

Department of Electronics and Information Technology, Government of India



Digital India

A programme to transform India into a digitally empowered society and knowledge economy

What is Digital India?

- Digital India is a Programme to prepare India for a knowledge future.
- The focus is on being transformative to realize IT + IT = IT
- The focus is on making technology central to enabling change.
- It is an <u>Umbrella Programme</u> covering many departments.
 - It weaves together a large number of ideas and thoughts into a **single, comprehensive vision** so that each of them is seen as part of a larger goal.
 - Each individual element stands on its own. But is also part of the larger picture.
 - It is coordinated by DeitY, implemented by the entire government.
 - The weaving together makes the Mission transformative in totality
- The Programme:
 - Pulls together many existing schemes.
 - These schemes will be restructured and re-focused.
 - They will be implemented in a synchronized manner.
 - Many elements are only process improvements with minimal cost.
- The **common branding** of programmes as **Digital India** highlights their transformative impact.

Vision of Digital India

Centered on 3 Key Areas

Digital Infrastructure as a Utility to Every Citizen

Governance & Services on Demand

Digital Empowerment of Citizens

Vision Area 1: Infrastructure as a Utility to Every Citizen

- High speed internet as a core utility
- Cradle to grave digital identity -unique, lifelong, online, authenticable
- Mobile phone & Bank account enabling participation in digital & financial space
- Easy access to a Common Service Centre
- Shareable private space on a public cloud
- Safe and secure Cyber-space

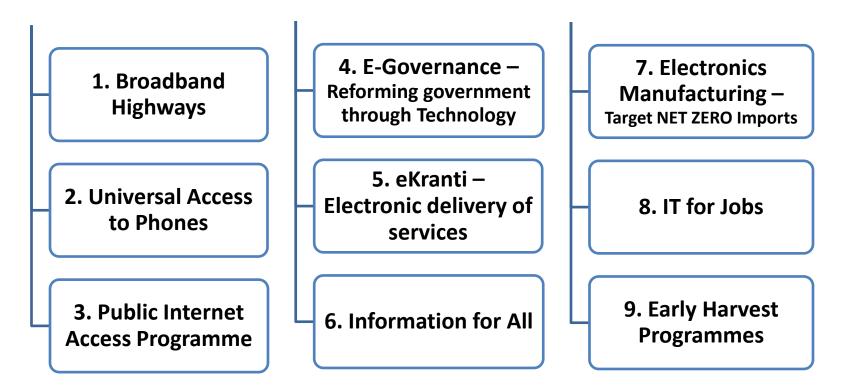
Vision Area 2: Governance & Services On Demand

- Seamlessly integrated across departments or jurisdictions
- Services available in real time from online &mobile platform
- All citizen entitlements to be available on the cloud
- Services digitally transformed for improving <u>Ease of Doing</u>
 <u>Business</u>
- Making financial transactions electronic & cashless
- Leveraging GIS for decision support systems & development

Vision Area 3: Digital Empowerment of Citizens

- Universal Digital Literacy
- Universally accessible digital resources
- All documents/ certificates to be available on cloud
- Availability of digital resources / services in Indian languages
- Collaborative digital platforms for participative governance
- Portability of all entitlements through cloud

Nine Pillars of Digital India



Pillar 1. Broadband Highways

Broadband for all Rural

• Coverage: 250,000 GP

• Timeline: December 2016

• CAPEX: Rs 32,000 Cr

Nodal Dept: DoT

1yr: 50,000 GP

2yr: 100,000 GP

3yr: 100,000 GP

Broadband for all Urban

- Virtual Network Operators for service delivery.
- Mandate communication infrastructure in new urban development and buildings.

Changes in Rules to facilitate.

