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ELEVENTH REPORT

SECOND ADMINISTRATIVE REFORMS COMMISSION

**PROMOTING e-GOVERNANCE**

*The SMART*

*Way Forward*



e-GOVERNANCE

DECEMBER 2008

GOVERNMENT OF INDIA

**SECOND ADMINISTRATIVE REFORMS COMMISSION**

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*The SMART Way Forward*

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## PREFACE

**In his *Grundlegung Zur Metaphysik de Sitton*, Immanuel Kant says, “So act as to treat humanity, whether in their own person or in that of any other, in every case as an end withal, never as means only”. Kant’s observation is even more valid today. The citizens are ends in themselves, rather than as means to other ends.** The colonial view of the Government used to be as a ‘controller’ and ‘ruler’. It is now that of a coordinator and provider. Government is responsible for providing certain services to the citizens, just like an organisation is responsible for managing a value chain that leads to output. Business corporations have discovered over the last few decades that information technology can make the value chain more efficient and lead to quality improvements and cost savings. Similarly, Governments have discovered that information technology can make the provision of services to the citizen more efficient and transparent, can save costs and lead to a higher level of efficiency.

e-Governance is in essence, the application of Information and Communications Technology to government functioning in order to create ‘Simple, Moral, Accountable, Responsive and Transparent’<sup>1</sup> (SMART) governance. In this report on e-Governance, the Second Administrative Reforms Commission (ARC) has tried to analyse the successes and failures of e-Governance initiatives in India and at the global level, in order to extrapolate the best practices, key reform principles and recommendations that can help the government to implement a new paradigm of governance in the country. This new paradigm would focus on the use of information technology to bring public services to the doorsteps of our citizens and businesses on the basis of revolutionary changes in our institutional structures, procedures and practices that would transform the relationships between our three levels of government, our businesses and our citizens.

The revolution in Information and Communications Technology (ICT) has brought a whole new agenda for governance into the realm of possibility. e-Governance comprises decisional processes and the use of ICT for wider participation of citizens in public affairs. Citizens are participants in e-Governance. The purpose of implementing e-Governance is to improve governance processes and outcomes with a view to improving the delivery of public services to citizens. Some authors have defined e-Governance as the e-business of the

State. This seems appropriate as both e-Governance and e-business use similar technologies, infrastructure and hardware. However the market models are widely different thus justifying e-Governance as a separate area of research (Gisler, 2001). Although there are many definitions of e-Governance, the objectives of governments are indisputable: maintaining collective security, administering justice, providing the institutional infrastructure of the economy and ensuring that vital social capital is enhanced through improvements in health and education and through strong families and communities (Dawes et al. 1999). A more comprehensive definition of e-Governance proposes changes of government in two related aspects: 1) transformation of business of governance i.e. reducing costs, improving service delivery and renewing processes; 2) re-examination of the functions and processes of democracy itself (Aicholzer and Schmutzer 2000). The resulting impacts are reduced costs, lesser corruption, increased transparency, revenue growth and convenience for the citizenry.

India, being the largest democracy in the world, has much to gain from e-Governance, especially when citizen participation in governance is one of the features of the fully evolved stage of e-government. Many e-readiness assessments have been carried out at the global level that show the current state of India's e-readiness. Some of the more recent study findings are as follows: The July 2002 EIU ranking found that 55 of the countries navigating the information super highway account for 98 per cent of all IT in 150 countries. It ranked India at 54 among the group of elite 55. The May 2001 Mc-Connell ranking of e-readiness assessment indicated that substantial improvements were needed in the area of connectivity. Improvements are also required in the areas of E-Leadership, E-Business, Information Security and Human Capital. The Global Information Technology Report, 2002-03, ranked India 37 above China which is ranked 43rd, whereas the 2001-02 Report ranked India 54 (adapted from INDIA: E-Readiness Assessment Report 2003, Department of Information Technology, Government of India).

Singapore has 'SINGAPORE ONE', an e-Governance suite that offers very comprehensive services to its citizens. Once a child is born, the data base keeps track of this child during its primary and secondary school days, graduation degree, employment, marriage, housing loans, passport, business etc. South Korea is another country that has developed a number of e-Governance projects. This country boasts of the best connectivity in the world. The UK also has an excellent e-Governance system and a lot can be learnt from how the government has transformed itself in the new era. While the India processes are based on the UK processes, they have remained antiquated. They need to be updated and changed as per current circumstances.

e-Governance 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 various arms of government resulting in 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 resultant benefits are less corruption, increased transparency, greater convenience, revenue growth, and cost reductions.\*

Analogous to e-commerce, which allows business to transact with each other more efficiently (B2B) and brings customers closer to businesses (B2C), e-government aims to make the interaction between government and citizens (G2C), government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive.

