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National E-Governance Plan in India

Radha Chauhan

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National E-Governance Plan in India

Radha Chauhan

Abstract

The report presents the National E-Governance Plan in India. It discusses the vision, components, implementation strategies and governance structure of the plan. The report starts by presenting some basic facts about India, covering the political, geographical, social, economical and regulatory aspects. Subsequently, the report highlights the status of the IT sector in India. Finally, challenges faced in the implementation of the plan are discussed.

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1 Introduction

An Electronic Governance Strategic Plan is a long term plan for developing Electronic Governance specifying the vision and goals and how these goals will be achieved based on the internal capabilities, needs of stakeholders and other external factors, through a coherent set of concrete initiatives. It also specifies priority initiatives, challenges, required policies, regulations and measures for success.

The Government of India has defined its Electronic Governance Strategic Plan, which provides the roadmap of Electronic Governance implementation during 2003-2007. The plan seeks to create the right governance and institutional mechanisms, to set up the core infrastructure and policies, and to implement a number of Mission Mode Projects (MMPs) with the goal of creating a citizen- and business-centric environment for governance [1].

This report presents the National Electronic Governance Plan (NeGP) in India, introducing its components, strategies and the framework for its implementation. In addition, some challenges faced for its implementation are explained. To assess the local conditions, the report highlights political, social, economical and regulatory aspects and also presents the status of the Information and Communication Technology (ICT) sector in India.

The report is structured as follows. Section 2 presents an overview of India analyzing political, geographical, social, economic and legal aspects, and the status of the IT sector. Section 3 introduces the elements of the NeGP. Section 4 explains some of the challenges in its implementation. Finally, Section 5 draws some conclusions.

2 India Overview

The following sub-sections introduce main facts and figures of political, geographical, social, economic and legal aspects. Finally, the last section presents the status of the ICT sector.

2.1 Political Aspects

India, the world's largest democracy and second most populous country in the world, is a Sovereign, Secular, Democratic Republic with a Parliamentary system of Government. The Indian polity is governed by the Constitution, which was adopted by the Constituent Assembly on 26 November 1949 and came into force on 26 November 1950. A federal republic based on a written Constitution, the polity comprises 28 States and 7 Union Territories with its national capital located in the city of New Delhi. Figure 1 presents a political map of India.