National Information Infrastructure

Coverage: Nationwide

• Timeline: March 2017

• Cost: Rs 15,686 Cr

Nodal Dept: DeitY

Integration of SWAN, NKN, NOFN. To be implemented in 2 years

Pillar 2. Universal Access to Mobile connectivity

Universal Access to mobile connectivity

- Coverage: Remaining uncovered villages (~ 42,300 villages)
- Timeline: FY 2014-18
- Cost: Rs 16,000 Cr
- Nodal Dept: DoT

Ongoing Programme
Increased network
penetration &
coverage of gaps

Pillar 3. Public Internet Access Programme – National Rural Internet Mission

CSCs -

made viable, multifunctional end-points for service delivery • Coverage: 2,50,000 villages (now 130,000)

• Timeline: 3 Years - March 2017

Cost: Rs 4750 Cr

Nodal Agency: DeitY

Ongoing Programme
Reach of Govt.

services to all GPs

Post Offices

to become

Multi-Service Centres

• Coverage: 1,50,000 Post Offices

• Timeline: 2 Years

Nodal Agency: D/o Posts

This should be long term vision for POs

Pillar 4. e-Governance: Reforming Government through Technology

- Government Business Process Re-engineering using IT to improve transactions
 - Form Simplification, reduction
 - Online applications and tracking, Interface between departments
 - Use of online repositories e.g. school certificates, voter ID cards, etc.
 - Integration of services and platforms UIDAI, Payment Gateway, Mobile Platform, EDI
- Electronic Databases all databases and information to be electronic, not manual
- Workflow automation inside government
- Public Grievance Redressal using IT to automate, respond, analyse data to identify and resolve persistent problems – largely process improvements
- To be implemented across government critical for transformation.

Pillar 5. eKranti - Electronic Delivery of Services

- Technology for Education e-Education
 - All Schools connected with broadband
 - Free wifi in all schools (250,000)
 - Digital Literacy program
 - MOOCs develop pilot Massive Online Open Courses
- Technology for Health e-Healthcare
 - Online medical consultation
 - Online medical records
 - Online medicine supply
 - Pan-India exchange for patient information
 - Pilots 2015; Full coverage in 3 years
- Technology for Planning
 - GIS based decision making
 - National GIS Mission Mode Project

- Technology for Farmers
 - Real time price information
 - Online ordering of inputs
 - Online cash, loan, relief payment with mobile banking
- Technology for Security
 - Mobile Emergency Services
- Technology for Financial Inclusion
 - Mobile Banking
 - Micro-ATM program
 - CSCs/ Post Offices
- Technology for Justice
 - e-Courts, e-Police, e-Jails, e-Prosecution
- Technology for Security
 - National Cyber Security Co-ordination Center

Ongoing Programme (NeGP) – will be revamped to cover these elements

Pillar 6. Information for All

- Online Hosting of Information & documents
 - Citizens have open, easy access to information
 - Open data platform
- Government pro-actively engages through social media and web based platforms to inform citizens
 - MyGov.in
 - 2-way communication between citizens and government
- Online messaging to citizens on special occasions/programs
- Largely utilise existing infrastructure limited additional resources needed

Pillar 7. Electronics Manufacturing Target NET ZERO IMPORTS by 2020

- Target NET ZERO Imports is a striking demonstration of intent
- Ambitious goal which requires coordinated action on many fronts
 - Taxation, Incentives
 - Economies of Scale, Eliminate cost disadvantages
 - Focused areas Big Ticket Items
 - FABS, Fab-less design, Set top boxes, VSATs, Mobiles, Consumer & Medical Electronics, Smart Energy meters, Smart cards, micro-ATMs
 - Incubators, clusters
 - Skill development
 - Government procurement
- There are many ongoing programs which will be fine-tuned.
- Existing Structures inadequate to handle this goal. Need strengthening.