The goals of e-Governance are:

- a. Better service delivery to citizens
- b. Ushering in transparency and accountability
- c. Empowering people through information
- d. Improved efficiency within Governments
- e. Improve interface with business and industry.

e-Governance needs to transform all levels of Government but the focus should be on local governments since local governments are the closest to citizens, and constitute for many, the main interface with government. The relationship of citizens and local authorities tends to be one based on proximity as the interests at stake for both parties are closely entwined concerning issues such as public services, local development, education etc. e-Governance based administrative reforms in local governments can have maximum impact on citizens.

The benefits of information technology have not been evenly distributed. It has been noticed that most of the time the benefits of e-Governance are also reaped by the affluent sections of society. Therefore a concerted effort has to be made to direct e-Governance reforms towards the common man.

The advances in information and communications technologies and the internet provide opportunities to transform the relationship between governments and citizens and business in new ways that contribute to the attainment of good governance. They provide opportunities for people and business to involve themselves in the process of governance at all levels. They facilitate better service delivery to clients, in terms of timelines and quality,

thus making governance more efficient and effective. In addition, the use of ICT may lower transaction costs both for citizens and government operations and public services can be made more affordable to the people at large.

e-Governance has to be comprehensive; mere introduction of the IT component is not an end in itself. Comprehensive e-Governance reforms cover (1) the process, (2) preparedness and the technology (3) and the people. Introduction of e-Governance needs process engineering as the first step. Unless the processes and procedures and even structures of government are re-engineered so as to be e-Governance compatible, e-Governance projects cannot succeed. The technology and the hardware and software come second, only after the processes have been re-engineered. And ultimately, in order to make the reforms sustainable the people in the concerned departments/agencies have to internalize the changes. This is also one of the reasons why e-Governance projects succeed at the pilot level but 'when up-scaled' they become unsustainable.

Different States in India are at different levels of e-readiness: while implementing e-Governance reforms in different parts of the country, this aspect has to be kept in mind. This makes implementation of national e-Governance projects in a uniform way difficult. Therefore, it is necessary to bring all States at the same or comparable levels of IT readiness. Today, there are a number of successful projects of e-Governance running in the country. But there are very few which are on a nation-wide basis. The challenge is to replicate and upscale the successful models.

A large number of e-Governance projects can be implemented in the public-private partnership mode. It is a challenge to integrate the professional approach of the private sector with the social concerns of the Government. It is necessary to evolve some norms for such partnerships. It is also very important to provide all services to citizen at one common counter/platform, preferably close to where the citizen lives. This is possible through e-Governance. But this requires all the individual services to be brought to the same levels of computerization which poses a serious challenge. The next step thereafter is to use mobile technology and India's increasing mobile telephony penetration rates to allow citizens to transact many services on the move without even needing to come to a common counter let alone queue up for the services.

The types of services possible through e-Governance can be broadly classified into three categories (1) providing information (2) improving processing efficiency and (3) facilitating transactions. Amongst these, providing information is the simplest and the degree of complexities increase as we move from information to transactions. But it is the second and the third category of services that provide maximum convenience to the citizens. The challenge is to cover such services.

e-Government is not about ‘e’ but about ‘government’; it is not about computers and websites, but about services to citizens and businesses. e-Government is also not about translating processes; it is about transforming them. e-Government is concerned with the transformation of government, modernisation of government processes and functions and better public service delivery mechanisms through technology so that government can be put on an auto-pilot mode.

The four pillars of e-Government are:\*

- People
- Process
- Technology
- Resources

The challenges in e-Governance have been described as centred around four key areas viz people, process, technology and resources. The key considerations in e-Governance are described below:

#### e-Governance imperatives

Process	Simplicity	Efficiency	Citizen-centricity	Sustainability	Cost-effectiveness
People	Vision	Leadership	Commitment	Competency	Change
Technology	Architecture	Open Standards	Reliability	Scalability	Security
Resources	Holistic	Efficient	Service-oriented	Sustained	Adequate

To compete successfully in a network based global economy, governments need to be both leaders and facilitators. The leadership and facilitation roles comprise the following elements:

- Developing a national e-strategy, making ICT adoption and network readiness a national priority;
- Undertaking innovative projects that make a difference, to lead by example, adopting best practices;
- Reforming government processes covering areas such as revenues, expenditures, procurement, service delivery, customer grievances etc;

\*This and subsequent paragraphs are adapted from a paper prepared/presentation made by Dr. P.K. Mohanty

- Tracking, storing and managing information, promoting production of national content online and through electronic media; and documenting “successes” and “failures”;
- According high priority to protection of individual rights, intellectual property, privacy, security, consumer protection etc. and mobilising the civil society; and
- Developing a supportive framework for early adoption of ICT and creating a regulatory framework for ICT-related activities.