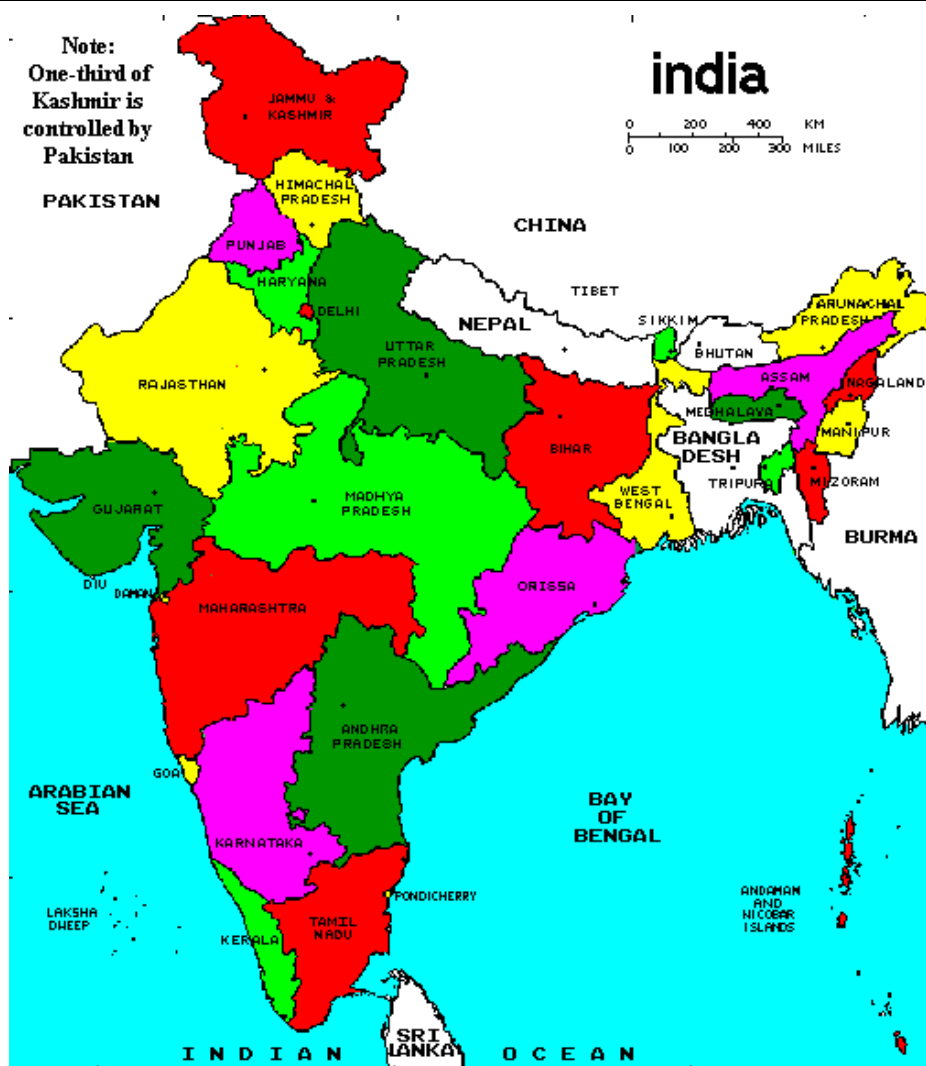


Figure 1: India Political Map

The Union Executive consists of the President, the Vice-President and Council of Ministers with the Prime Minister at the head to aid and advise the President. The President is the constitutional head of Executive of the Union. Constitution provides that there shall be a Council of Ministers headed by the Prime Minister to aid and advise the President who shall, in exercise of his functions, act in accordance with such advice. The Council of Ministers is collectively responsible to the Lok Sabha, the House of the People.

In the states, the Governor, as the representative of the President, is the head of the Executive arm of government. The Council of Ministers of a state headed by the Chief Minister is collectively responsible to the elected legislative assembly of the state.

The Constitution governs the sharing of legislative power between Parliament and the State Legislatures, and provides for the vesting of residual powers in Parliament. The power to amend the Constitution also vests in Parliament.

2.2 Geographical Aspects

Location: The Indian peninsula is separated from mainland Asia by the Himalayas. The Country is surrounded by the Bay of Bengal in the east, the Arabian Sea in the west, and the Indian Ocean to the south.

Geographic Coordinates: Lying entirely in the Northern Hemisphere, the Country extends between 8° 4' and 37° 6' latitudes north of the Equator, and 68°7' and 97°25' longitudes east of it.

Area: 3.300.000 km².

Bordering Countries: Afghanistan and Pakistan to the north-west; China, Bhutan and Nepal to the north; Myanmar to the east; and Bangladesh to the east of West Bengal. Sri Lanka is separated from India by a narrow channel of sea, formed by Palk Strait and the Gulf of Mannar.

Coastline: The coastline of India involves 7,516.60 km encompassing the mainland, Lakshadweep Islands, and the Andaman & Nicobar Islands.

Climate: The climate of India can broadly be classified as tropical monsoon. There are four seasons – i) winter from December to February, ii) summer from March to June, iii) south-west monsoon season from June to September, and iv) post monsoon season from October to November.

2.3 Social Aspects

Indian society is multifaceted and boasts of an ethnic and linguistic diversity that may be rarely paralleled across the world. Due to its checked historic past where India was conquered and ruled by various cultures and religions, the indigent culture has assimilated the innate value of absorbing external culture and value in its socio-cultural systems. Religion ranges from the Hindu majority and the world's largest Muslim population – although minority in

India. Other groups include Buddhists, Christians, Jains, Jews, Parsis, Sikhs, and practitioners of tribal religions.

A summary of the main figures and features about the Indian population are presented below:

Population: India's population, according to the 1 March 2001 census [2], stood at 1,028,000. This census also indicates that 532,100,000 were male and 496,400,000 females. The estimated population by July 2008 is 1,147,995,898 [3].

Population Growth Rate: The average annual exponential growth rate stands at 1.93 per cent during 1991-2001.

Birth Rate: The Crude Birth rate according to the 2001 census is 24.8.

Death Rate: The Crude Death rate according to the 2001 census is 8.9.

Life Expectancy Rate: 63.9 years for males and 66.9 years for females. (figures provided in September 2005).

Sex Ratio: 933 females per 1000 males, according to the 2001 census.

Ethnic Groups: All the five major racial types - Australoid, Mongoloid, Europoid, Caucasian, and Negroid find representation among the people of India.

Religions: According to the 2001 census, out of the total population of 1.028 million in the Country, Hindus constituted the majority with 80.5 %, Muslims came second at 13.4%, followed by Christians, Sikhs, Buddhists, Jains, and others.

Languages: 22 National Languages have been recognized by the Constitution of India, of which Hindi is the Official Union Language. Besides these languages, there are 844 different dialects that are practiced in various parts of the Country.

Literacy: According to the 2001 census, the literacy rate in the Country stands at roughly 65% per cent.