Pillar 8. IT for Jobs

Train people in smaller towns & villages for IT sector jobs

- Coverage: 1 Crore students
- Timeline: 5 years
- Cost: Rs 200 Cr for weaker sections
- Nodal Agency: DeitY

IT/ITES in NE

- Scope: Setting up of BPO per NE State
- Coverage: NE States
- Nodal Agency: DeitY

Train Service Delivery Agents to run viable businesses delivering IT services

- Coverage: 3,00,000
- Timeline: 2 Years
- Nodal Agency: DeitY

Telecom service providers to train rural workforce to cater to their own needs

- Coverage: 5,00,000
- Timeline: 5 Years
- Nodal Agency: DoT

New Scheme

IT ready workforce

ICT enabled growth in NE

Ongoing

Skilled VLEs and **Viable CSCs**

Telecom ready

workforce

Pillar 9. Early Harvest Programmes

IT platform for messages

- Coverage: Elected representatives, All Govt employees
- 1.36 Cr mobiles and 22 Lakh emails
- Mass Messaging Application developed

Targeted Mass messaging since
July 14

Government Greetings to be e-Greetings

- Basket of e-Greetings templates available
- Crowd sourcing of e-Greetings thru MyGov
- e-Greetings Portal ready by 14 August 2014

1st e-Greeting from PM on 15th Aug 2014

Biometric attendance

- Coverage: All Central Govt. Offices in Delhi
- Operational in DeitY & Initiated in Urban Developm
- On-boarding started in other depts
- Procurement of devices tender issued

To be completed by Oct 2014

Pillar 9. Early Harvest Programmes

Wi-fi in All Universities

Scope: All universities on NKN

400 additional Universities

• Cost: Rs 790 Cr

Approval - Oct 2014
Implementation
done by Dec 2015

Secure email within government

- Phase I upgradation for 10 Lakh employees done
- Ph II for 50 Lakh employees by March 2015
- Cost: Rs 98 Cr

Email to be primary mode of communication

Standardize government email design

• Standardised templates under preparation

To be ready by October 2014

Pillar 9. Early Harvest Programmes

Public wifi hotspots

• **Coverage:** Cities with pop > 1 Mill., tourist centres

Nodal Agency: DoT/ MoUD

Digital Cities

Completed by Dec

2015

School Books to be eBooks

Nodal Agency: MHRD/ DeitY

Completed by Mar 2015

SMS based weather information, disaster alerts

- DeitY's Mobile Seva Platform ready
- Nodal Agency: MoES (IMD) / MHA (NDMA)

