practices in Chapter 3. Chapter 4 examines some of the e-Governance initiatives undertaken in India prior to the formal launch of the National e-Governance Plan (NeGP) in 2006. In Chapter 5, the ‘Core Principles’ of e-Governance have been outlined in the Indian context and Chapter 6 elaborates upon the issues involved in implementation of e-Governance reforms on the basis of these ‘core principles’. The basic components of NeGP are discussed in Chapter 7. This Chapter also contains a discussion on some of the issues involved in the implementation of the mammoth National e-Governance Plan. Chapter 8 deals with the legal framework required for e-Governance in the country. Chapter 9 includes a brief discussion on Knowledge Management.

1.13 The Commission has visited several States and UTs to elicit the views of State Government officials and the public. During these visits, the presentations made by the State Governments generally included a presentation on the e-Governance initiatives undertaken by them. The Commission has also benefited from additional inputs on e-Governance initiatives provided by several State Governments. The Commission is grateful to Shri Dayanidhi Maran, the then Union Minister for Communications and Information Technology, and officers of the Ministry for discussing the initiatives undertaken in relation to e-Governance. The Commission is also grateful to Dr. Sam Pitroda, Chairman, the National Knowledge Commission and its members with whom it had a very useful interaction. The Commission would also like to thank Shri Rajiv Chawla, Commissioner, Survey and Settlement, Land Records, Government of Karnataka, Shri Ajay Seth, Secretary (Finance), Government of Karnataka; Shri S.G. Hegde, Executive Director, KEA; and Shri Amod Kumar, Special Secretary (I&T), Government of Uttar Pradesh for their valuable inputs on the ‘Bloomi’, ‘Khatian’, ‘Computerised Counselling’ and ‘Lokvani’ projects respectively. The Commission acknowledges the contribution of Shri Harish Gowda, Commissioner of Commercial Taxes, Karnataka. The Commission would like to place on record its gratitude to Dr. N. Sheshagiri, former Director General, National Informatics Centre; Shri Vivek Kulkarni, Chairman and CEO, Brickwork India; and Shri Nazeer Hussain, former Director, Planning Department, Government of Karnataka for their valuable suggestions. To assist in the preparation of this Report, the Commission had entrusted the task of preparing a concept paper on the Commission’s Terms of Reference on e-Governance to the National Institute of Smart Governance, Hyderabad. The inputs provided by them in their concept paper were invaluable. The Commission also acknowledges the contribution of Shri R. Chandrashekhar, Special Secretary (IT), Department of Information Technology; Shri J. Satyanarayana, CEO, NISG and Shri B.B. Nanawati, Principal Consultant, NeGP Project Monitoring Unit.

2.1 Enabling Good Governance through Use of ICT

2.1.1 The emergence of Information and Communications Technology (ICT) has provided means for faster and better communication, efficient storage, retrieval and processing of data and exchange and utilization of information to its users, be they individuals, groups, businesses, organizations or governments. What had begun as a faster, more accurate and simpler means of word-processing quickly lent itself to being used as a tool for processing and tabulating data as an aid in decision making. With growing computerization and increasing internet connectivity, this process has presently reached a stage where more and more users are motivated to modifying their ways of doing things in order to leverage the advantages provided by ICT. In other words, this has led to ‘business process re-engineering’. So far as governments are concerned, the coming together of computerization and internet connectivity/web-enablement in association with process re-engineering, promises faster and better processing of information leading to speedier and qualitatively better decision making, greater reach and accountability, better utilization of resources and overall good governance. In the case of citizens, it holds the promise of enhanced access to information and government agencies, efficient service delivery and transparency in dealings and interactions with government.

