

---

# *Briefing Notes on*



# *e-Governance*

---

# Contents

---

|        |  |    |
|--------|--|----|
| 1.     | What is Governance? .....                              | 3  |
| 2.     | What is Good Governance? .....                         | 3  |
| 3.     | Concept and Definition of e-Governance .....           | 4  |
| 4.     | The Goals of e-Governance.....                         | 5  |
| 5.     | Interactions between Main Groups in e-Governance ..... | 5  |
| 5.1.   | G2G (Government to Government).....                    | 5  |
| 5.2.   | G2C (Government to Citizens) .....                     | 5  |
| 5.3.   | G2B (Government to Business).....                      | 6  |
| 5.4.   | G2E (Government to Employees) .....                    | 6  |
| 6.     | Benefits / Outcomes of e-Governance .....              | 6  |
| 7.     | Improving Public Administration .....                  | 7  |
| 8.     | e-Governance Maturity Model .....                      | 7  |
| 8.1.   | Gartner e-Governance Maturity Model.....               | 7  |
| 8.1.1. | Information: .....                                     | 7  |
| 8.1.2. | Interaction:.....                                      | 7  |
| 8.1.3. | Transaction:.....                                      | 8  |
| 8.1.4. | Transformation: .....                                  | 8  |
| 9.     | Evolution of e-Governance in India .....               | 9  |
| 10.    | Components of National eGovernance Plan.....           | 10 |
| 11.    | The Digital India Programme .....                      | 11 |
| 11.1.  | Key Initiatives under Digital India .....              | 12 |
| 12.    | eGovernance Project Lifecycle.....                     | 12 |
| 12.1.  | Vision and strategy development .....                  | 13 |
| 12.2.  | Current state assessment .....                         | 13 |
| 12.3.  | Future state definition .....                          | 14 |
| 12.4.  | Implementation approach and sourcing.....              | 14 |
| 12.5.  | Develop and implement IT system .....                  | 14 |
| 12.6.  | Operate and sustain.....                               | 15 |
| 12.7.  | Project management.....                                | 15 |
| 12.8.  | Change management and communications activity.....     | 15 |

## 1. What is Governance?

---

1. Self-preservation – the state needs to be preserved both from external aggression and internal disturbances. Government discharges this function by raising and maintaining a national army, a police force and other enforcement agencies and empowering these agencies through legislations.
2. Supervision and resolution of conflicts – Strengthening of democratic practices and processes, ensuring equity to all citizens, setting up of conflict resolution mechanisms and fair governance are some ways for minimization of conflicts.
3. Socio-economic development – Enactment and effective enforcement of laws, assuring welfare of the weaker sections, bringing about desirable social change are some measures which governments adopt to bring about socio-economic development.
4. Regulation of the economy – has emerged as one of the most important functions of government. Adopting sound fiscal and monetary policies is one of the major duties of a government.
5. Provision of goods and services –increasing emphasis on socio-economic development, governments today are major providers of different types of goods and services such as education, health, public distribution of food grains etc. For the sake of present analysis, the functions of a government could be broadly categorized as follows:
  - a. Regulatory functions
  - b. Service providing functions
  - c. Developmental functions.

## 2. What is Good Governance?

---

Good governance aims at providing an environment in which all citizens irrespective of class, caste and gender can develop to their full potential. In addition, it also aims at providing public services effectively, efficiently and equitably to the citizens. The 4 pillars on which the edifice of good governance rests, in essence are:

1. Ethos (of service to the citizen)
2. Ethics (honesty, integrity, and transparency)
3. Equity (treating all citizens alike with empathy for the weaker sections), and
4. Efficiency (speedy and effective delivery of service without harassment and using ICT increasingly).