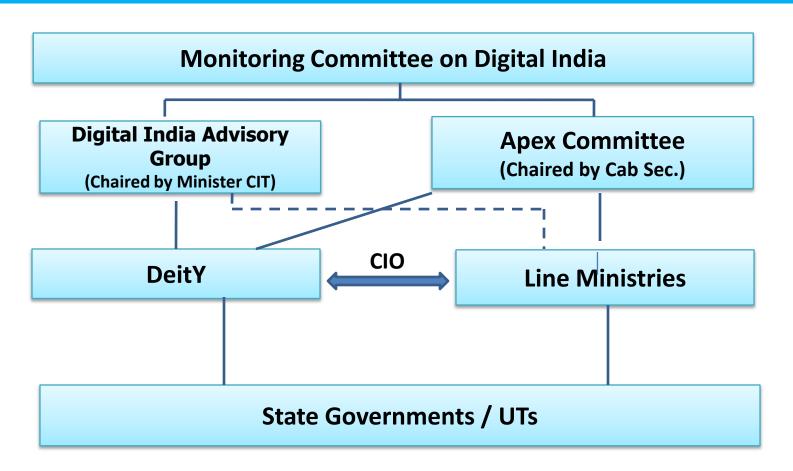
In place by Dec 2014

National Portal for Lost & Found children

• Nodal Agency: DeitY/ DoWCD

In place by Oct 2014

Institutional Mechanisms at National Level

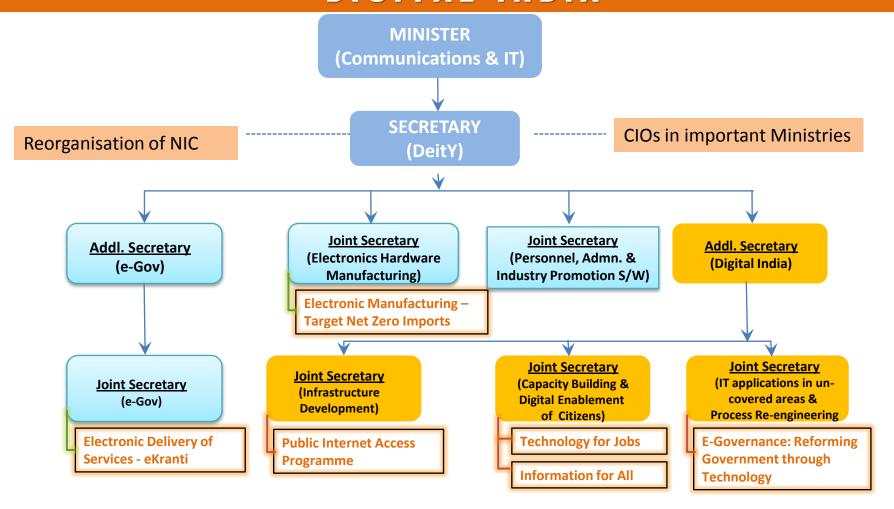


Composition of Monitoring Committee on Digital India

- Prime Minister Chairman
- Finance Minister
- Minister of Communications & IT
- Minister of RD
- Minister of HRD
- Minister of Health

Special Invitees:

- Principal Secretary to PM
- Cabinet Secretary
- Secretaries of Expenditure, Planning, DoT and Posts
- Secretary, DeitY Convener



Estimated Costs and Impacts

Overall Costs of Digital India

- ~ Rs 100,000 Cr in ongoing schemes (only Deity, DOT & not incl. those in other line Ministries)
- ~ Rs 13,000 Cr for new schemes & activities

Impact of Digital India by 2019

- Broadband in 2.5 lakh villages, universal phone connectivity
- Net Zero Imports by 2020
- 400,000 Public Internet Access Points
- Wi-fi in 2.5 lakh schools, all universities; Public wi-fi hotspots for citizens
- Digital Inclusion: 1.7 Cr trained for IT, Telecom and Electronics Jobs
- Job creation: Direct 1.7 Cr. and Indirect at least 8.5 Cr.
- e-Governance & eServices: Across government
- India to be leader in IT use in services health, education, banking
- Digitally empowered citizens public cloud, internet access

Challenges & Changes Needed

- Program on this scale never conceived
- Each Pillar/program has own challenges
- Human Resource Issues
 - NIC not equipped for a fraction of this task (obsolesce) needs revamping & restructuring
 - DeitY needs program managers at least 4 more officers at senior levels
 - Ministries Need a Chief Information Officer / Chief Technology Officer (CIO/CTO)
 - Could begin with CIOs 10 major Ministries
 - Can be anyone from within or outside government
 - To be patterned as AS & FAs dual reporting

Financial Resource Issues

- Mostly structured around ongoing programs: Better focus, need some restructuring
- Some others are process improvements or better utilisation of resources
- A few new programs may be needed particularly in Electronics manufacturing and Skill Development

Coordination Issues

- Program covers many other departments
- Need commitment and effort
- Leadership and support critical for success

THANK YOU

4. e-Governance: Reforming Government through Technology

Business Process Reengineering — using IT to improve transactions

- Coverage: All dept(s)
- Timeline: Over 3 Years
- Nodal Agency: DARPG / DeitY / Line Ministries / State Governments

All depts undertaking GPR

Electronic Storage of Information

- Coverage: All dept(s)
- Timeline: Over 2 Years
- Nodal Agency: DeitY /Line Ministries /State Governments

All depts having electronic DB hosted on cloud

Workflow automation

- Coverage: Inside Government & citizen centric services
- Timeline: Over 3 Years
- Nodal Agency: DeitY /Line Ministries /State Governments

All depts having automated w/f

4. e-Governance: Reforming Government through Technology

of information

- Coverage: All dept(s)
- Timeline: in phase manner
- Nodal Agency: DeitY/Line Ministries/State Governments

Govt. data hosted in GI Cloud "MeghRaj"