Creating the macro-economic environment for growth and innovation in ICT, including fiscal policies (cost, innovation, investment, and venture capital), legal and regulatory environment (competition, independent regulator, rule of law, intellectual property protection) and channelizing and mobilization of resources for ICT is an important corollary to e-Governance as is implementing an education policy for the right quantum and quality of manpower resources for a network-ready economy-curricula, ICT training facilities and wiring/networking of educational institutions. Addressing the ‘digital divide’ domestically and internationally, giving signals to markets - articulating a national vision of ICT, according national priority to ICT, undertaking large projects, promoting innovation and risk taking through fiscal concessions and availability of venture capital; creating an investment climate for domestic and foreign investment in ICT sector; championing national interests in international forums etc. are equally important.

Despite important policy initiatives and significant achievements in the economic and social sectors in our country, we still have a long way to go before achieving our full potential for development. This is because there is still a wide gulf between our policy initiatives and intents and the actual achievements. Among the major reasons for this gap include outmoded systems of governance, cumbersome processes and procedures, prevalence of corruption and lack of accountability in our functioning. A pertinent question, therefore, is how can these deficiencies be best redressed. An obvious answer is through adopting e-Governance as an inextricable part of government functioning, be they in routine matters or major projects. In this context I would like to share some of the successful initiatives in e-Governance which were undertaken when I served as Education and Finance Minister and later as Chief Minister in Karnataka. These include use of e-Governance both in routine matters as well as in major initiatives. Some of these are:

- Introduction of computerised counseling in the Common Entrance Test (CET) for admission to Professional Colleges in Karnataka.

This involved creation of a computerized system to manage the processing of the results of CET, to prepare merit lists and thereafter on the basis of the merit list to enable seat selections by the candidates in a transparent manner.

- Disposal of files in the Chief Minister's office.

Every grievance or appeal which was addressed to the Chief Minister, was given a computer number and date and watched on computer for its disposal. Needless to mention the impact of such objective watch had an impact on the efficiency of the CM's secretariat in the matter of prompt disposal of files, redressal and are elaborated in this Report.

Information Technology presents many avenues for improving governance. It has opened up new opportunities for governments to manage things differently and in a more efficient manner by utilizing information effectively and re-engineering processes. ICT tools are emerging as important instruments towards the goal of "good governance". Many countries have launched specific initiatives for open government. Freedom of information is being redefined and supported by ICT. India's Right to Information Act, 2005 is a prime example in this regard. ICT has facilitated a conscious attempt to bring the citizen to the centre-stage. Citizens are being perceived as customers and clients rather than beneficiaries. The internet revolution coupled with rapid advances in communication have proved to be a powerful tool for citizen-centric governance. An important dimension of the Internet potential is the possibility of providing public services anytime, anywhere.

My hope is that the ARC's Eleventh Report on e-Governance, can help transform governance in India to a transparent, responsive, citizen friendly and efficient regime that we can all be proud of.

New Delhi  
December 20, 2008

  
(M. Veerappa Moily)  
Chairman

**Government of India**  
**Ministry of Personnel, Public Grievances & Pensions**  
**Department of Administrative Reforms and Public Grievances**

**Resolution**

**New Delhi, the 31st August, 2005**

No. K-11022/9/2004-RC. — The President is pleased to set up a Commission of Inquiry to be called the Second Administrative Reforms Commission (ARC) to prepare a detailed blueprint for revamping the public administration system.

2. The Commission will consist of the following :

- (i) Shri Veerappa Moily - Chairperson
- (ii) Shri V. Ramachandran - Member
- (iii) Dr. A.P. Mukherjee - Member
- (iv) Dr. A.H. Kalro - Member
- (v) Dr. Jayaprakash Narayan - Member\*
- (vi) Smt. Vineeta Rai - Member-Secretary

3. The Commission will suggest measures to achieve a proactive, responsive, accountable, sustainable and efficient administration for the country at all levels of the government.

The Commission will, inter alia, consider the following :

- (i) Organisational structure of the Government of India
- (ii) Ethics in governance
- (iii) Refurbishing of Personnel Administration
- (iv) Strengthening of Financial Management Systems
- (v) Steps to ensure effective administration at the State level
- (vi) Steps to ensure effective District Administration
- (vii) Local Self-Government/Panchayati Raj Institutions
- (viii) Social Capital, Trust and Participative public service delivery
- (ix) Citizen-centric administration
- (x) Promoting e-governance
- (xi) Issues of Federal Polity
- (xii) Crisis Management
- (xiii) Public Order

Some of the issues to be examined under each head are given in the Terms of Reference attached as a Schedule to this Resolution.