2.4 Economical Aspects

India has the world's second largest labor force, with 516,300,000 people; 60% of whom are employed in agriculture and related industries; 28% in services and related industries; and 12% in industry. Major agricultural crops include rice, wheat, oilseed, cotton, jute, tea, sugarcane, and potatoes. The agricultural sector accounts for 28% of GDP; the service and industrial sectors make up 54% and 18% respectively. Major industries include automobiles, cement, chemicals, consumer electronics, food processing, machinery, mining, petroleum, pharmaceuticals, steel, transportation equipment, and textiles.

Goldman Sachs has predicted that India will become 3rd largest economy of the world by 2035 based on predicted growth rate of 5.3 to 6.1% [4]. Currently, the growth rate is 9.4%. In the late 80s, the government eased restrictions on capacity expansion for incumbents, removed price controls and reduced corporate taxes. While this increased the rate of growth,

it also led to high fiscal deficits and a worsening current account. The 1991 economic reforms did away with the License Raj (investment, industrial and import licensing) and ended many public monopolies, allowing automatic approval of foreign direct investment in many sectors.

Figure 2 shows the forecast published by Goldman Sachs of the GDP growth for China, United States of America, India, Japan and United Kingdom for 2000-2050. As shown in the picture, India will occupy the third position, after China and United States of America.

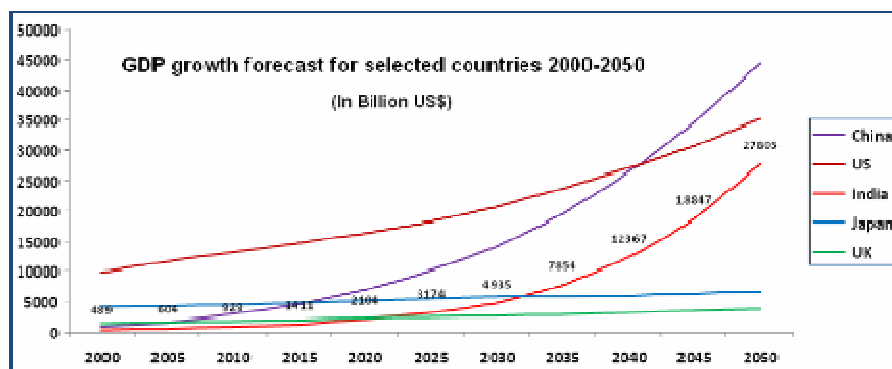


Figure 2: GDP Growth for Selected Countries

2.5 Legal Aspects

The Constitution of India draws extensively from Western legal traditions in its outline of the principles of liberal democracy. However, it is distinguished from many Western constitutions, in its elaboration of principles reflecting the aspirations to end the inequities of traditional social relations and enhance the social welfare of the population.

The federal structure of the polity determines the modalities for power sharing between the Central and State governments. The apportionment of subjects between the constituents of the federal structure is listed in the Constitution as Central, State and Concurrent lists.

The Supreme Court is the apex court in the country. The High Court stands at the head of the state's judicial administration. Each state is divided into judicial districts presided over by a district and sessions judge, who is the highest judicial authority in a district. Below him, there are courts of civil jurisdiction, known in different states as munsifs, sub-judges, civil judges and the like. Similarly, criminal judiciary comprises chief judicial magistrate and judicial magistrates of first and second class.

2.6 IT Sector

The Government of India's liberalization and economic reforms program aims at rapid and substantial economic growth and integration with the global economy in a harmonized manner. The Government has announced promotion of Information Technology as one of the five top priorities of the country and constituted a National Task Force on Information Technology and Software Development. The new policies have made governmental procedures transparent, eliminated licensing in almost all sectors and provide encouragement

to entrepreneurship through market friendly systems. In line with its mission of formulating a transparent investor friendly environment, the Government has done away with the complex pre-entry approvals. Nowadays, Foreign Direct Investment can enter India in most sectors through the automatic route. In addition, India is a signatory to the Information Technology Agreement of the World Trade Organization and World Economic Forum. Since 1st March, 2005 the customs duty on all the specified 217 items has been eliminated [5].

Some of the initiatives undertaken over the last years include: Foreign Trade Policy for Electronics and IT products has been liberalized, Customs and Excise procedures have been simplified, Electronic Data Interchange (EDI) was implemented by Customs and under implementation by Central Excise and Customs duty on specified capital goods and raw materials for electronics and IT hardware has been brought down to zero percentage. In addition, Electronics Hardware Technology Park (EHTP) and Special Economic Zones (SEZ) schemes have been tailored to boost manufacturing in the country.