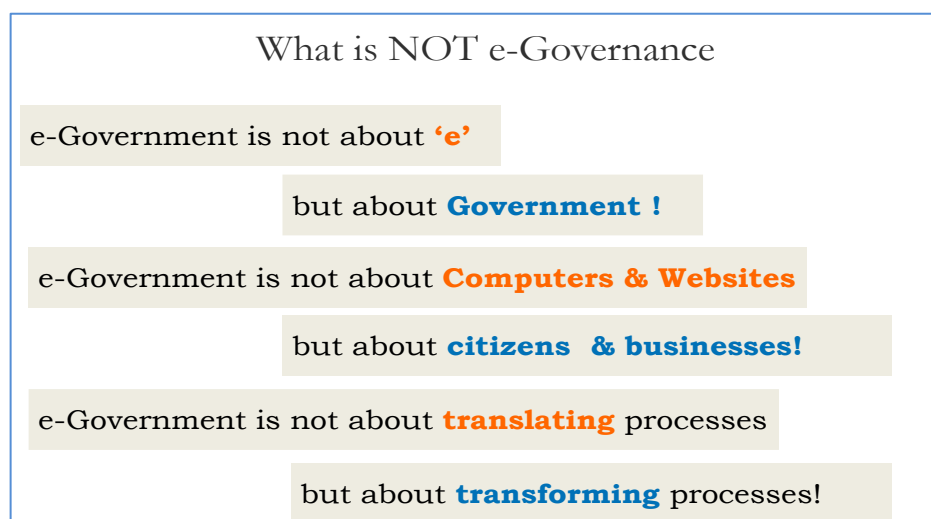
The Eleventh Plan has emphasized that good governance should cover the following distinct dimensions:

- As a democratic country, a central feature of good governance is the constitutionally protected right to elect government at various levels in a fair manner, with effective participation by all sections of the population. This is a basic requirement for the legitimacy of the government and its responsibility to the electorate.
- The government at all levels must be accountable and transparent. It must be effective and efficient in delivering social and economic public services, which are its primary responsibilities. This requires constant monitoring and attention to the design of our programmes.
- An overarching requirement is that the rule of law must be firmly established. This is relevant not only for relations between the government and individuals enabling individuals to demand their rights but also for relations between individuals or businesses. Finally, the entire system must function in a manner which is seen to be fair and inclusive. This is an issue based on perception but it is real nonetheless. Disadvantaged groups, especially the SCs, STs, minorities and others, must feel they have an equal stake and should perceive an adequate flow of benefits to ensure the legitimacy of the State.

### 3. Concept and Definition of e-Governance

---

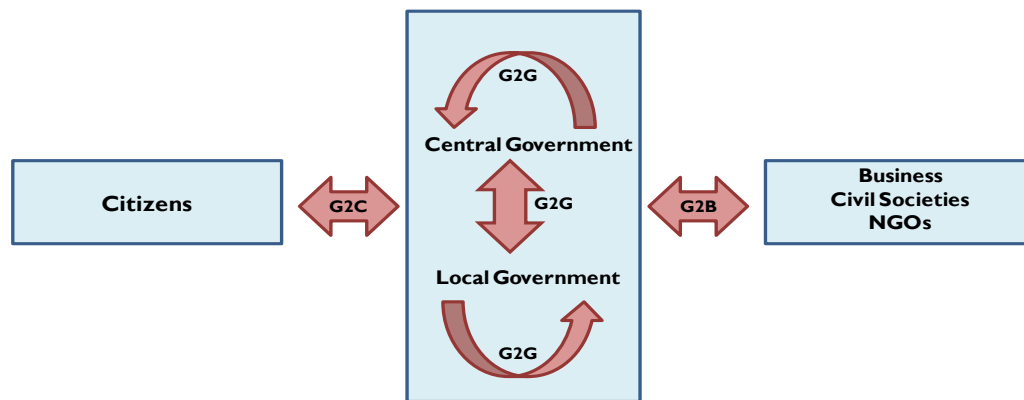
The “e” in e-Governance stands for ‘electronic’. Thus, e-Governance is basically associated with carrying out the functions and achieving the results of governance through the utilization of ICT (Information and Communications Technology). More importantly, citizens’ expectations from government have increased manifold.



#### 4. The Goals of e-Governance

- Better service delivery to citizens
- Ushering in transparency and accountability
- Empowering people through information
- Improved efficiency within Governments
- Improved interface with business and industry

e-Governance facilitates interaction between different stakeholders in governance using ICT (indicated by block arrows in the diagram below).



