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 Umbrella Programme – 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.
INDIAN TALENT (IT) + INFORMATION TECHNOLOGY (IT) = INDIA TOMORROW (IT)
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

Digital

INFRASRTUCTURE AS A UTILITY TO EVERY CITIZEN

- High speed internet as a core utility
- Cradle-to-grave digital identity
- Participation in digital & financial space through mobiles & banking
- Easy access to a common services center (CSC)
- Shareable private space on public cloud
- Safe & secure cyberspace
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
Governance

Vision Area 2

Governance and Services on Demand

- Seamlessly integrated services
- Services in real-time from online and mobile platforms
- Leveraging GIS for decision support systems and development
- Citizen entitlements to be portable and available on cloud
- Making financial transactions electronic and cashless
- Digitally transformed services for improving ease of doing business
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 Ease of Doing Business
- 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
- Availability of digital resources/services in Indian languages
- Collaborative digital platforms for participative governance
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 AT A GLANCE
Nine Pillars of Digital India

1. Broadband Highways
2. Universal Access to Phones
3. Public Internet Access Programme

4. E-Governance – Reforming government through Technology
5. eKranti – Electronic delivery of services
6. Information for All

7. Electronics Manufacturing – Target NET ZERO Imports
8. IT for Jobs
9. Early Harvest Programmes
**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, multi-functional 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

Post Offices to become Multi-Service Centres
- Coverage: 1,50,000 Post Offices
- Timeline: 2 Years
- Nodal Agency: D/o Posts

Ongoing Programme
- Reach of Govt. services to all GPs
- 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*
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Proposed MMPs</th>
<th>Category</th>
<th>Owner Department</th>
<th>Key Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>e-Sansad</td>
<td>Central</td>
<td>Parliament of India, Lok-Sabha Secretariat</td>
<td>Bills, Gazette notifications, Budget, Parliamentary Questions database, Parliamentary proceedings, Publications</td>
</tr>
<tr>
<td>2</td>
<td>e-Vidhaan</td>
<td>State</td>
<td>Parliament of India, Lok-Sabha Secretariat</td>
<td>As above for State Legislatures</td>
</tr>
<tr>
<td>3</td>
<td>Financial Inclusion</td>
<td>Integrated</td>
<td>Financial Services</td>
<td>Strengthening Banking &amp; Insurance services in the rural areas through strategic use of ICT</td>
</tr>
<tr>
<td>4</td>
<td>Roads and Highways Information System (RAHI)</td>
<td>Integrated</td>
<td>M/o Road Transport &amp; Highways</td>
<td>Integrated citizen centric services related to roads and highways</td>
</tr>
<tr>
<td>5</td>
<td>Agriculture 2.0</td>
<td>State</td>
<td>D/o Agriculture</td>
<td>Sector specific services for horticulture and fisheries, governance &amp; citizen-centric services for co-operatives and fertilizer testing labs</td>
</tr>
<tr>
<td>6</td>
<td>NGIS</td>
<td>Integrated</td>
<td>D/o Science &amp; Technology</td>
<td>Integrated GIS platform</td>
</tr>
<tr>
<td>7</td>
<td>Rural Development</td>
<td>State</td>
<td>D/o Rural Development</td>
<td>A portfolio of rural development services including NREGA</td>
</tr>
<tr>
<td>8</td>
<td>Social Benefits</td>
<td>Integrated</td>
<td>M/o Social Justice and Empowerment as the leader and other welfare departments as co-owners</td>
<td>Online benefit schemes, Integrated e-services for NGOs</td>
</tr>
<tr>
<td>9</td>
<td>Women and Child Development</td>
<td>State</td>
<td>M/o Women and Child Development</td>
<td>Integrated Child Development Scheme, Integration with Health MMP</td>
</tr>
<tr>
<td>10</td>
<td>Common IT Roadmap for Para Military Forces</td>
<td>Central</td>
<td>MHA</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>e-Bhasha Takniki</td>
<td>Integrated</td>
<td>DeitY</td>
<td>Language localisation</td>
</tr>
</tbody>
</table>
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

New Scheme
- IT ready workforce

IT/ITES in NE
- Scope: Setting up of BPO per NE State
- Coverage: NE States
- Nodal Agency: DeitY

ICT enabled growth in NE

Train Service Delivery Agents to run viable businesses delivering IT services
- Coverage: 3,00,000
- Timeline: 2 Years
- Nodal Agency: DeitY

Ongoing
- Skilled VLEs and Viable CSCs

Telecom service providers to train rural workforce to cater to their own needs
- Coverage: 5,00,000
- Timeline: 5 Years
- Nodal Agency: DoT

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

**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

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

**Targeted Mass messaging since July 14**

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

**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

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

Standardize government email design
- Standardised templates under preparation

Approval - Oct 2014
Implementation done by Dec 2015
Email to be primary mode of communication
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

**School Books to be eBooks**
- **Nodal Agency:** MHRD/ DeitY

**SMS based weather information, disaster alerts**
- **DeitY’s Mobile Seva Platform ready**
- **Nodal Agency:** MoES (IMD) / MHA (NDMA)

**National Portal for Lost & Found children**
- **Nodal Agency:** DeitY/ DoWCD

**Digital Cities**
- Completed by Dec 2015

**Completed by Mar 2015**

**In place by Dec 2014**

**In place by Oct 2014**
Institutional Mechanisms at National Level

- Monitoring Committee on Digital India
  - Digital India Advisory Group (Chaired by Minister CIT)
  - Apex Committee (Chaired by Cab Sec.)
  - DeitY
  - Line Ministries
  - State Governments / UTs
Reorganisation of NIC

CIOs in important Ministries

MINISTER (Communications & IT)

SECRETARY (DeitY)

Addl. Secretary (e-Gov)

Joint Secretary (Electronics Hardware Manufacturing)

Joint Secretary (Personnel, Admn. & Industry Promotion S/W)

Addl. Secretary (Digital India)

Electronic Manufacturing – Target Net Zero Imports

Electronic Delivery of Services - eKranti

Public Internet Access Programme

Technology for Jobs

Information for All

E-Governance: Reforming Government through Technology

Joint Secretary (Infrastructure Development)

Joint Secretary (Capacity Building & Digital Enablement of Citizens)

Joint Secretary (IT applications in uncovered areas & Process Re-engineering)
Composition of Monitoring Committee on Digital India

- Prime Minister – Chairman
- Finance Minister
- Minister of Communications & IT
- Minister of Rural Development
- 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

- 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 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

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