



## E – Governance in India

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**ABSTRACT:** Government forms the backbone of any country. The primary purpose of any government is the welfare of its citizens. With the advent of the World Wide Web and the revolution in information and communication technology, different governments across the world started taking initiatives to offer government services online. In line with this trend, India has undertaken massive initiatives to introduce e-governance at the national, state and local level. The fundamental motivation for the implementation of e-Governance in the India was to provide SMART Government (Simple, Moral, Accountable and Responsive Government). India, being the largest democracy in the world, has much to gain from e- Governance, especially when we are emerging as an economic giant and a potential super power of the future.

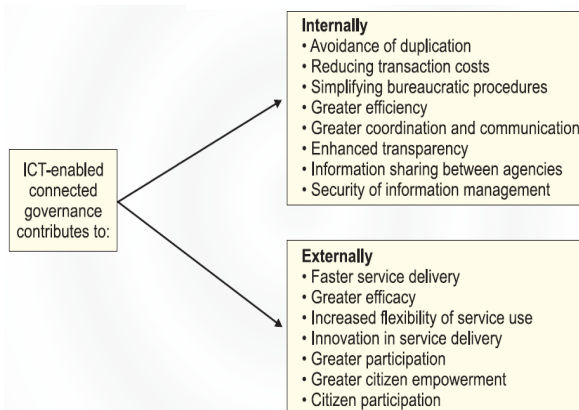
In this paper we discuss some of the major e- Governance initiatives taken in India at different levels of governance. We also cover the ambitious NeGP (National e- Governance Plan) and its successor NeGP 2.0 of the Indian Government. Though our country has made a giant progress in providing e- governance to its citizens, a number of challenges lie in front of us for its effective and efficient implementation. In the last section of the paper we try to address these issues.

**Keywords :** SMART Government, NeGP

### I. INTRODUCTION

People's voice is the key driver of a democracy and listening to that voice is the key test of good governance. The motive to provide good governance and the revolution in information and communication technology has transformed public governance throughout the world. This has led to the formation of a new form of governance by the name of e- governance.

E-Governance is the application of ICT (Information and Communications Technology) to government functioning in order to create 'Simple, Moral, Accountable, Responsive and Transparent' (SMART)[1] governance.



Source: Promoting e-Governance – *The SMART Way Forward*

E-Governance aims to make the interaction between government and citizens (G2C), government and business enterprises (G2B) and inter-government relationships (G2G) more friendly, convenient, transparent, and inexpensive.

Today, E- Governance has become an integral part of public governance. Countries across the globe are taking various measures to promote e- governance. India too, has taken a number of initiatives to promote e-governance at all levels of governance. The next section deals with e- Governance in India.

### II. E- GOVERNANCE IN INDIA

The e-Governance scenario in India has come a long way and is not just limited to the computerization of government offices. India is now one of the leading countries venturing into e-Governance. The focus now is on extending the reach of governance to have a major impact on the people at large.

*A. History of E-Governance in India :* The Government of India established the Department of Electronics in 1970. The first major step towards e-Governance in India was the establishment of the National Informatics Centre (NIC) in 1977. This was followed by the launch of NICNET in 1987. The District Information System of the National Informatics Centre (DISNIC) programme was launched to computerize all district offices in the country. Thus, NICNET was extended to all district headquarters by 1990. A National Task Force on Information Technology and Software Development was constituted in May 1998. In the year 1999, a separate ministry was created for Information and Technology.

Information Technology Act was passed by the Indian Parliament in the year 2000 [2].

*B. E- Governance Projects in India* : Different State Governments across the country have taken various e-governance initiatives. Some of them include:

1) *Project E-Cops, Andhra Pradesh*

This project was launched on the 17th of July 2002. It helps police stations to reduce paperwork and automate the maintenance of registers, report generation, data analysis, planning and coordination, enable the speedy detection of crime and monitor prosecutions. It also facilitates the online interaction of citizens with the police department. The central Oracle database of crime records is hosted at the DGP's office in Hyderabad. This database records information such as FIR [3].

2) *Project Swagat, Gujarat*

SWAGAT(State-Wide Attention on Public Grievance by Application of Technology) is an online grievance redressal system launched in the year 2003. It enables direct communication between the citizens and the Chief Minister. Fourth Thursday of every month is a SWAGAT day wherein the Chief Minister himself attends the grievances of the common man. SWAGAT helps common people to seek redressal of their pending grievances once a month. There is a three-tier grievance redress system in Gujarat: Taluka, District and State level. All grievances are reviewed by the Chief Minister himself. The review is done based on the problems solved and not on the petition disposed. This Project won the UN Public Service Award for the year 2010. This project has been extended to villages in 2011 by the name of GRAM SWAGAT [4].

