards. The entire configuration is available in a single server as a tabletop model. Unlike the traditional HPC systems or supercomputers, this system does not require specific support infrastructure like precision air-conditioned environment, controlled humidity etc. which makes it an ideal solution for high-end computation.

Integrated Indian Languages Virtual Keyboard on Android platform

For effective delivery of mobile governance (m-governance) services and usage of ICT, Indian language support in tablets and mobile devices are essential. C-DAC's On Screen Keyboards provide this facility and support over twenty local languages.

Bharat Operating System Solutions (BOSS)

BOSS GNU and Linux distribution has been developed by C-DAC for enhancing the use of open source software throughout India. BOSS releases come for desktops, servers, notebooks and educational versions for schools. The latest Release of BOSS GNU/Linux Version 6.0, codenamed Anoop, is coupled with GNOME Desktop Environment 3.14 version with wide Indian language support and packages, relevant for use in the government domain. This release aims more at enhancing the user interface by coupling latest applications from the community. The distribution includes over 13,500 new packages, for a total of over 58,383 packages.

Sakal Bharati Font

Sakal Bharati is a Unicode based Open Type font that includes 11 scripts in one font, namely, Assamese, Bengali, Devanagari, Gujarati, Kannada, Malayalam, Oriya, Punjabi, Telugu, Tamil and Urdu. It has used Mono

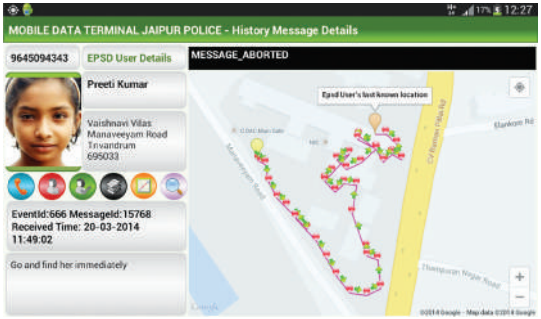
thick glyphs that results in equal thickness of horizontal stems and vertical stems for all scripts. The same letter height is applicable for all 11 scripts. There are more than 3,698 glyphs in the font. The keyboard engine of Sakal Bharati provides support for typing in Hindi and Marathi language using Open Type Fonts.

JATAN – Virtual Museum Builder

C-DAC has developed a comprehensive software solution known as JATAN, that is a Virtual Museum Builder. JATAN provides multimodal access to digital collections through mobile, web, kiosks and virtual worlds. Such virtual museums can provide information about history of civilizations, lifestyles, culture, traditions, ancient knowledge of science and technology and overall human evolution. It allows the museum collections to be accessed online for the benefit of tourists, teachers, students and researchers. JATAN has been deployed at 10 National Museums.

Electronic Personal Safety System (e-PSS)

e-PSS is an integrated solution for personal security where instant police assistance is provided to a person in extreme distress or feeling high threat to safety. The



electronic personal safety system has two components. One, the safety device itself and the other is the back-end infrastructure. The safety device is intended to be used by citizens. The corresponding back-end system connects to the police to provide mechanisms for tracking a person who is in a vulnerable situation.

Wireless Traffic Control System (WiTRAC)

C-DAC's Wireless Traffic Control System is a demand-activated road traffic signal controller that controls the signal lamps over wireless medium. WiTraC is a

cost-effective traffic signalling solution as this can be installed without digging and ducting across the carriageway, and use of hume pipes and armoured cable are avoided during the process of signal installation. WiTraC is designed to operate on solar power. This has GPS-enabled Real-time Clock (RTC) for distributed time synchronization. The result is easy installation, high availability and less cost of installation.

TARANG: Digital Programmable Hearing Aid

C-DAC has designed and fabricated an Application Specific Integrated Circuit NAADA through which both body worn and behind the ear type hearing aids TARANG, have been developed, with maximum 80 dB gain, covering hearing impaired patients with mild, moderate and profound hearing loss. Countrywide field trials were carried out in leading medical institutions and hospitals.