2.1.2 With the increasing awareness among citizens about their rights and the resultant increase in expectations from the government to perform and deliver, the whole paradigm of governance has changed. Government, today, is expected to be transparent in its dealings, accountable for its activities and faster in its responses. This has made the use of ICT imperative in any agenda drawn towards achieving good governance. It has also led to the realization that such technologies could be used to achieve a wide range of objectives and lead to faster and more equitable development with a wider reach. In its Fourth Report entitled ‘Ethics in Governance’, the Commission had clearly stated that the tools of modern technology such as Information and Communications Technology (ICT) should be used to transform the relationship of the government with its constituents, citizens and businesses, and also between its own agencies. While recognizing the potential of ICT in transforming and redefining processes and systems of governance, the Commission had suggested that
e-Governance is the logical next step in the use of ICT in systems of governance in order to ensure wider participation and deeper involvement of citizens, institutions, civil society groups and the private sector in the decision making process of governance.  

2.1.3 e-Governance or ‘electronic governance’ is basically the application of Information and Communications Technology to the processes of Government functioning in order to bring about ‘Simple, Moral, Accountable, Responsive and Transparent’ (SMART) governance. This would generally involve the use of ICT by government agencies for any or all of the following reasons: (a) Exchange of information with citizens, businesses or other government departments (b) Speedier and more efficient delivery of public services (c) Improving internal efficiency (d) Reducing costs / increasing revenue (e) Re-structuring of administrative processes and (f) Improving quality of services.

2.2 Defining e-Governance

2.2.1 Although the term ‘e-Governance’ has gained currency in recent years, there is no standard definition of this term. Different governments and organizations define this term to suit their own aims and objectives. Sometimes, the term ‘e-government’ is also used instead of ‘e-Governance’. Some widely used definitions are listed below:

i. According to the World Bank, “E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.” Thus, the stress here is on use of information technologies in improving citizen-government interactions, cost-cutting and generation of revenue and transparency.

ii. UNESCO defines e-Governance as: “Governance refers to the exercise of political, economic and administrative authority in the management of a country’s affairs, including citizens’ articulation of their interests and exercise of their legal rights and obligations. E-Governance may be understood as the performance of this governance via the electronic medium in order to facilitate an efficient, speedy and transparent process of disseminating information to the public, and other agencies, and for performing government administration activities.” This definition visualizes the use of the electronic medium in the exercise of authority in the management of a country’s affairs along with articulation of citizens’ interests leading to greater transparency and efficiency.

iii. The Council of Europe has taken e-Governance to mean: “the use of electronic technologies in three areas of public action:
- relations between the public authorities and civil society
- functioning of the public authorities at all stages of the democratic process (electronic democracy)
- the provision of public services (electronic public services)” In this case, the focus is on making use of electronic technologies with a view to encourage better interaction between government and citizens, promote democracy and provide public services.

iv. The US E-Government Act of 2002 defines “electronic Government” to mean (Section 3601): “the use by the Government of web-based Internet applications and other information technologies, combined with processes that implement these technologies, to-
(A) enhance the access to and delivery of Government information and services to the public, other agencies, and other Government entities; or
(B) bring about improvements in Government operations that may include effectiveness, efficiency, service quality, or transformation”. This definition reflects the strategy of the US Government regarding the use of ICT in improving Government operations on the one hand and enhancing the access and delivery of information and services to citizens and government entities on the other.

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4 Paragraph 6.4.1 of the Report
6 Source: http://go.worldbank.org/M1JHE0Z280 (extracted on 18.08.2008)
8 Source: http://www.coe.int/T/E/com/Files/Themes/e-voting/definition.asp
e-Governance is the logical next step in the use of ICT in systems of governance in order to ensure wider participation and deeper involvement of citizens, institutions, civil society groups and the private sector in the decision making process of governance.  

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2.2.2 Basically, e-Governance is generally understood as the use of Information and Communications Technology (ICT) at all levels of the Government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient efficient and transparent manner.

Dr. APJ Abdul Kalam, former President of India, has visualized e-Governance in the Indian context to mean:

"A transparent smart e-Governance with seamless access, secure and authentic flow of information crossing the interdepartmental barrier and providing a fair and unbiased service to the citizen."