3) *Project Panjeeyan, Assam*

This project deals with the computerization of the document registration. It provides modules for initial enquiry for stamp duty evaluation, cash collection, data entry, verification, scanning of registered documents and photos. It also has a module for scanning the finger prints of concerned parties. It has been integrated with e-Stamping solution from Stock-holding Corporation of India to eliminate problems of manual stamp-paper purchase. This project won the Gold Medal at National E- Governance Awards under "Excellence in Government Process Re-engineering" category for the year 2012-13.<sup>[5]</sup>

4) *Project Bhoomi, Karnataka*

This project deals with the management of land records in Karnataka. It provides transparency in land records management with better citizen services and takes discretion away from civil servants at operating levels. The Revenue Department in Karnataka, with the technical assistance from National Informatics Centre built BHOOMI system throughout the state. The

BHOOMI has computerized over 20 million records of land ownership [6].

5) *Project Friends, Kerala*

FRIENDS (Fast, Reliable, Instant, Efficient Network for the Disbursement of Services) is a Single Window Facility providing citizens the means to pay taxes and other financial dues to the State Government. The payments that citizens can make include utility payments for electricity and water, revenue taxes, license fees, motor vehicle taxes, university fees, etc. [7].

6) *Project Voice, Andhra Pradesh*

This project was launched to deliver municipal services such as building approvals, and birth and death certificates, to the people of Vijayawada. It also handles the collection of property, water and sewerage taxes. The VOICE system uses five kiosks located close to the citizens. These are linked to the back end processes in the municipal offices through a wide area network. The application has helped reduce corruption, made access to services more convenient and has improved the finances of the local government [8].

7) *Project Gyandoot, Madhya Pradesh*

Gyandoot is an Intranet-based Government to Citizen (G2C) service delivery initiative. It was initiated in the Dhar district of Madhya Pradesh in January 2000 with the twin objective of providing relevant information to the rural population and acting as an interface between the district administration and the people. Initially, computers were installed in twenty village panchayat centres and connected to the District Rural Development Authority in Dhar town. The services offered through the Gyandoot network include income certificate, domicile certificate, rural hindi newspaper, public grievance redressal system, agricultural information etc [9].

8) *Project Smartgov, Andhra Pradesh*

This is a G2G initiative employed by the Andhra Pradesh Secretariat. Before the implementation of SmartGov in the secretariat, the processing of information was workflow intensive and information moved in the form of paper files from one officer to another for seeking opinions, comments, approvals etc. SmartGov was developed to streamline operations, enhance efficiency through workflow automation and knowledge management. SmartGov automates the functioning of all levels of Government entities and provides a well defined mechanism for transforming the "hard copy environment" to a "digital environment". SmartGov replaced the paper file with an e-file and has features such as creation, movement, tracking and closure of e-files etc [10].

### III. NATIONAL E-GOVERNANCE PLAN

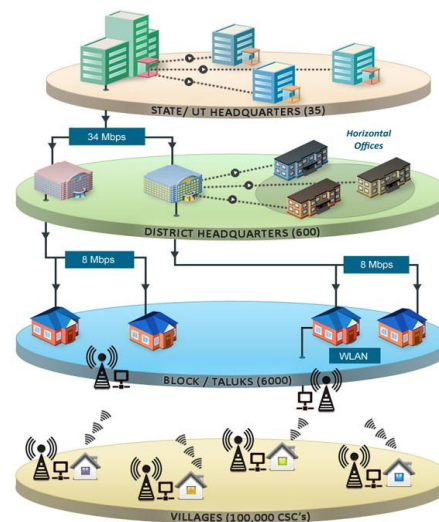
The National e-Governance Plan [11] takes a holistic view of various e-Governance initiatives across the

country. It seeks to lay the foundation and provide the impetus for long-term growth of e-Governance within the country. The National e-Governance Plan was launched by the Department of Information Technology (DIT) and Department of Administrative Reforms & Public Grievances (DAR&PG) on the recommendations of the second Administrative Reforms Commission. The NeGP aims at improving delivery of Government services to citizens and businesses 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 & reliability of such services at affordable costs to realise the basic needs of the common man.”*

NeGP is monitored and coordinated at the highest level by the National e-Governance Advisory Group. It is headed by the Minister of Communications & Information Technology, Government of India<sup>[12]</sup>. NeGP implementation involves setting up of common and support IT infrastructure such as: State Wide Area Networks (SWANs), State Data Centres (SDCs), Common Services Centres (CSCs) and Electronic Service Delivery Gateways.

State Wide Area Networks (SWANs)[14] are one of the core infrastructure components under NeGP and was planned as a converged backbone network for voice, video and data communications across each of the 29 States and 6 Union Territories. It aims to create a dedicated closed user group (CUG) network of minimum speed of 2 Mbit/s by connecting around 7500 points of presence (PoPs), providing data, voice & Video connectivity to more than 50,000 government offices. It also aims to provide reliable, vertical and horizontal connectivity within the State / UT administration and would facilitate electronic transactions between all the government departments. Steps are being taken to connect SWANs of all Indian states using the National Knowledge Network (NKN). States including Gujrat, Tamilnadu, Karnataka and Andhra Pradesh have already been integrated using National Knowledge Network. Common Services Centers (CSC) are multiple-services-single-point model for providing facilities for multiple transactions at a single geographical location. The main purpose of these centres is to provide a physical facility for delivery of e-Services of the Government of India to the rural and remote locations where availability of computers and Internet is currently negligible or mostly absent. The aim is to create 1,00,000 CSC across 600,000 rural and remote locations of India [15].