Wireless ECG Sensor

The ECG sensor is attached to the patient with two electrodes on the left and right side of the chest. The signal obtained from the body is filtered and amplified. The sensor outputs an analog signal which is then converted by the analogue-to-digital

converter (ADC). The serial-to-Bluetooth module transmits the digital output of the ADC to the cell phone. On the phone the sampled ECG is displayed.

Wireless Sensor Network Development Kit (WSNDK)

WSNDK by C-DAC has multiple features that enable researchers and students to explore different aspects and develop different applications in the field of wireless sensor network. Its low power design and medium range communication link make it suitable for various applications in agriculture, traffic control, disaster relief, health monitoring, home automation, etc.

Endpoint Security Framework

Endpoint Security Framework protects endpoints from threats through unknown applications, devices, web access and vulnerabilities in known applications.

National Informatics Centre Services Inc.

National Informatics Centre Services Inc. (NICSI) is a Section 23 Company and facilitator to the user Ministries, Departments and other organisations in the government sector to provide ICT solutions and services, including hardware, systems and applications software, software development, intra-networking, video conferencing, ICT consultancy, data centre physical infrastructure services, security, computing devices, etc.

NICSI is providing ICT solutions and services to various DeitY programmes, some of which are:

- National Knowledge Network (NKN)
- National Data Centre (NDC)
- SWAN in 9 States
- Information Security & Education Awareness (ISEA)
- Open Technology Centre (OTC)
- CIC Projects in North East States (including Sikkim) and J&K
- VSATs for CSCs Project
- AppsStore
- Aadhar-enabled Biometric Attendance System
- e-Procurement/e-Office/e-Hospital/Core Banking
- Jeevan Pramaan Awareness
- e-Mail Solutions

CHOICE

Build capability to provide end-to-end ICT services to customers at competitive rates

EFFICIENCY

Build and strengthen organizational capacity

LEADERSHIP

To increase awareness of services and become preferred technology service provider

NEW TECHNOLOGY

Promoting and facilitating use of ICT in governance

RESPONSIBILITIY

Bring IT within easy reach of the common man

Figure 1

NIELIT

National Institute of Electronics and Information Technology

NIELIT is a 100% owned organization of the Department of Electronics and Information Technology (DeitY) and is actively engaged in the development of human resources in the areas of IT; electronics; communication technologies; hardware; cyber law; cyber security; IPR; GIS; cloud computing; ESDM; e-Governance and related verticals. NIELIT offers courses both in the formal as well as the informal sectors of education and is also one of the National Examination bodies that accredits institutes for conducting of courses in the Non-Formal IT and Electronics Sectors.

NIELIT has been mandated to undertake various projects under Capacity Building in IECT with the objective of creating human resources at various levels including development of employment and self-employment linked quality and cost effective training programmes, besides conducting IT Literacy programmes for the masses, specially targeted towards the rural/ underdeveloped areas in the country. NIELIT is also the preferred agency for many State Governments for rolling out IT Literacy programmes for its employees and the masses.

Online Applications/Services of NIELIT for Good Governance

Online Registration of Students: The process of registration of students is available as an online web-based facility with provisions for online acceptance of registration fees through various payment modes like debit or credit card and through Internet banking.

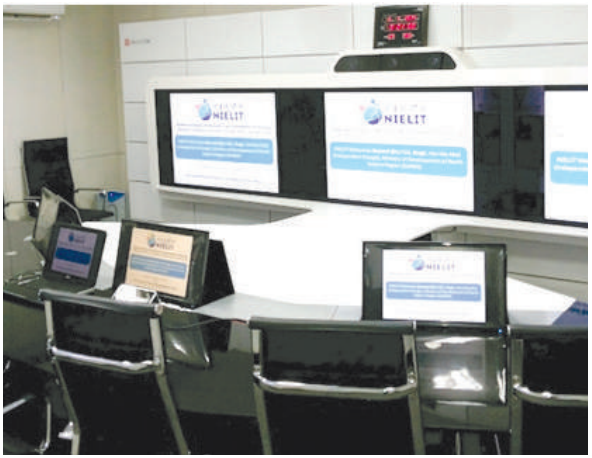
Online Placement Portal: Placement Portal is an initiative by NIELIT to provide better job opportunities to its students. It also helps NIELIT to keep track of the placements of its students and to ascertain the efficiency of the courses.