Electronics and Information Technology is the fastest growing segment of Indian industry both in terms of production and exports. Information Technology has given India formidable brand equity in the global markets. The Indian Software Industry has been moving up the value chain as well. Indian software companies have a unique distinction of providing efficient software solutions with cost and quality as an advantage by using state-of-the-art technology. Through joint efforts of Government and the Industry, Software Development and IT Enabled Services have emerged as niche opportunities for India in the global context. The Government has been making continuous efforts to make India a front-runner in the age of Information revolution.

India is fifteenth in the world in services output. It provides employment to 23% of work force, and it is growing fast. Business services, like Information Technology (IT), IT-enabled services (ITES), and business process outsourcing are among the fastest growing sectors contributing to one third of the total output of services in 2000. The growth in the IT sector is attributed to increased specialization, availability of a large pool of low cost, but highly skilled, educated and fluent English-speaking workers on the supply side and on the demand side to the increased demand from foreign consumers interested in India's service exports or those looking to outsource their operations.

India today has the advantages of skilled manpower base, active and healthy competition amongst states in attracting investment in infrastructure as well as framing IT applications in areas such as e-governance, e-learning, e-commerce, entrepreneurship, software exports growth and a large potential in the domestic market. The Indian IT industry has grown its revenues ten-fold in the past decade, from USD 4.8 billion in the fiscal year 1997-98, to USD 47.8 billion in the fiscal year 2006-07. Its contribution to GDP is estimated to have grown from 1.2% to 5.4% in the same period. The IT and ITES industry continues to grow five times as fast as the global IT services industry, clocking a Compound Annual Growth Rate (CAGR) of 28 per cent since the fiscal year 1999-2000. From this figure, software and services exports are estimated to grow by 32 per cent (CARG), to reach \$23.4 billion in the fiscal year 06 [6].

At the same time, the vision is to use Information Technology as a tool for raising the living standards of the common man and enriching their lives.

3 National E-Governance Plan

The following sections explain the main features of the plan.

3.1 Vision

Over the past decade, India has seen islands of Electronic Governance (e-Governance) initiatives in the country at National, State, district and even minor government level. A need was therefore felt for taking a holistic view towards the entire e-Governance initiative across the country. The National e-Governance Plan (NeGP) has been conceptualized with the following vision:

“Make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man”.

The Government approved the National e-Governance Plan on May 18 2006, comprising of 27 Mission Mode Projects (MMPS) and 8 components – three Core Components, and five others.

3.2 Mission Mode Projects

Figure 3 depicts the 27 Mission Mode Projects (MMPs) identified by the NeGP – 8 integrated projects; 8 central projects and 11 state projects.

The 8 integrated projects located at the core of the figure include:

- 1) *e-BIZ* - seeks to address several issues related to approvals and permissions for businesses, reducing the points of contact between the business entities and the Government agencies, standardizing required information, establishing a single-window services, and reducing the burden of compliance.
- 2) *National Service Delivery Gateway* - acts a messaging middleware providing intelligent routing services from a Service Seeker to a Service Provider.
- 3) *Common Service Centers* - proposes to set up to 87,419 centers for providing common services in 17 States.
- 4) *e-Procurement* - establishes a one stop-shop providing all services related to government procurement.
- 5) *e-Office* - provides a middleware for streamlining, aligning, optimizing and automating all internal processes across government boundaries.
- 6) *e-Courts* - offers online availability of judgments and cause list, e-filing of cases and notifications through e-mails.
- 7) *India Portal* - provides one-stop access to government services.

- 8) *Electronic Data Interchange (EDI) for Trade* - introduces electronic filing and clearance of import and export documents, e-payment of duties or charges by Ports, Airports, Customs, etc., and electronic exchange of documents between community partners and Customs, Ports, and other government agencies.

The 8 central projects comprise:

- 1) *Income Tax* – includes 19 defined services to be provided online like e-filing of tax returns through intermediaries, online submission of forms, online payment of taxes through selected banks, issue of refunds through Electronic Clearance System, etc.
- 2) *MCA21*- offers availability of all Ministry of Company Affairs (MCA) services including filing of documents, registration of companies and public access to corporate information through a secure portal.
- 3) *Insurance* - provides insurance-related services through the four public sector general insurance companies.
- 4) *Central Excise* - enables filing of service tax and Excise Returns, e-Payments of custom duties, automated clearance of courier consignments, etc.
- 5) *National ID/UID* - creates a central database and generates unique identifiers for residents across the country primarily for effective reach of social sector benefits.
- 6) *Pensions* - tracks and handles pension settlements.
- 7) *Banking* - integrates core banking solutions of various banks.
- 8) *Passport, Visas and Immigration* - enables applications for new passports, renew old passports, track application status, and handle immigration formalities for all international incoming flights.