Public Grievance Redressal –

IT to leverage in complaint mgmt & ensure visibility to govt. processes

- Coverage: All dept(s)
- Nodal Agency: DARPG/Line Ministries/State Governments

Automated Public
Grievance
Redressal

6. eKranti - Electronic Delivery of Services

Expand Mission Mode Projects

- Coverage: from 31 MMPs to 100 MMPs
- Timeline: Over 2 Years
- Nodal Agency: DeitY

43 MMPs by 2014

Revamp Existing MMPs

- Convergence: Infrastructure and Services
- Communications: Data Exchange & open APIs
- Leveraging Common Platforms & Cloud

Integrated Services

Technology for Education (e-Education)

- Scope: All Schools connected with broadband, Free wifi in all schools & MOOCs (Massive Online Open Courses)
- Coverage: 250,000 Schools
- Timeline: 2 Years
- Nodal Agency: MHRD

eLearning

6. eKranti - Electronic Delivery of Services

Digital Literacy programCSCs/ others

• **Coverage:** 50,00,000

• Timeline: 5 Years

Cost: Rs 500 Cr

Nodal Agency: DeitY

Digital Inclusion

Technology for Healthe-Healthcare • **Scope:** Online consultation, records, supply and pan-India exchange for patient information

Coverage: Nationwide

Timeline: Pilot by 2015 and full implementation in 3 years

Nodal Agency: MoHFW

Complete online medical records by 2020

Technology for Farmers

- **Scope:** Real time price info, Online ordering, cash, loan, relief payment with mobile banking
- Coverage: Nationwide
- Timeline: Pilot by 2015 and full implementation in 3 years
- Nodal Agency: MoAgri/ DeitY/ Fertilizers/ DFS

Direct Impact on Agriculture sector &

Farmers

6. eKranti - Electronic Delivery of Services

Technology for Security
- Mobile Emergency
services/ alerts

- Coverage: All Control Rooms
- Nodal Agency: MHA (NDMA) and MoES (IMD)

Alerts on real time basis

Technology for Financial Inclusion

- Scope: Mobile Banking, Micro-ATM programme, CSCs
- Coverage: Nationwide
- Timeline: 2015 end
- Nodal Agency: DFS, DoT and DeitY

Financial
Services to
citizens

6. eKranti - Electronic Delivery of Services

Technology for Justice

- **Scope:** e-Courts, e-Police, e-Jails, e-Prosecution
- Coverage: Nationwide
- Timeline: 2015 end
- Nodal Agency: DFS, DoJ and DeitY

Justice in fast track mode

Technology for Better Planning

- GIS based Decision Making
- Social Media (MyGov)
- Data Analytics and BI
- National GIS Mission Mode Project

Better Implementation

Technology for Security

- National Cyber Security Coordination Center
- Cost: Rs 1100 Cr

Safe & Secure e-Transactions

3. Electronics Manufacturing

TARGET NET ZERO IMPORTS by 2020

- Duties, Taxes & Incentives
 - Eliminate cost disadvantages
 - Manufacturing
 - Fabless design
- Big Ticket Items
 - IT, Telecom equipments, Mobiles, Consumer
 & Medical Electronics, LED, Solar,
 Automotives etc
- Defense Electronics
 - Focus on indigenous manufacturing
- Innovation
 - Through Industries

- National Electronics Mission
 - Creation of an empowered body
 - Institutional Capacity
- Clusters
 - Facilitating Infra for manufacturing
- Wafer Fabs
 - Indigenous manufacturing of critical electronic components in 2 years
- Skill Development
 - Vocational / Shop floor
 - Graduate / Post Graduate and PHDs

3. Electronics Manufacturing

Incentives

- M-SIPS
- Rationalizing taxes & duties
- Preferential market access
- Incentives for fabless design (NEW)
- Cost : Rs 24000 Cr

60 Bn turnover over 6 years

Direct Employment: 1.5 Million Indirect Employment: 6 Million

Clusters

- Coverage: 5 Greenfield EMCs operational
- Timeline: 5 years
- Cost: Rs 1,500 Cr (Govt share Rs 500 Cr)

Infrastructure for electronics manufacturing

Promoting Innovation

- Electronic Development Fund
- PhD Scheme
- National Centres of Excellence (emerging technologies)
- Incubators
- Cost: Rs 5,000 Cr