Online Submission of Application for Accreditation: NIELIT is in the process of building capacity in the area of education and training and therefore efforts are being made to put in place a robust and reliable online facility, which would assist the training institutions to submit applications and relevant fees required for running NIELIT Accredited Courses.

Activity Information Management System (AIMS): NIELIT has developed AIMS to monitor the various activities covering building project monitoring, training projects monitoring, event information, finance, administration, vigilance information, beside tour management details of senior NIELIT Officials. The User Management System, Login Management System, Building Project Monitoring System, Event Management, Tour Management and other details are available online on NIELIT website.

Smart Virtual Classroom

With a view to connect all NIELIT Centres in the country for improving the quality of education imparted to students specially belonging to the remote corners of India, NIELIT has set up Smart Virtual Classrooms at its centres for carrying out



A Smart Virtual Classroom in NIELIT

multi-casting, video conferencing, video-streaming and virtual classroom sessions. The smart virtual classrooms have been set up at all North-East Centres and at NIELIT Centre Ajmer, Aurangabad, Chandigarh, Calicut, Srinagar, Gorakhpur, Kolkata and Chennai.

With the installation of virtual classrooms, the students in remote areas will be benefited to a large extent as they can access the lectures delivered by expert faculties through video conferencing from any part of the country. Also, the e-Contents, tutorials and video sessions of expert lectures delivered will be stored at a central storage server which can be accessed later by any student on demand basis.

Development of E-Contents and Availability of CCC E-Contents in 22 Indian Languages

The e-contents of the immensely popular NIELIT's Course on Computer Concepts (CCC), which aims to equip a person to use a computer for his/her day-to-day needs, is available in 22 Indian languages, free of costs. NIELIT is also in the process of developing e-contents for its various other courses to promote 'Anywhere- Anytime' Learning. Development of e-contents in respect of 81 modules is under process.

Spectrum of NIELIT Courses

Primary Skills	Secondary Skills	Tertiary Skills
• Awareness in Computer Concepts (ACC) – 20 Hrs • Basic Computer Course (BCC) – 36 Hrs • Course on Computer Concepts (CCC) 80 Hrs • CCC + - 126 Hrs • Expert Computer Course (ECC) – 200 Hrs	Non Formal • 'O' & 'A' Level in • Information Technology • Hardware • Multimedia • Bio-informatics • Certification in Information Security • Diploma/ Certificate courses in e-Governance, GIS, IPR, Cloud Computing etc. • Skill oriented Short Term Courses (duration less than 1 year) Formal • BCA • PG Diploma / Diploma in Electronics, Computer Science, Telecom	Non Formal • 'B' Level in IT, Bio-informatics • 'C' Level in IT Formal • Master in Computer Applications (MCA) • B.Tech in Computer Science Engineering • M.Tech in Electronic Design Technology • M.Tech in Embedded Systems • Ph.D (yet to start

Media Lab Asia

Media Lab Asia has been promoted by DeitY as a not-for profit-company. The objective of the company was to bring the benefits of ICT to the common man. It started with functional activity areas such as World Computer, Bits for All and Tomorrow's Tool. However it was later changed to application areas such as healthcare, education, livelihood and empowerment of disabled. Since then the company has taken up 75 development products and some of the projects are now being rolled out at the national level.

The projects initiated by Media Lab Asia are:

- Chanderi ICT for Integrated Development Program (CIIDP) in Chanderi, Madhya Pradesh.
- Health Associado™ - Rural Health Management Information System using mobile and tablets.

Chanderi ICT For Integrated Development Program

The objective of the project was to make Chanderi an ICT-enabled community through digital development programmes. It aims at integrated development of cluster and socio-economic empowerment through education, healthcare, social entrepreneurship, preservation of culture and heritage, online marketing, market linkages, tourism development. During the project period a number of websites were developed which present socio-cultural characteristics of Chanderi. This helped in digitizing the knowledge of Chanderi. Also, it increased the visibility and made Chanderi popular in the virtual world.