2.3 Stages of e-Governance

2.3.1 It is evident that e-Governance is intrinsically linked with the development of computer technology, networking of computers and communication systems. In developing countries, such technologies and systems became available with a perceptible time lag as compared to developed nations. However, in the case of India, with the liberalization of the economy from the early 1990s onwards, there has been a convergence in the availability of cutting edge technologies and opportunities in the field of e-Governance. Generally speaking, the Indian experience demonstrates that the onset of e-Governance proceeded through the following phases:

(a) Computerisation: In the first phase, with the availability of personal computers, a large number of Government offices got equipped with computers. The use of computers began with word processing, quickly followed by data processing.

(b) Networking: In this phase, some units of a few government organizations got connected through a hub leading to sharing of information and flow of data between different government entities.

(c) On-line presence: With increasing internet connectivity, a need was felt for maintaining a presence on the web. This resulted in maintenance of websites by government departments and other entities. Generally, these web-pages/web-sites contained information about the organizational structure, contact details, reports and publications, objectives and vision statements of the respective government entities.

(d) On-line interactivity: A natural consequence of on-line presence was opening up of communication channels between government entities and the citizens, civil society organizations etc. The main aim at this stage was to minimize the scope of personal interface with government entities by providing downloadable Forms, Instructions, Acts, Rules etc. In some cases, this has already led to on-line submission of Forms. Most citizen-government transactions have the potential of being put on e-Governance mode.

2.4 Types of Interactions in e-Governance

2.4.1 e-Governance facilitates interaction between different stakeholders in governance. These interactions may be described as follows:

G2G (Government to Government) – In this case, Information and Communications Technology is used not only to restructure the governmental processes involved in the functioning of government entities but also to increase the flow of information and services within and between different entities. This kind of interaction is only within the sphere of government and can be both horizontal i.e. between different government agencies as well as between different functional areas within an organisation, or vertical i.e. between national, provincial and local government agencies as well as between different levels within an organisation. The primary objective is to increase efficiency, performance and output.

G2C (Government to Citizens) – In this case, an interface is created between the government and 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. It gives citizens the choice of when to interact with the government (e.g. 24 hours a day, 7 days a week), from where to interact with the government (e.g. service centre, unattended kiosk or from one’s home/workplace) and how to interact with the government (e.g. through internet, fax, telephone, email, face-to-face, etc). The primary purpose is to make government, citizen-friendly.

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costs and to create a more transparent business environment when dealing with the government. The G2B initiatives can be transactional, such as in licensing, permits, procurement and revenue collection. They can also be promotional and facilitative, such as in trade, tourism and investment. These measures help to provide a congenial environment to businesses to enable them to perform more efficiently.

G2E (Government to Employees) – Government is by far the biggest employer and like any organisation, it has to interact with its employees on a regular basis. This interaction is a two-way process between the organisation 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.

2.5 Benefits of e-Governance

2.5.1 In the end, e-Governance is about reform in governance, facilitated by the creative use of Information and Communications Technology. It is expected that this would lead to:

i. **Better access to information and quality services for citizens:** ICT would make available timely and reliable information on various aspects of governance. In the initial phase, information would be made available with respect to simple aspects of governance such as forms, laws, rules, procedures etc later extending to detailed information including reports (including performance reports), public database, decision making processes etc. As regards services, there would be an immediate impact in terms of savings in time, effort and money, resulting from online and one-point accessibility of public services backed up by automation of back end processes. The ultimate objective of e-Governance is to reach out to citizens by adopting a life-cycle approach i.e. providing public services to citizens which would be required right from birth to death.

ii. **Simplicity, efficiency and accountability in the government:** Application of ICT to governance combined with detailed business process reengineering would lead to simplification of complicated processes, weeding out of redundant processes, simplification in structures and changes in statutes and regulations. The end result would be simplification of the functioning of government, enhanced decision making abilities and increased efficiency across government – all contributing to an overall environment of a more accountable government machinery. This, in turn, would result in enhanced productivity and efficiency in all sectors.

iii. **Expanded reach of government:** Rapid growth of communications technology and its adoption in governance would help in bringing government machinery to the doorsteps of the citizens. Expansion of telephone network, rapid strides in mobile telephony, spread of internet and strengthening of other communications infrastructure would facilitate delivery of a large number of services provided by the government. This enhancement of the reach of government – both spatial and demographic – would also enable better participation of citizens in the process of governance.
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