Architecture of SWAN [13]

#### IV. NATIONAL E-GOVERNANCE PLAN 2.0

Prime Minister, Shri Narendra Modi, chairing the Union Cabinet , today gave its approval for the Approach and Key Components of e-Kranti : National e-Governance Plan (NeGP) 2.0. It is a follow up to the key decisions taken in the first meeting of the Apex Committee on the Digital India programme held in November 2014. This programme has been envisaged by the Department of Electronics and Information Technology(DeitY).<sup>[17]</sup>

The objectives of 'e-Kranti' are as follows:

- 1) To redefine NeGP with transformational and outcome oriented e-Governance initiatives.
- 2) To enhance the portfolio of citizen centric services.
- 3) To ensure optimum usage of core Information & Communication Technology (ICT).
- 4) To promote rapid replication and integration of eGov applications.
- 5) To leverage emerging technologies.
- 6) To make use of more agile implementation models.

The key principles of e-Kranti are as follows:

- 1) Transformation and not Translation.
- 2) Integrated Services and not Individual Services.
- 3) Government Process Reengineering (GPR) to be mandatory in every MMP.
- 4) ICT 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 (Geo-Spatial Information System).
- 11) Security and Electronic Data Preservation.

e-Kranti is the primary pillar of the Digital India programme. The Vision of e-Kranti is "Transforming e-Governance for Transforming Governance". The

Mission of e-Kranti is to ensure a Government wide transformation by delivering all Government services electronically to citizens through integrated and interoperable systems via multiple modes, while ensuring efficiency, transparency and reliability of such services at affordable costs [17].

Its approach is fully aligned with the Digital India programme. The programme management structure approved for Digital India programme would be used for monitoring the implementation of e-Kranti and also for providing a forum to ascertain views of all stakeholders, overseeing implementation, resolving inter-Ministerial issues and ensuring speedy sanction of projects. Key components of the management structure would consist of the Cabinet Committee on Economic Affairs (CCEA) for according approval to projects according to the financial provisions, a Monitoring Committee on Digital India headed by the Prime Minister, Digital India Advisory Group chaired by the Minister of Communications and IT, an Apex Committee chaired by the Cabinet Secretary and the Expenditure Finance Committee (EFC) / Committee on Non Plan Expenditure (CNE). The Apex Committee headed by the Cabinet Secretary would undertake addition / deletion of Mission Mode Projects (MMPs) which are considered to be appropriate and resolve inter-Ministerial issues [17].

## V. CHALLENGES AND FUTURE

The major challenge before the government is to extend the reach of e-Governance services to rural India where 70% of Indian population lives. ICT penetration is very poor in rural areas especially in the hilly regions. Even in the urban areas, benefits of e-Governance are being enjoyed only by the affluent section of the society. Thus, only a small section of the Indian population is being able to utilize the benefits of e-Governance. Therefore a concerted effort has to be made to direct e-Governance reforms towards the common man.

Another reason that makes providing services through e-Governance difficult is that there is no unique identity of a person in India. AADHAAR card [16] is an initiative of the government in this regard. AADHAAR is a 12 digit individual identification number issued by the Unique Identification Authority of India on behalf of the Government of India. This number will serve as a proof of identity and address, anywhere in India and will be unique to an individual. AADHAAR number will also help in getting access to services like banking, mobile phone connections.

Now, with the implementation of initiatives such AADHAAR, NeGP (National e-Governance Plan) and SWANs (State Wide Area Network), it is expected that e-Governance services will reach all corners of the country and to all sections of the society.

Also, there is need for generating widespread awareness among the public at large. The success of e-

Governance lies in increasing the number of electronic interactions between citizens and the government and not merely in building the infrastructure of e-Governance.

It is expected that e-Governance would enable the government to discharge its functions more effectively. However, this would require the government to change itself – its processes, its outlook, laws, rules and regulations and also its way of interacting with the citizens.

## VI. CONCLUSION

E-Governance in India is in its early stages of development. Though, a significant progress has been made by the government to provide e-governance facilities to the citizens but it is still limited to only a small section of the society. E-Governance will bear fruit only when it is inclusive, sustainable and provided to all sections of the society.

Dr. APJ Abdul Kalam, former President of India and a visionary in the field of e-Governance has aptly summarized the basic challenge lying before the country: *“e-Governance, has to be citizen-friendly. Delivery of services to citizens is considered a primary function of the government. In a democratic nation of over one billion people like India, e-Governance should enable seamless access to information and seamless flow of information across the state and central government in the federal set up. No country has so far implemented an e-Governance system for one billion people. It is a big challenge before us.”*

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