A design library has been created which has more than 10,000 designs. The Centre has helped in reviving old designs and made available new designs, therefore more number of designs are being made in the looms. 90% of the weavers get designs made from the Centre.

Health Associado™ - Rural Health Management Information System using Mobile/Tablets

Health Asociado™ is a system for health data collection and follow-ups (reminders, alerts) using mobile devices. Health workers use mobile phone for data collection and follow-up of immunization, ante-natal care, family welfare and diseases. It empowers the health workers for timely collecting of health data and reduce the burden of manual record keeping. A centralized server is used for storing the collected data in a database. The system also generates work-plans for health workers to schedule their tasks. Effective planning activities can be conducted by analysing the data collected. This process can help in improving the health of the citizens by building community awareness on public health and building a well-planned and organized health care ecosystem.

Some of the States have already taken the initiatives of implementing the public health monitoring tool; some of the new AIIMS are interacting with Media Lab Asia to implement this initiative in their field

practice area for further modifications/enhancements. Health Associado™ has been deployed at 20 PHCs/ CHCs/ BPHCs of Tirur Taluk of Malappuram district, Kerala and 7.2 lakh population has been registered with the system. The same concept has been pilot tested at Ballabgarh in collaboration with AIIMS, New Delhi. Based on this Media Lab Asia's initiative, Department of Health and Family Welfare, Government of Kerala has taken up a state-wide roll-out.

NIXI

National Internet Exchange of India

The National Internet Exchange of India is the neutral meeting point of the ISPs in India. Its main purpose is to facilitate exchange of domestic Internet traffic between the peering ISP members. This enables more efficient use of international bandwidth, saving foreign exchange. It also improves the quality of services for the customers of member ISPs by avoiding multiple international hops and thus reducing latency.

NIXI is a not-for-profit organization under section 25 of the Companies Act 1956, and was registered on 19 June 2003. NIXI was set up for peering of ISPs among themselves for the purpose of routing the domestic traffic within the country, instead of taking it all the way abroad, thereby resulting in better quality of service (reduced latency) and reduced bandwidth charges for ISPs by saving on International Bandwidth. NIXI is managed and operated on a neutral basis, in line with the best practices for such initiatives globally.

Launch of . ભારત in Gujarati and . ভারত in Bangla script

The Internet is a global resource having widespread applications in the socio-economic development of the country. Local languages play a critical role in making the Internet more inclusive by widening the knowledge base across communities in the native language and promoting the use of local language content.

Till now websites were depicted using English language, however Internationalized Domain Names (IDNs) enable domain names to be represented in local language characters. IDNs provide depiction of websites in local languages. For example www. भाषा.भारत, www. ભાષા.ભારત, www. ভাষা.ভারত, etc.

This feature is expected to enhance the reach and relevance of Internet in remote and far flung villages, further bridging the digital divide.

Presently .Bharat has been delegated in seven of the Indian languages, namely, Hindi, Bengali, Gujarati, Punjabi, Tamil, Telugu and Urdu. Earlier, . भारत was launched in Devanagri script which covered Hindi, Marathi, Bodo, Dogri, Konkani, Maithili, Nepali and Sindhi-Devanagari.

Now it is proposed to launch . ભારત, . ভারত written in Gujarati and Bangla script respectively on 25 December 2014, on Good Governance Day.

The launch will involve, the Honourable Minister unveiling portals such as ગુજરાત.સરકાર.ભારત , પંચાયત.ગુજરાત.સરકાર.ભારત, in Gujarati and এসএনএলটিআর.ভারত, রবীন্দ্ররচনাবলী.ভারত in Bangla.