**Figure 1: Stakeholders' Interactions using ICT in Governance**

#### 5. Interactions between Main Groups in e-Governance

These interactions may be described as follows:

##### 5.1. G2G (Government to Government)

In this case, Information and Communications Technology is used not only to restructure the government processes, but also to increase the flow of information and services within and between different entities, government agencies as well as between different functional areas within an organization, or vertical i.e. between national, provincial and local government agencies as well as between different levels within an organization.

##### 5.2. G2C (Government to Citizens)

In this case, an interface is created between the government and its citizens, which enables the citizens to benefit from efficient delivery of a large range of public services. This expands the availability and accessibility of public services on the one hand and improves the quality of services on the other. The primary purpose is to make government, citizen friendly.

### 5.3. G2B (Government to Business)

Here, e-Governance tools are used to aid the business community – providers of goods and services – to seamlessly interact with the government. The objective is to cut red tape, save time, reduce operational costs and to create a more transparent business environment when dealing with the government.

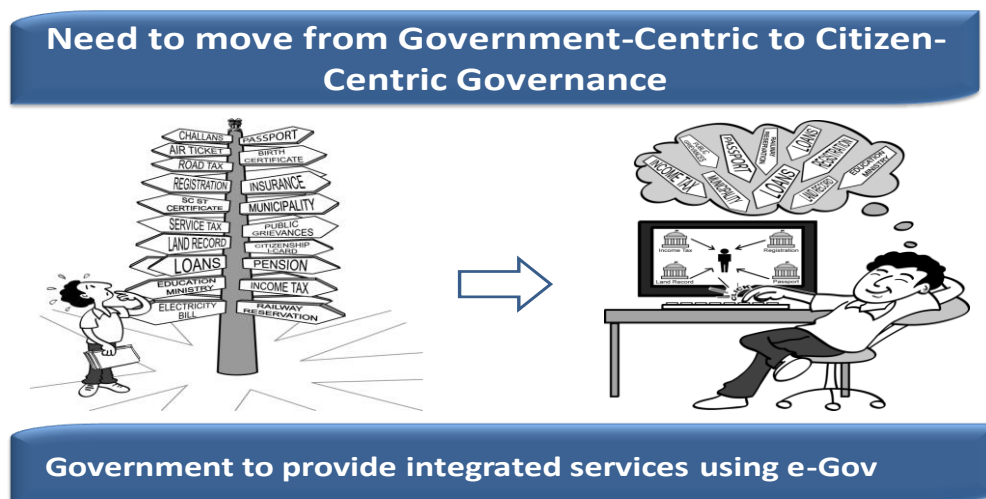
### 5.4. G2E (Government to Employees)

Government is by far the biggest employer and like any organization, it has to interact with its employees on a regular basis. This interaction is a two-way process between the organization and the employee. Use of ICT tools helps in making these interactions fast and efficient on the one hand and increase satisfaction levels of employees on the other.

## 6. Benefits / Outcomes of e-Governance

e-Governance is about reforms in governance, facilitated by the creative use of Information and Communications Technology. The following can therefore be achieved as a result of e-Governance:

- Better Access to Information and Quality Services for Citizens
- Simplicity, Efficiency and Accountability in the Government
- Extended Reach of Governance
- Enabling Environment for Promoting Economic Development
- Enhancing Transparency and Accountability
- Improving Service Delivery



**Figure 2: Integrated services using e-Governance**

## 7. Improving Public Administration

e-Governance administrative components, such as a computerized treasury, integrated financial management information systems, and human resource management systems, lead to greater efficiency in public administration. Its features include the integration of expenditure and receipt data, control of expenditure, human resources management, intelligent audit through data analysis and the publishing of financial data.

## 8. e-Governance Maturity Model

In order to guide and benchmark e-Governance development, various e-Governance development models, so called maturity models have been developed. These models outline various stages for e-Government development.