Electronics Products with IP in India

3. Electronics Manufacturing (Contd.)

Wafer Fabs

Coverage: 2 Fabs

• Timeline: 3 years

• Cost: Rs 12,419 Cr + Rs 23,347 Cr + Rs 1,400 Cr over XII, XIII

and XIV Plan periods

Semiconductor
CHIPS for strategic /
commercial use

Skill Development

• Coverage: 4,00,000

Timeline: 5 years

Cost: Rs 575 Cr

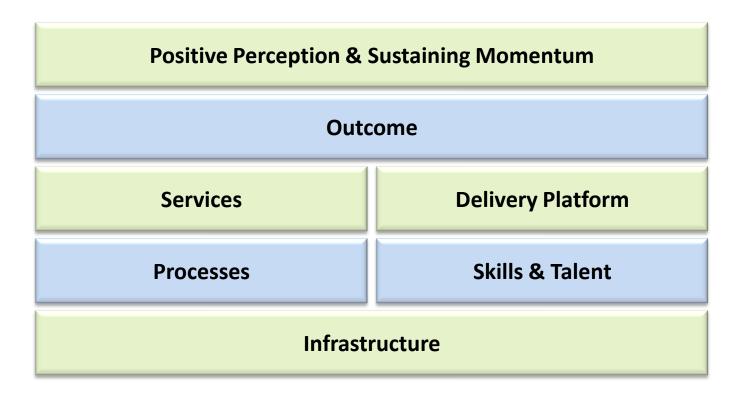
4 Lakhs workforce ready for Electronics

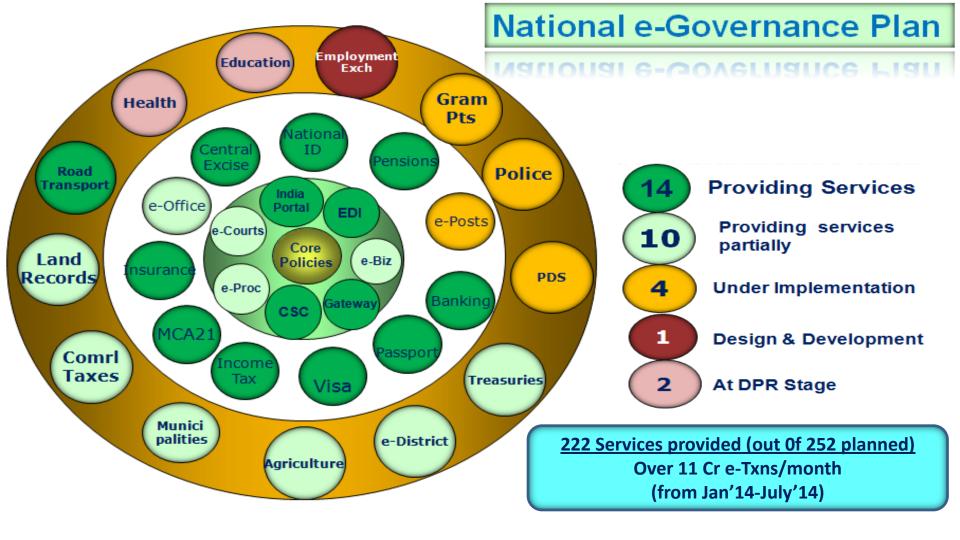
National Electronics Mission

- Empowered Inter-ministerial body to expedite implementation
- Approval in 6 months

Fast track implementation

To prepare India for a knowledge world, the Digital India initiative aims to build and sustain all associated critical elements..





India's Rank on Ease of Doing Business – 134 (World Bank Ranking 2014)

Sr. No.	Component	Rank (2014)
1	Starting a Business	179
2	Dealing with Construction Permits	182
3	Getting Electricity	111
4	Registering Property	92
5	Getting Credit	28
6	Protecting Investors	34
7	Paying Taxes	158
8	Trading Across Borders	132
9	Enforcing Contracts	186
10	Resolving Insolvency	121 Back