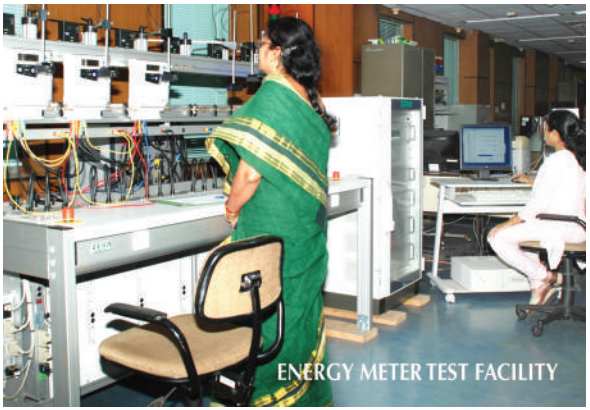
STQC Directorate

STQC
Government of India
Department of Electronics & Information Technology
Standardisation Testing and Quality Certification Directorate

Standardisation Testing and Quality Certification (STQC) Directorate is an attached office of the DeitY, which provides quality assurance services in the areas of Electronics and IT through countrywide network of laboratories and centres. The services include testing, calibration, IT and e-Governance, training and certification to public and private organizations.

Besides testing and calibration, STQC has specialized institutions such as Indian Institute of Quality Management (IIQM) for quality-related training programs, Centre for Reliability (CFR) for reliability-related services and Centre for Electronics Test Engineering (CETEs) for skill-based training.

In the area of IT and e-Governance, STQC provides assurance services through its IT Centres for Software Quality testing, Information Security and IT Service Management by conducting testing, training, audit and certifications. STQC is responsible for maintaining e-Governance standards. Based on this concept a Conformity Assessment Framework (CAF) for e-Governance projects has also been developed and is in operation. Two IT test laboratories, at Bangalore and Kolkata have received accreditation from American Association for Laboratory Accreditation.


ENERGY METER TEST FACILITY

Common Criteria

The project has enabled security testing and certification of IT products to ensure safe and secure governance and establishes a comprehensive infrastructure and capability for testing and certification of IT products. The project has helped India become an Authorizing Nation member of Common Criteria Recognition Arrangement (CCRA). It has led to establishment of certification body and test laboratory for security testing and certification of IT products.

ERNET India

ERNET India is an autonomous scientific society of Ministry of Communications and Information Technology. ERNET has made a significant contribution to the emergence of networking in the country. It practically brought the Internet to India and has built up national capabilities in the area of networking, especially in protocol software engineering. Over a period of years, it has successfully built a large network that provides various services to the intellectual segment of Indian society i.e. the research and education community. To keep pace with developing technology and enhancing innovation, ERNET focuses on research and development in newer areas like Internet of Things (IoT).

ERNET India is involved in various R&D projects spanning the wide domain of cloud-based e-learning services, 6LoWPAN (Lowpower Wireless Personal Area Network) etc. ERNET contributed along-with DeiTY in taking the IoT technology concept at the policy level during the year 2014 and organized an IoT Ideation workshop, Interim IoT framework report and Draft IoT policy.

(A) ICT Vocational Centres for Childrens with Disibilities

This project was designed for inculcating computer literacy, enhancing educational skills and providing job-oriented training to disabled children to become employable. Many barriers have obstructed the optimal usage and success level of the tools and technology in aiding the disabled people. So, to bridge this gap and considering the extent of its impact, ERNET initiated a Department of Electronics and Information Technology funded project for providing educational access through assisted technology for children with disabilities. The project has been initiated in two-phased approach.

(B) Mobile IPv6 Test bed

Mobile IPv6 Test bed for mobility management over heterogeneous access networks is a joint project between ERNET India and Indian Institute of Science (IISc) Bangalore which is funded by DeitY. This project objective is to deploy Mobile IPv6 test bed and study network layer mobility management issues, design typical mobility scenario and measure performance metrics such as handover latency, packet loss and also conduct dual stack mobility tests (DSMIPv6) between IPv4 and IPv6 networks. The Mobile IPv6 test bed includes WiMAX, WLAN and 3G access networks connecting IPv6 enabled ERNET backbone for mobility demonstration.