4. The Commission may exclude from its purview the detailed examination of administration of Defence, Railways, External Affairs, Security and Intelligence, as also subjects such as Centre-State relations, judicial reforms etc. which are already being examined by other bodies. The Commission will, however, be free to take the problems of these sectors into account in recommending re-organisation of the machinery of the Government or of any of its service agencies.

5. The Commission will give due consideration to the need for consultation with the State Governments.

6. The Commission will devise its own procedures (including for consultations with the State Government as may be considered appropriate by the Commission), and may appoint committees, consultants/advisers to assist it. The Commission may take into account the existing material and reports available on the subject and consider building upon the same rather than attempting to address all the issues ab initio.

7. The Ministries and Departments of the Government of India will furnish such information and documents and provide other assistance as may be required by the Commission. The Government of India trusts that the State Governments and all others concerned will extend their fullest cooperation and assistance to the Commission.

8. The Commission will furnish its report(s) to the Ministry of Personnel, Public Grievances & Pensions, Government of India, within one year of its constitution.

*Sd/-*

**(P.I. Suvrathan)**

**Additional Secretary to Government of India**

\*Dr. Jayaprakash Narayan – Member, resigned with effect from 1st September, 2007  
(Resolution No. K.11022/26/207-AR, dated 17th August, 2007).

**Government of India**  
**Ministry of Personnel, Public Grievances & Pensions**  
**Department of Administrative Reforms and Public Grievances**

**RESOLUTION**

New Delhi, the 24th July, 2006

No. K-11022/9/2004-RC (Vol.II) – The President is pleased to extend the term of the second Administrative Reforms Commission by one year upto 31.8.2007 for submission of its Reports to the Government.

*Sd/-*

**(Rahul Sarin)**

**Additional Secretary to the Government of India**

**Government of India**  
**Ministry of Personnel, Public Grievances & Pensions**  
**Department of Administrative Reforms and Public Grievances**

**RESOLUTION**

New Delhi, the 17th July, 2007

No.K-11022/26/2007-AR – The President is pleased to extend the term of the second Administrative Reforms Commission (ARC) by seven months upto 31.3.2008 for submission of its Reports to the Government.

*Sd/-*

**(Shashi Kant Sharma)**

**Additional Secretary to the Government of India**

**Government of India**  
**Ministry of Personnel, Public Grievances & Pensions**  
**Department of Administrative Reforms and Public Grievances**

**RESOLUTION**

New Delhi, the 14th February, 2008

No.K-11022/26/2007-AR – The President is pleased to extend the term of the second Administrative Reforms Commission (ARC) by six months upto 30.9.2008 for submission of its Reports to the Government.

*Sd/-*  
**(Dhruv Vijai Singh)**  
**Additional Secretary to the Government of India**

**Government of India**  
**Ministry of Personnel, Public Grievances & Pensions**  
**Department of Administrative Reforms and Public Grievances**

**RESOLUTION**

New Delhi, the 5th September, 2008

No.K-11022/26/2007-AR – The President is pleased to extend the term of the second Administrative Reforms Commission (ARC) by six months upto 31.3.2009 for submission of its Reports to the Government.

*Sd/-*  
**(P.K. Jha)**  
**Joint Secretary to the Government of India**



# ORGANISATION

## **Second Administrative Reforms Commission**

1. Dr. M. Veerappa Moily, Chairman
2. Shri V. Ramachandran, Member
3. Dr. A.P. Mukherjee, Member
4. Dr. A.H. Kalro, Member
5. Smt. Vineeta Rai, Member-Secretary

## **Officers of the Commission**

1. Shri A.B. Prasad, Additional Secretary
2. Shri P.S. Kharola, Joint Secretary
3. Shri R.K. Singh, PS to Chairman
4. Shri Sanjeev Kumar, Director
6. Shri Shahi Sanjay Kumar, Deputy Secretary

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## LIST OF ABBREVIATIONS

### Abbreviation Full Form

AOA	Articles of Association
APL	Above Poverty Line
APR	Annual Performance Appraisal Report
ARC	Administrative Reforms Commission
ATIs	Administrative Training Institutes
BIS	Bureau of Indian Standards
BOD	Bulk Operations Division
BPL	Below Poverty Line
BPR	Business Process Reengineering
BSEB	Bihar State Electricity Board
CBDT	Central Board of Direct Taxes
CBRMs	Capacity Building Roadmaps
CCTNS	Crime and Criminal Tracking Network and System
C-DAC	Centre for Development of Advance Computing
CDB	Core Database
CET	Common Entrance Test
CIO	Chief Information Officer (USA)