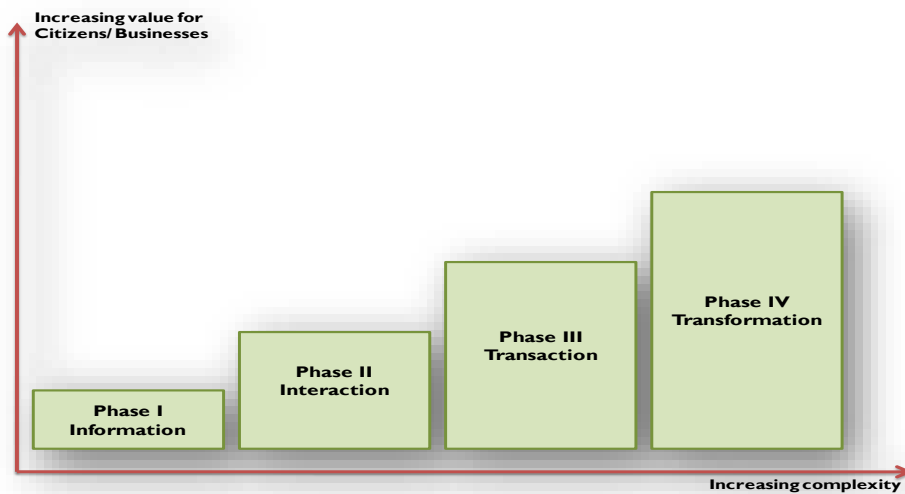


Figure 3: e-Governance Maturity Model (Gartner, 2000)

### 8.1. Gartner e-Governance Maturity Model

A brief description of each of the phases is as follows:

8.1.1. **Information:** In the first *phase*, e-Governance means being present on the web, providing the external public (G2C and G2B) with relevant information. The value to the public is that government information is publicly accessible; processes are described and thus become more transparent, which improves democracy and service.

Internally (G2G), the government can also disseminate information with static electronic means, such as the internet. In this phase, it is all about information.

8.1.2. **Interaction:** In the *second phase*, the interaction between government and the public (G2C and G2B) is stimulated with various applications. People can ask questions via e-mail, use search engines for information and are able to download all sorts of forms and documents. These functionalities save time. In fact the complete intake of (simple)

applications can be done online 24/7. Normally this would have only been possible at a counter, during working hours.

Internally (G2G), government organizations use Local Area Networks (LAN), intranets and e-mail to communicate and exchange data. The bottom line is that more efficiency and effectiveness is achieved because a large part of the intake process is done online. However, you still have to go to the office to finalize the transaction, by paying a fee, handing over evidence or signing papers.

8.1.3. **Transaction:** With *phase three*, the complexity of the technology is increasing, but customer (G2C and G2B) value will also be higher. Complete transactions can be done without going to an office. Examples of online services are filing income tax, filing property tax, extending/renewal of licenses, visa and passports and online voting. Phase three is complex, mainly because of security and personalization issues – e.g., digital (electronic) signatures are necessary to enable legal transfer of services. In this phase, internal (G2G) processes have to be redesigned to provide good service. Government needs to create new laws and legislation that will enable paperless transactions with legal certification. The bottom line is that, now, the complete process is online, including payments, digital signatures etc. This saves time, paper and money.

8.1.4. **Transformation:** The *fourth phase* is the transformation phase in which all information systems are integrated and the public can get G2C and G2B services at one (virtual) counter. One single point of contact for all services is the ultimate goal. The complex aspect in reaching this goal is mainly on the internal side, e.g. the necessity to drastically change culture, processes and responsibilities within the government institution (G2G). Government employees in different departments have to work together in a smooth and seamless way. In this phase, cost savings, efficiency and customer satisfaction are reaching highest possible levels.

The **UN e-Governance Survey 2008** report has taken this model a step further and introduced, as the *fifth phase*, the concept of '**Connected Government**', which means Governments transform themselves into a connected entity that responds to the needs of its citizens by developing an integrated back-office infrastructure. This is characterized by:

- Horizontal connections (among government agencies)
- Vertical connections (central and local government agencies)
- Infrastructure connections (interoperability issues)
- Connections between governments and citizens
- Connections among stakeholders (government, private sector, academic institutions, NGOs and civil society)



## 9. Evolution of e-Governance in India

---

Recognizing the increasing importance of electronics, the Government of India established the Department of Electronics in 1970. The subsequent establishment of the National Informatics Centre (NIC) in 1977 was the first major step towards e-Governance in India as it brought 'information' and its communication in focus. In the early 1980s, use of computers was confined to a very few organizations. The advent of personal computers brought the storage, retrieval and processing capacities of computers to Government offices. By the late 1980s, a large number of government officers had computers but they were mostly used for 'word processing'. Gradually, with the introduction of better software, computers were put to other uses like managing databases and processing information. Advances in communications technology further improved the versatility and reach of computers, and many Government departments started using ICT for a number of applications like tracking movement of papers and files, monitoring development programmes, processing of employees' pay rolls, generation of reports etc.