(C) IPv6 Project

ERNET has created the Central Facility for IPv6 Training and provide the environment to users for Hands-on IPv6 configuration on DNS, mail server, proxy, web-server using virtual machines. For capacity building in the area of IPv6 to enhance the usage and deployment of IPv6 infrastructure in the country, ERNET will provide the training under the Project IPv6 Training Programme for Staff of Government/Ministries and Institutions specially in Government Organizations and Associated Institutions funded by DeitY.

Software Technology Parks of India

Software Technology Parks of India (STPI), an autonomous society under DeitY was set up in 1991, with the objective of promoting software exports from the country and played a seminal role in this regard. Starting with a few centres in 1991, STPI has grown to 53 centres all over the country. STPI has had a nucleating effect on the growth of software exports from these locations. Administration/Implementation of STP/ EHTP schemes through STPI centres has generated employment and entrepreneurial opportunities across the country. STPI also provides High Speed Data Communication (HSDC) services and Incubation services to IT/ITeS/ESDM industry.

Computerization of STPI

With a view to enrich customer experience, STPI is implementing an integrated computerization and e-Governance project that has far-reaching outcome and benefit for the Software, Electronics and Hardware industry in India. STPI is committed and constantly looking for innovative ways and means to improve services to the industry. The integrated computerization project is a step in this direction. The project addresses requirements of the industry for an online interaction, re-engineered business processes, electronic work-flows and processes. The project is being implemented by M/s Infosys Ltd. on transaction based model.

The project aims at automation of end-to-end processes cutting across about 200 identified services of STPI.

Stakeholders in the project include both units registered with STPI and units not registered with STPI, customers of STPI for DataCom and Incubation services, STPI employees, STPI vendors and partners and public at large.

Apart from the often quoted benefits of e-Governance such as transparency, faster turnaround time and ease of use, the project is expected to aid the government in exceptional quality of data for the planning purpose. The project establishes interconnection with other line departments within the government. Organizations such as DGFT,RBI,and Customs shall be interconnected with this service delivery platform. This data-centric platform will ensure accuracy of information, speed of information, agility and ease of access of information, for the stakeholders. Another unique feature of this platform is Business Idea Competition platform to encourage varied communities to come up to a competitive national and international landscape of business and success.

With the services going online, the customers, partners and employees will receive benefit of electronic on-line services, faster turnaround time and reduction of drudgery associated with paper based processes. Empowerment is yet another goal that the project achieves via access to information. The project will be implemented by 2015.

Financial inclusion through CSC

Banking through CSC

As one of the world's largest government-approved ICT-enabled network, and in view of the advantage CSCs enjoy due to their location, accessibility and availability of ICT infrastructure, CSCs are ideally positioned to strengthen India's banking scenario by extending the business correspondent (BC) network. Agreements to conduct BC work have been signed with all 26 PSU banks. Other than that, five private banks, one cooperative bank from Jharkhand and six Regional Rural Banks too have signed agreements with Special Purpose Vehicle. At present, over 24,000 CSCs across India are delivering banking services by acting as Business Correspondents. In the last two years, transactions recorded have crossed Rs. 1.75 crore.

CSC SPV has also recently launched e-KYC-based services through Punjab National Bank and UCO Bank. Till 18 November 2014, over 1.65 lakh e-KYC transactions have been recorded through CSCs. DFS in a meeting held in October, 2014 has directed all CSCs to operate as BCs in order to deliver banking services.

Insurance Service

Insurance sales and service was launched on the e-KYC platform through the CSC network on 6 August 2014. More than 18,000 VLEs have registered for Rural Authorized Persons (RAP) training. Since the beginning of August 2014, more than 1,420 VLEs have been licensed for the sale and service of insurance products. Till date Life Insurance Renewal Premium of approx. Rs. 48 crore has been transferred to insurance companies.

Sale of insurance products has also been started by following insurance companies:

- India First Life Insurance Co. Ltd.
- HDFC Ergo General Insurance Co. Ltd.
- IFFCO TOKIO General Insurance Co. Ltd.
- New India Assurance Co. Ltd.
- United India Insurance Co. Ltd.
- Reliance General Insurance Co. Ltd.