CIOC	Chief Information Officer Council (USA)
CIPA	Common Integrated Police Application
CITU	Central IT Unit (UK)
CLR	Computerisation of Land Records
COD	Compliance Operations Division
CSC	Common Service Centre
CSS	Centrally Sponsored Scheme
DAR&PG	Department of Administrative Reforms and Public Grievances
DDA	Delhi Development Authority
DGFT	Directorate General of Foreign Trade
DHS	Department of Homeland Security (USA)
DIN	Director Identification Number
DISNIC	District Information System of the National Informatics Centre
DIT	Department of Information Technology
DMA	Disaster Management Act, 2005
DoLR	Department of Land Resources
DPR	Detailed Project Report
EA	Enterprise Architecture
EC	Empowered Committee
EDI	Electronic Data Interchange
EFC	Expenditure Finance Committee
EGOM	Empowered Group of Ministers
EOI	Expression of Interest
ERNET	Education and Research Network
ETS	Electronic Total Station
EXIM	Export Import
FAR	Federal Acquisition Regulation (USA)
FEA	Federal Enterprise Architecture (USA)
FIFO	First in First out
FIU-IND	Financial Intelligence Unit - India
G2B	Government to Business

G2C	Government to Citizen
G2G	Government to Government
GIS	Geographic Information System
GPS	Global Positioning System
GSA	General Services Administration (USA)
HRSI	High Resolution Satellite Imagery
ICT	Information & Communications Technology
IEC	Information Education and Communication
IEE	Internal Efficiency and Effectiveness
IRM	Institute of Risk Management (USA)
ISRO	Indian Space Research Organization
IT	Information Technology
ITES	Information Technology Enabled Services
ITIN	Individual Tax Identification Number
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
KISS	Keep it Small and Simple
KM	Knowledge Management
LAN	Local Area Network
MCA	Ministry of Corporate Affairs
MEA	Ministry of External Affairs
MHA	Ministry of Home Affairs
MIS	Management Information System
MMPs	Mission Mode Projects
MNIC	Multi-purpose National Identity Card
MOA	Memorandum of Association
MoUD	Ministry of Urban Development
MPLADS	Member of Parliament Local Area Development Scheme
MSA	Measurement System Analysis
NARA	National Archives & Records Administration (USA)
NASSCOM	National Association of Software and Services Companies

NeGP	National e-Governance Plan
NIC	National Informatics Centre
NICNET	National Informatics Centre Network
NISG	National Institute of Smart Governance
NLRMP	National Land Records Modernisation Programme
NLSA	National Level Service Agency
NMMP	National Mission Mode Project
NPR	National Population Register
NREGA	National Rural Employment Guarantee Act, 2005
NSDG	National e-Governance Service Delivery Gateway
OECD	Organisation for Economic Co-operation and Development
OFPP	Office of Federal Procurement Policy (USA)
OMB	Office of Management and Budget (USA)
OPM	Office of Personnel Management (USA)
PAN	Permanent Account Number
PDS	Public Distribution System
PeMT	Project e-Governance Mission Teams
PESU	Patna Electric Supply Undertaking
PFO	Physical Front Office
PIAs	Privacy Impact Assessments
PPP	Public-Private Partnership
PSUs	Public Sector Undertakings
RACE	Revenue Administration through Computerised Energy
REGS	Rural Employment Guarantee Scheme
RDs	Regional Directors
RFP	Request for Proposal/Participation
RGI	Registrar General of India
ROC	Registrar of Companies
RoR	Records of Rights
RPO	Regional Passport Office

RTC	Records of Right, Tenancy and Cultivation
RTI	Right to Information
SCA	Service Centre Agency
SDA	State Designated Agency
SDCs	State Data Centres
SeMT	State e-Governance Mission Teams
SMART	Simple, Moral, Accountable, Responsive and Transparent
SRA	Strengthening of Revenue Administration
SROs	Sub-Registrars' Offices
SSC	State Services Commission (New Zealand)
STQC	Standardization Testing and Quality Certification
SWAN	State Wide Area Network
TIN	Tax Identification Number
UID	Unique Identity
ULBs	Urban Local Bodies
ULR	Updating of Land Records
URL	Uniform Resource Locator
UTs	Union Territories
VFO	Virtual Front Office
VLE	Village Level Entrepreneur
WAN	Wide Area Network