However, the main thrust for e-Governance was provided by the launching of NICNET in 1987 – the national satellite-based computer network. This was followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments. NICNET was extended via the State capitals to all district headquarters by 1990.

In the ensuing years, with on-going computerization, tele-connectivity and internet connectivity came a large number of e-Governance initiatives, both at the Union and State levels. A National Task Force on Information Technology and Software Development constituted in May 1998, while recognizing Information Technology as a frontier area of knowledge per se, focused on utilizing it as an enabling tool for assimilating and processing all other spheres of knowledge. It recommended the launching of an 'Operation Knowledge' aimed at universalizing computer literacy and spreading the use of computers and IT in education. In 1999, the **Union Ministry of Information Technology** was created. By 2000, a 12-point minimum agenda for e-Governance was identified by Government of India for implementation in all the Union Government Ministries/Departments. Some of the important agenda points included the following actions to be taken by the Ministries / Departments:

- Each Ministry/Department must provide PCs with necessary software up to the Section Officer level. In addition, Local Area Networks (LAN) must also be set up.
- It should be ensured that all staff that have access to and need to use computer for their office work are provided with adequate training. To facilitate this, inter alia, Ministries/Departments should set up their own or share other's Learning Centres for decentralized training in computers as per the guidelines issued by the MIT.

- Each Ministry/Department should start using the Office Procedure Automation software developed by NIC with a view to keep a record of receipt of *dak*, issue of letters, as well as movement of files in the department.
- Pay roll accounting and other house-keeping software should be put to use in day-to-day operations.

These initiatives / actions, though served an important purpose in introducing ICTs in government, fell far short of expectations because the approach was still Departmental and not Citizen-centric. Citizens did not benefit much as they still were supposed to physically go to each Department (or its associated office) to avail the service. Second, there was no integration of information within and among departments. This resulted in creation of silos of information. Third, from a government perspective, there was huge duplication of effort and wastage of precious resources in creation of overlapping infrastructure by each Department / Ministry at the central & state level.

Prior to 2006 when the Government of India formally launched its National e-Governance Plan (NeGP), which is discussed in subsequent chapter of this book, some departments of Government of India as well as state governments had initiated steps to adopt e-Governance. Backed with the experience of implementing NeGP, e-Kranti has evolved as an essential pillar of Digital India programme.