The 11 state projects involve:

- 1) *Agriculture* – provides services like market prices, soil information, crop diseases and management, good practices for horticulture, sericulture, etc.
- 2) *Employment Exchange* – enables to match the requirements of employers and potential employees, provides guidance to the unemployed, and facilitates online registration of vacancies by employers.
- 3) *Commercial Taxes* – improves efficiency of VAT administration by enabling electronic filing of returns and clearance of refunds, online payment of taxes, etc.
- 4) *Land Records* – identifies and automates 14 services like integration of textual and spatial land records data, integration of registration and mutation processes, automatic updating of land records providing conclusive title to land owners, etc;
- 5) *Road Transport* – includes services like vehicle registration and driving licenses;
- 6) *Gram Panchayat* – issues trade licenses, certificates, house related services, receipt of fund progress reports, individual beneficiaries of various schemes, etc.
- 7) *Municipalities* – provides G2C services like issuing birth and death certificates, payment of utility bills, issuing licenses, etc.

- 8) *Police* –implements Common Integrated Police Application (CIPA) and hardware in Police Stations.
- 9) *Property Registration* – replaces manual systems of verification and scrutiny of documents, capturing and preserving copies of documents, and conducting searches and of maintaining back office records.
- 10) *Treasuries* – involves payment of salaries to government employees, payment of expenses, etc.
- 11) *e-District* – automates backend processes to enable the delivery of G2C services through Common Services Centers. In addition to the eleven projects defined, each State can add up to five state-specific projects.

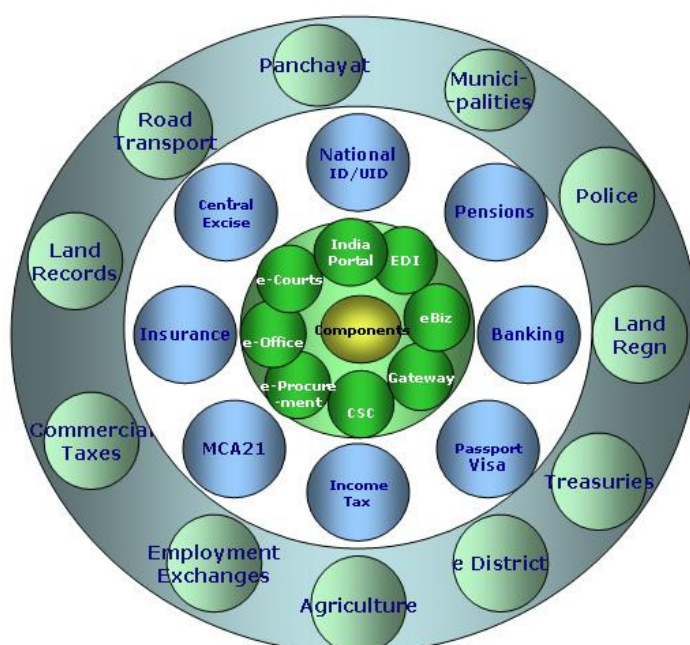


Figure 3: Mission Mode Projects

3.3 Components

The components of the plan are broadly divided into two categories. The first category covers core infrastructural components, and the other category covers capacity building, technical support, research and development, policy guidelines and standards, awareness creation and assessment that go a long way to ensure successful implementation, institutionalization and sustainability of NeGP. Brief descriptions of the key components follow.

3.3.1 Core Components

Three main core components were identified by the Plan: State Wide Area Network, State Data Center, and Common Services Centre. Each of them is presented below.

State Wide Area Network (SWAN)

The Government has approved the SWAN Scheme for establishing State Wide Area Networks (SWANs) across the country in 35 States and Union Territories, at a total outlay of Rs. 3,334 Crore over a period of five years. The objective of SWAN Scheme is to establish converged network consisting of data, voice and video circuits with minimum 2 Mbps capacity, linking the State with the Union Territories Headquarters, right up to the Block and Tehsil headquarters, through the district and the Sub-division headquarters. The aim is to create a secure government closed user group (CUG) network, for the purpose of delivering Government-to-Citizen (G2C) and Government-to-Government (G2G) services.

State Data Centre (SDC)

State Data Centre (SDC) has been identified as one of the important element of the Core infrastructure components for supporting NeGP. SDC provides key functionalities such as central repository of the state, secure data storage, online delivery of services, Citizen Information/Services portal, State Intranet portal, disaster recovery, remote management and service integration, among others. The entire scheme involves an outlay of Rs. 17,000 million. It is expected that the State Data Centre shall be set-up and operated by 2009 across different states in the country.