PFRDA Service

CSC e-Governance Services India Ltd. had launched Swavalamban scheme under National Pension System (NPS-Lite) of Pension Fund Regulatory and Development Authority of India (PFRDA) for subscription through the CSCs across the country. PFRDA application was launched on the CSC platform on 21 November 2013. At present close to 26,300 CSCs are delivering PFRDA services and more than 48,000 subscribers have enrolled through CSCs.

Swavalamban scheme will encourage the people from the unorganized sectors to voluntarily save for their retirement. As per the scheme, the Government of India will contribute Rs.1,000 to each NPS account which is Swavalamban eligible account. To be eligible for Swavalamban scheme the person must be from

CSC as Banking Correspondent

the unorganized sector and has to put a minimum contribution of Rs. 1,000 and a maximum contribution of Rs. 12,000 during a financial year.

Educational services through CSC

(A) Digital Literacy

One of the key objectives of the National IT Policy 2012 is to make at least one individual in every household e-literate. CSCs are taking the initiative on this front through various digital literacy projects. Some of the ongoing projects are:

National Digital Literacy Mission (NDLM)

Making one person in every family digitally literate is one of the integral components of the Prime Minister's Vision of Digital India. The National Digital Literacy Mission (NDLM) project aims to train 10 lakh eligible beneficiaries on basic IT literacy in every eligible household in selected blocks in all States/Union Territories across India. The purpose is to enable the beneficiaries to use IT and related applications to enhance their livelihood and lead to a technologically empowered society. At present household surveys have been done in 19 states and more than 4 lakh households have been covered under the survey so far.

(B) Educational Transaction Services

Ongoing Educational Transaction Services are: National Institute of Open Schooling, NIELIT Transaction Services, English for Aam Aadmi, Basic Computer Course and Online Cricket Coaching.

(C) Financial Literacy

Financial literacy is about empowering and educating people so that they are knowledgeable about finance in a way that is relevant to their lives. Some of the completed projects are: Financial Literacy Programme for Rural Adults and Investor Awareness Programme–Pilot Project.

Digital Dibba

www.deity.gov.in

www.cloud.gov.in

www.negp.gov.in

www.jeevanpramaan.gov.in

www.mgov.gov.in

www.mygov.in

www.indg.in

www.etaal.gov.in

www.india.gov.in

www.nkn.in

www.cca.gov.in

www.data.gov.in

www.csc.gov.in

www.attendance.gov.in

www.egreetings.india.gov.in

NeGP Social Media Channels

@NEGPIndia

National e-Governance Plan (NeGP), India

NeGP India

NeGP India

National e-Governance Division: The Department of Electronics and Information Technology, Government of India has formed the National e-Governance Division (NeGD) as an autonomous business division within Media Lab Asia, under the Ministry of Communication and Information Technology, Government of India, for supporting and assisting Department of Electronics and Information Technology in the Programme Management of NeGP. The task of supporting coordination of Digital India is also being handled by NeGD.

NeGD supports Department of Electronics and Information Technology in the following tasks: Facilitating implementation of Mission Mode Projects by Line Ministries/State Governments; Providing technical assistance to Central Ministries/State Line Departments; Acting as Secretariat to Apex Committee; Undertaking technical appraisal of all NeGP projects to examine issues such as overall technology architecture, framework, standards, security policy, service delivery mechanism, sharing of common infrastructure; Human Resource Development, Training and Awareness Building, Framing core policies, technical assistance, R&D, awareness and assessment and creation of organization structure; Acting as a Central Agency for an effective implementation of Capacity Building Scheme inter-alia involving provisioning of manpower at various State e-Mission Teams (SeMTs) across States/Union Territories; Positioning of a Capacity Building Management Cell for effective management of manpower at SeMTs together with management of other scheme activities including training and setting up HR policies.

National e-Governance Division
Energising Digital Governance

Designed & developed by:
National e-Governance Division
Electronics Niketan, 6 C.G.O. Complex, Lodhi Road, New Delhi - 110 003
Phone: 011-30481624, Fax: 011-30481611
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