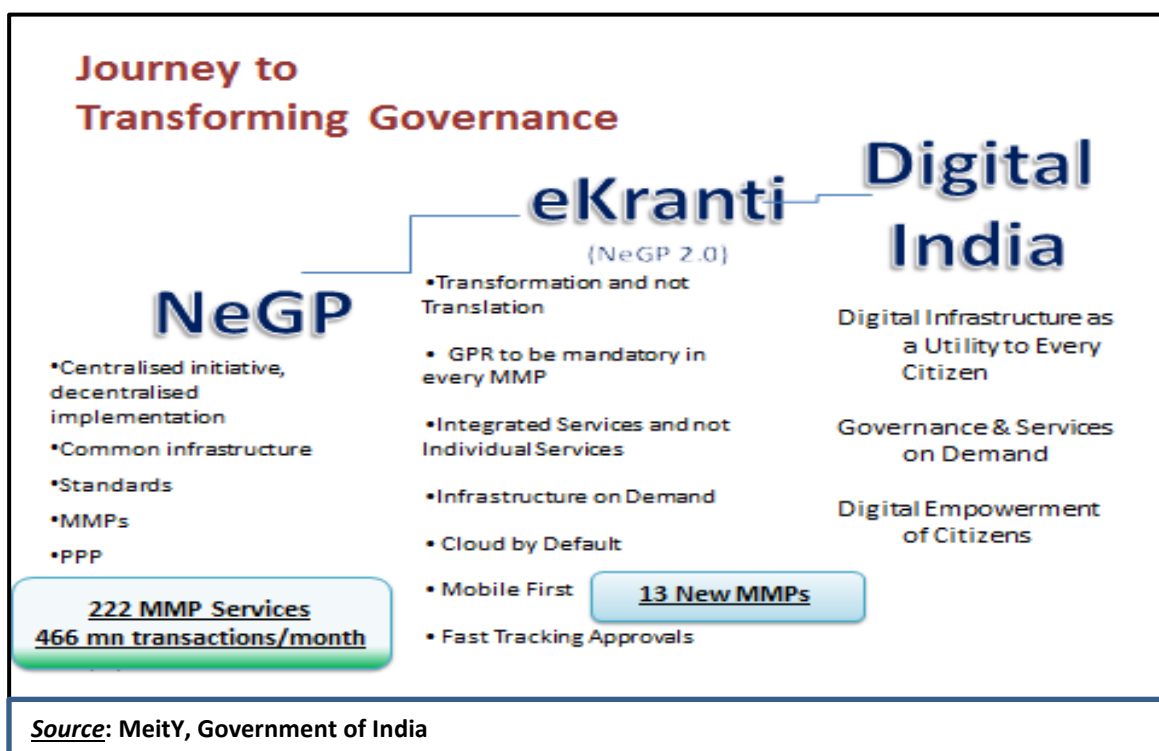
## 10. Components of National eGovernance Plan

---

The key components of the NeGP are as follows:

- Integrated Service Delivery Platforms
- 31 Mission Mode Projects (31)
- Core ICT Infrastructure components such as
  - State Data Centre (SDC)
  - Statewide Area Network (SWAN)
  - Common Service Centers (CSCs)
  - State Portal and State Service Delivery Gateway (SSDG)
  - National e-Governance Service Delivery Gateway (NSDG)
  - Mobile e-Governance Service Delivery Gateway (MSDG)
- Core support components include are

Core policies and guidelines on Security, HR, Citizen Engagement, social media as well as Standards related to Metadata, Interoperability, Enterprise Architecture, Information Security etc.



## 11. The Digital India Programme

The Digital India program looks forward to make India a digitally empowered society and a knowledge economy. Digital India Programme is an umbrella programme that weaves together a larger number of ideas and thoughts pertaining to technology enabled governance into a single, comprehensive vision so that each of them is seen as part of a larger goal.

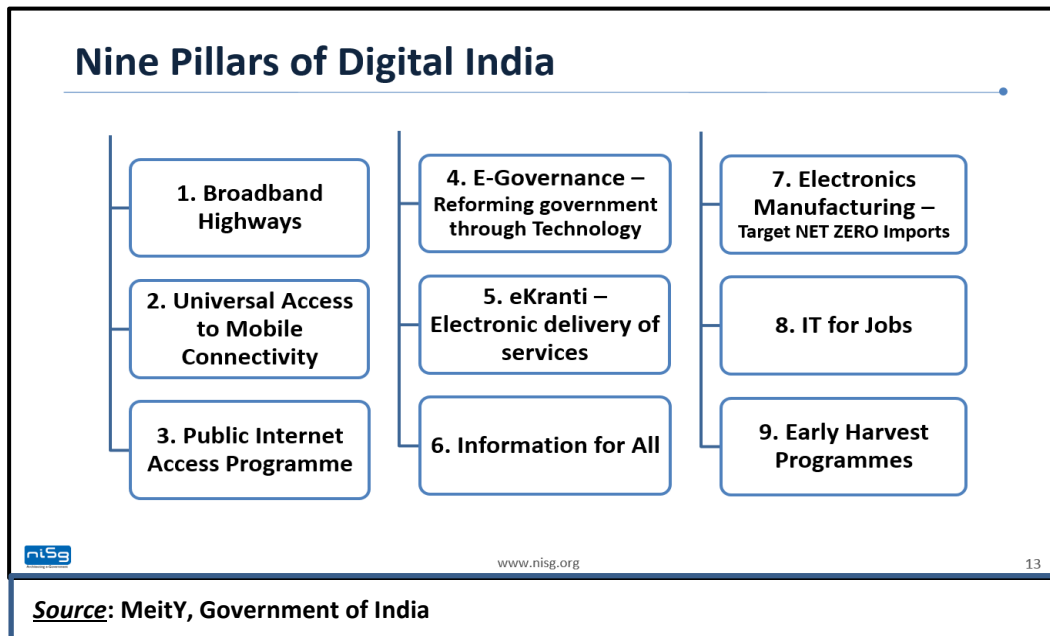
The Digital India programme is centered on three vision areas and rests on nine pillars. The nodal agency for coordinating the implementation of the programme is Ministry of Electronics & Information Technology (MeitY). The digital India programme is a transformative initiative where IT + IT = IT, which translates to:

***IT (India's Talent) + IT (Information Technology) = IT (India's Tomorrow)***

The programme is centered on three vision areas:

- Digital Infrastructure as a Utility to Every Citizen
- Governance & Services on Demand
- Digital Empowerment of Citizens

The programme is centered on nine pillars:



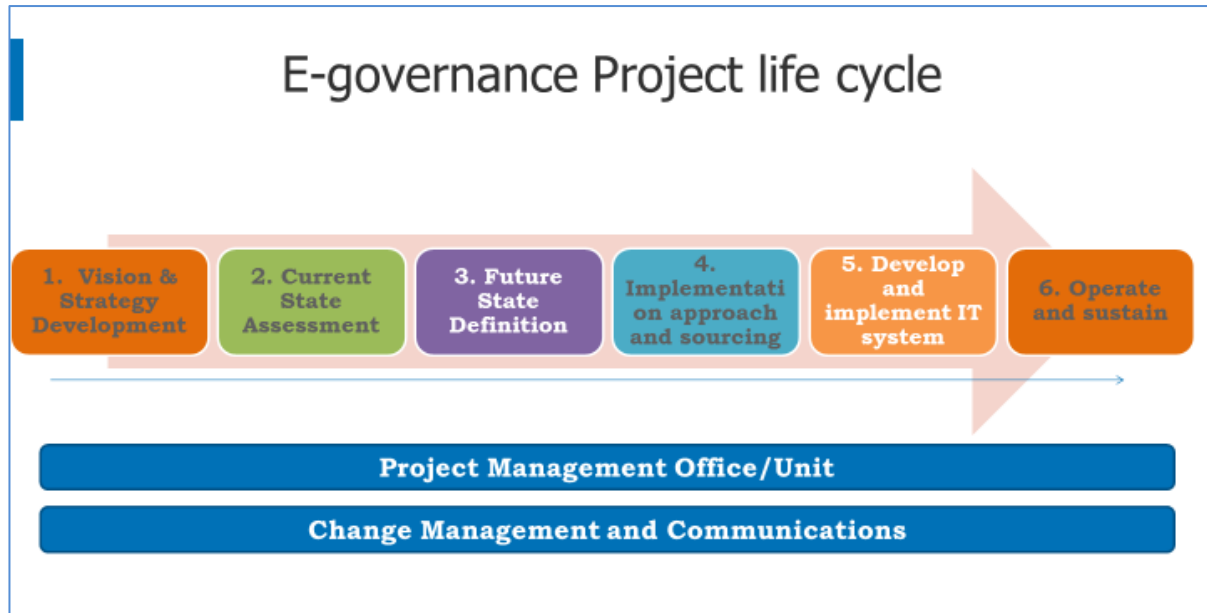
### 11.1. Key Initiatives under Digital India

As it is well known, Digital India is a large umbrella program covering various aspects of e-governance in India. It encompasses several programs under its ambit. This executive briefing covers some of the interesting and key initiatives under the Digital India program. It does not mean the other programs are not important, but these programs have higher visibility, applicability and immediate usage to the stake holders at large. Thus, these initiatives are briefed here for a quick reference with some details. The interested officer/candidate is requested to refer to the documents connected with the specific program for more details. This executive brief covers the following key initiatives of Digital India:

1. Digi-locker
2. Digital payments
3. MeghRaj
4. NCOG (National Centre of Geo Informatics)
5. Umang (Unified Mobile Application)

## 12. eGovernance Project Lifecycle

Life cycle is defined as that which spans the start to the end of a project, activity, or a task. In this case, from the start of the conceptualization of the ideas to implementation and roll out of IT projects in government departments. Hence it is called the e-Governance project life cycle. It is indicated in the figure below.