Common Services Centre (CSC)

CSC involves a scheme for providing support for establishing 100,000 broadband Internet enabled Common Service Centers (CSCs) in rural areas of the country. The Scheme has been approved at a total cost of Rs 5742 Crores over 4 years, of which the Government of India is estimated to contribute with Rs 856 Crore and the State Governments with Rs 793 Crores. Other resources would be mobilized from the private sector.

3.3.2 Other Plan Components

Other plan components refer to broad areas, like standards, capacity-building, awareness and communications, assessment, and research and development. Each of these areas is explained as follows.

Standards

Various Working Groups and Task Forces have been constituted considering various areas of interventions to formulate guidelines and standards. These areas include, technical standards

and e-governance architecture, network and information security, e-governance information security standard, localization and language technology standards, metadata and standards for application domains, conformity assessment framework which is extremely relevant for any e-governance project, policies on identity and access management, and e-forms.

Capacity Building

A comprehensive Capacity Building Scheme has been approved covering all States and Union Territories. The major component of Capacity Building Scheme is the formation of professional core teams for providing technical support to the policy makers, executive bodies and implementing authorities. The responsibilities of the core teams include providing training and orientation of key stakeholders associated with policy-making and implementation of state e-Governance Programme, and providing a platform to promote knowledge sharing. In addition, it creates Capacity Building Management Cell at the national level, to oversee the smooth implementation of capacity building scheme and to take mid-term corrective actions, as appropriate. The Scheme will also facilitate recruitment of professionals, preparation of training content, scheduling of training programs, study and adoption of international best practices.

Awareness and Communications

The success of the Plan hinges not only on accessibility and availability to information and various services but also awareness regarding the Programme, effective branding of NeGP and finally a communication strategy that addresses the above two. This component focuses on creating and implementing the strategy to achieve the following objectives:

- 1) building distinctive brand of NeGP which will be utilized across Departmental communications;
- 2) creating awareness among citizens about the initiative and its objectives;
- 3) motivating stakeholders, with an emphasis on the point that NeGP is not about computerization or technology but making interaction with government easier and
- 4) creating a demand driven atmosphere which would ensure that the service delivery and its quality are met. The aim is also to create a set of communication guidelines that can be used by other Ministries and /or Departments to design their own communications plan.

Assessment

A significant part of scarce resources are being invested in e-Government projects. Even with its perceived potentials, e-Government projects are fraught with risks and the success rate across the world is not very encouraging. Given this scenario and the fact that e-Government projects are inherently complex, it therefore becomes imperative that a robust assessment strategy and framework is devised for evaluating performance of e-Government projects. This would not only provide valuable understanding on individual projects but also provide for a backward integration into the process of project appraisal and capacity building.

Research and Development

Inputs from research activities are needed in the areas of e-Governance Technical Standards including interoperability standards, e-Government Enterprise Architecture Frameworks, Information Security, Data and Metadata Standards, and Quality and documentation that includes e-Governance Quality Manual, e-Governance Project Life-Cycle, Project Management, Program Management Conformance Assessment Frameworks, and Service-Level Agreement guidelines, among others. In addition, research results are needed for preparing deliverables that are being aimed at producing publications related to e-government standards, published at government websites for reference and as discussion papers for working group members. In addition, they are also required for reviewing technical papers, proposals, documents, guidelines, and for providing technical inputs on various open standards and technologies, architectures, and middleware to the e-Governance directorate. The approach includes collaborations with industry and academics in the area of e-Governance research and innovations. In particular, the Microsoft Innovation Lab has been set up for developing innovative e-Governance solutions and research in the area.

3.4 NeGP Implementation Strategies

The implementation strategy for NeGP is based on an integrated approach and on seven guiding principles.

The integrated approach is based on the integration of the following perspectives, and is depicted in Figure 4:

- *Connectivity* – deploying a State Wide Area Network, State Data Centers and 100,000 Common Service Centers (CSCs);
- *Capacity* – building human and institutional capacity in 20 Government of India Departments, 35 States and Urban Territories, 360 Departments at States;
- *Content* – providing services in vertical domains like Health and Education;
- *Cyberlaw* – providing the regulatory framework for digital signatures, etc.
- *Citizen Interface* – providing enhanced G2C services like vehicle registration, driver's license, passports and visas, etc.
- *Capital* – assuring financial resources.

Integrated Approach

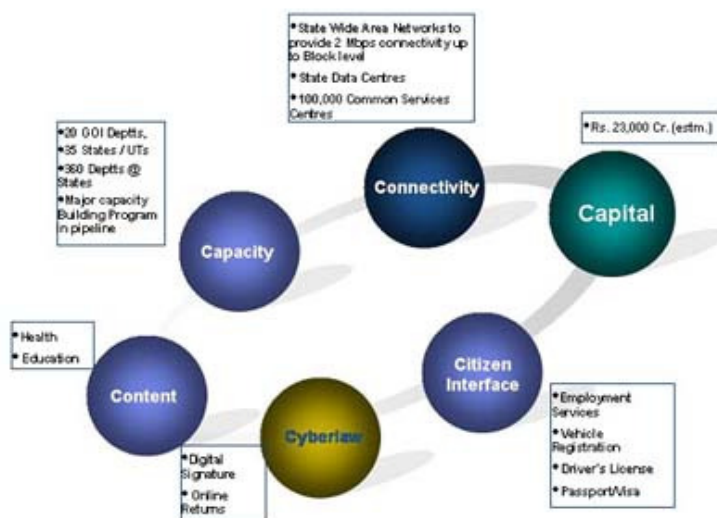


Figure 4: Integrated Approach for Implementing NeGP

The seven guiding principles include:

- 1) *Deliver Public Value* - delivery of value added government services that is citizen centered. The focus here is on transformation within government and its processes to achieve and deliver services that are easy to access and convenient to realize.
- 2) *Change Management* - It is appreciated that the change that is being aimed at as an outcome of this exercise has to be constantly managed at all levels. Process reengineering as part of project design, focused on value addition to services, necessitate that reengineered processes are managed as part of a dedicated change management policy. Explicit Change Management strategy addressing internal and external stakeholders and their concerns form an integral part of project formulation and design.
- 3) *Think Big, Start Small, and Scale Fast* – this three phases model the implementation strategy, where pilots are taken up to launch and test the efficacy of models. This would enable proper customization before the project is rolled out on a full scale. Process reengineering is essential feature of such pilots.
- 4) *Centralized Initiative and Decentralized Implementation* – each MMP is to be conceptualized and implemented by the respective Ministry or line department at central or state level. States have been given flexibility to identify up to 5 additional state-specific projects, which are very relevant for the economic development of the State.
- 5) *Common Core and Support Infrastructure* - Common core infrastructure in the form of State Wide Areas Network (SWAN), State Data Centre (SDC) and Electronic Service Delivery Gateways (SDG) has been envisaged for optimal utilization of limited

resources and to ensure interoperability for seamless delivery of public services. Similarly to ensure wider accessibility to public service delivery, over 100,000 Common Services Centres (CSCs) are being created in the villages, which will act as one-stop-shop for government as well as private services. The core and support infrastructure is likely to be in place by March 2009.

- 6) *Capacity Building* - Capacity Building (CB) Scheme approved with an outlay of Rs. 313 cr. enables the creation of State e-Governance Mission Teams for providing technical and professional support to decision-makers in States and for imparting specialized training and orientation for State parliamentarians, bureaucrats and SeMT members. The teams also enables to strengthening State level training institutions. In addition, the Scheme enables the creation of a CB Management Cell at the National level for facilitating implementation and providing support to Central Line Ministries for overall program management.
- 7) *Public Private Partnership (PPP)* – PPPs would be promoted wherever feasible to enlarge the pool of resources and to enhance capacity to effectively delivery public without compromising on the security aspects.

3.5 NeGP Governance Structure

Considering the multiplicity of agencies involved in the implementation of NeGP and the need for overall aggregation and integration at the national level, NeGP is conceived as a program, with well-defined roles and responsibilities of each agency involved. Therefore, the creation of an appropriate program management structure that guides, steers and coordinates the program is crucial for the whole endeavor. The structure comprises the following entities:

The Cabinet Committee on Economic Affairs (CCEA) responsible for program level policy decisions.

A body under the Chairpersonship of Prime Minister has been constituted with representation drawn from relevant Ministries and Departments, the National Knowledge Commission, the Planning Commission, experts, etc., to provide leadership, prescribe deliverables and milestones, and monitor periodically the implementation of the NeGP.

A National e-Governance Advisory Group, headed by the Minister of Communication and IT has been created, to solicit views of external stakeholders and to provide inputs to the CCEA, advise the government on policy issues and strategic interventions necessary for accelerating introduction of e-Governance across Central and State Government Ministries and Departments.

An Apex Committee (NeGP), with Cabinet Secretary as its Chairman and Secretary, Department of IT (DIT) as its Member Convener, has been constituted to oversee the program and providing policy and strategic directions for its implementation and for resolving inter-ministerial issues.