As can be seen from the figure, there are six distinct steps and two major activities spanning across the entire cycle. Let us now examine the same.

### 12.1. Vision and strategy development

It is virtually the first step in the entire process. This provides the direction and helps to bring a common understanding among all the stake holders while defining the anticipated outcome (benefits) of the program. Following are the major steps:

1. Needs Assessment
2. Define clear vision & objectives
3. Prioritization of services and projects
4. Incorporate domestic and global learnings which would involve review of best practices implemented by various governments
5. Identify institutional structures & capacities for implementation
6. Define funding requirements which would primarily involve public finance, private finance, project finance and hybrid models like Public-Private Partnerships
7. Define monitoring and evaluation approach

### 12.2. Current state assessment

This is the next step. This is also called as the 'As Is' assessment. Involves finding out IT systems, people readiness and process aspects. Covers – mainly but not limited to -

1. Critical assessment of current business processes and pain areas
2. Best practices in similar environments
3. Assess legal framework and current limitations

4. Assess current ICT systems and their ability to support future plans
5. Assessment of current capacities at all levels and their preparedness for e-governance

### 12.3. Future state definition

---

Also known as “To be” state definition. This is the aspirational dimension of the process. As in the previous process, all the three dimensions of IT systems, people readiness and processes are addressed. The major steps involved are

1. Process reengineering and to –be process definition
2. Identify IT enablement opportunities and requirements
3. Define changes to the legal and regulatory environment
4. Develop People change and capacity building plan
5. Develop project awareness and communication requirements...

### 12.4. Implementation approach and sourcing

---

This step mainly looks at options of executing the project including business model, funding possibilities etc. The major steps include:

1. Define implementation approach and phasing plan (functional and geographic)
2. Assess detailed funding requirements and business model
3. Develop vendor evaluation and selection criteria
4. Develop KPIs and performance levels for services and systems
5. Develop a DPR (Detailed Project Report)
6. Develop RFP (Request for Proposal), which contains the scope of work and selection criteria along with the contract documents.
7. Vendor selection for implementation of IT projects.

### 12.5. Develop and implement IT system

---

This step is when the actual software application for the e-governance is carried out. Following are the activities mainly:

1. Definition of detailed functional and technical requirements
2. System design and development
3. Software quality assurance, acceptance testing and auditing
4. Training and capacity building
5. Change management and project communications
6. Project documentation
7. Project go-live

### 12.6. Operate and sustain

---

It is the ongoing stage. This is to keep the system working with upgrades and ensure service continuity.

1. System operations and maintenance
2. Software change management
3. Rollout services and systems (functionality and geography)
4. Objectives and benefits evaluation and reinforcement
5. Sustained change, capacity building and communications

### 12.7. Project management

---

This is an activity that spans across the life cycle. This is a major activity and it requires systematic approach. This is mainly

1. To provide direction and to manage the project through-out the lifecycle
2. To ensure project development and implementation in line with the overall vision and objectives
3. To operationalize the project strategy in line with the defined timelines
4. To ensure application of learnings and best practices across initiatives/geographies/functions
5. Coordinate, monitor and track the project activities

### 12.8. Change management and communications activity

---

The Objective is to address and manage the 'people' related aspects in the project implementation. It includes

1. Managing the people change in terms of addressing the resistance
2. Managing people resistance to change
3. Communicating the project vision, objectives and benefits to all the stakeholders
4. Building skill sets and capacities across various levels in the organization to adopt new processes and systems

Though the steps indicated above are general requirement for execution of e-Governance projects, there may be some variations from case to case. As e-governance has been an accepted practice and most of the departments have embarked on the journey, the variations (additions or modification of the steps indicated above) are acceptable. This eGLC cycle may be used as a guiding factor to enable the proper execution of the program than adhering to it as a rule.

--- End of Document ---