Line Ministries and Departments are responsible for the implementation of the assigned Mission Mode Projects (MMPs) and Components. Mission Mode Projects are owned and

spearheaded by various line Ministries for Central Government, State Governments and Integrated projects.

State Governments are responsible for implementing State Sector MMPs, under the overall guidance of respective Line Ministries, in cases where Central Assistance is also required. An Apex Committee has been constituted at the State level headed by the Chief Secretary with a similar role and responsibility to the Apex Committee at the centre.

DIT is the facilitator and catalyst for the implementation of NeGP and is tasked with providing assistance to the Departments. In addition, DIT serves as the secretariat to the Apex Committee and assists it in managing the program. The DIT also implements pilot/ infrastructure/ technical/ special projects and support components in addition to the technical appraisal of all NeGP projects. This appraisal covers issues relating to project design, optimal utilization of infrastructure, compliance with interoperability standards etc.

A specific unit was created for managing the whole program, the Programme Management Unit (PMU) of the Department of IT. PMU assists the Apex Committee to drive NeGP through effective program monitoring and management. It provides assistance in policy and strategy formulation; supports DIT in implementing those projects and components of NeGP for which DIT is the implementing department; and builds capacity of various departments to enable them to implement their MMPs successfully.

4 Challenges

As expected, massive exercises with multiple stakeholders and conflicting interests pose significant challenges, particularly in attaining desired outcomes and ensuring the sustainability of initiatives that have been rolled out. The challenges raised by these issues are broadly defined in the following sections.

4.1 Policy Framework

Political leadership that envisions and mandates the outcomes has to ensure a comprehensive policy framework is in place. The policy framework must ensure to buy in all stakeholders, to bridge existing social, economic and digital gaps, and to enforce implementation of decisions. The framework also needs to provide for a leadership that stands the test of time and is insulated from frequently changing priorities and players. It has to be appreciated and accepted that the outcomes are not to be achieved in short-term and that there is a need for longer perspective in both time and efforts. There is also a need to persevere across all levels and not give in to the temptation of “quick fix” results.

4.2 Transformation

The traditional government set up with its vertical organizational structures and procedures is more attuned to a bureaucratic, paper-based style of working. The shift to more collaborative horizontal structures, less paper-based and more efficient and effective processes is a paradigm change for the organization and its constituents. Intrinsic transformation of government is a long evolution, difficult to sustain.

4.3 Business Process Reengineering

Value addition to the services that are being delivered by government is at the core of Business Process Reengineering. To work out a model that manages the back office processes working in automated and manual parallel modes is challenging and has its own technical as well as organizational issues. A very strong and dedicated leadership is needed at each level of the hierarchy that owns the initiative, for inspiring the players across to put in their best as the main engine for the whole effort.

4.4 Team Work

The team, including its leader, needs to be carefully put in place keeping in view the specific skills required for the project. Domain expertise and knowledge has to be combined with technology and managerial expertise. Once the team is created, the team members must be assured stability of tenure, so that their efforts are planned and executed for the whole life cycle of the project. Lack of stability generally leads to very half hearted inputs and efforts as team members are constantly under threat of change. Members also need to be assured that the leader is going to lead the whole way.

4.5 Organization and Ownership

Ownership of efforts and responsibility of the deliverables need to be clearly spelt out both for the organization and within the organization. Moreover, these features are relevant when the emphasis is on breaking silos and on establishing interagency collaboration.

4.6 Partnerships

NeGP looks at leveraging funds outside the government which entails a market oriented approach to project formulation and a stringent return on investment terms. Identifying areas for such partnerships, selecting partner terms and conditions, and defining the service charges on citizens are all very critical aspects of governance. To work out a balanced approach between private investments and interest of public needs, thoroughly analyzed agreements and ability and expertise for resolving conflicts and balancing interests are required.

4.7 Technology as a Tool

Building in ability to adapt to changes that are to an extent determined by technology is critical. Inherent capacities of the government structures have to be augmented on a continuous mode including leveraging skills outside government. Risk management of technology-related issues is an unfolding area where crucial lessons are being learnt that needs to be shared and managed more effectively.

5 Conclusions

It is to be appreciated that currently NeGP is a programme with defined mission(s) to be achieved in a given frame of time. The commitments of funds are also limited to the period it takes to achieve the set outcomes. e-Governance as the way of governance, as a discipline that has no limits of time or commitment is still to evolve. It is expected that once the system crosses the threshold of the physical digital divide, and also delivers tangible benefits to society across through this limited endeavor, then e-Governance would have taken root to further evolve on its own.

This report has presented the National E-Governance Plan in India, including its vision, components, implementation strategies and governance structure. Some of the challenges for implementing and sustaining the projects were also depicted.

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