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 **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**.
- 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**
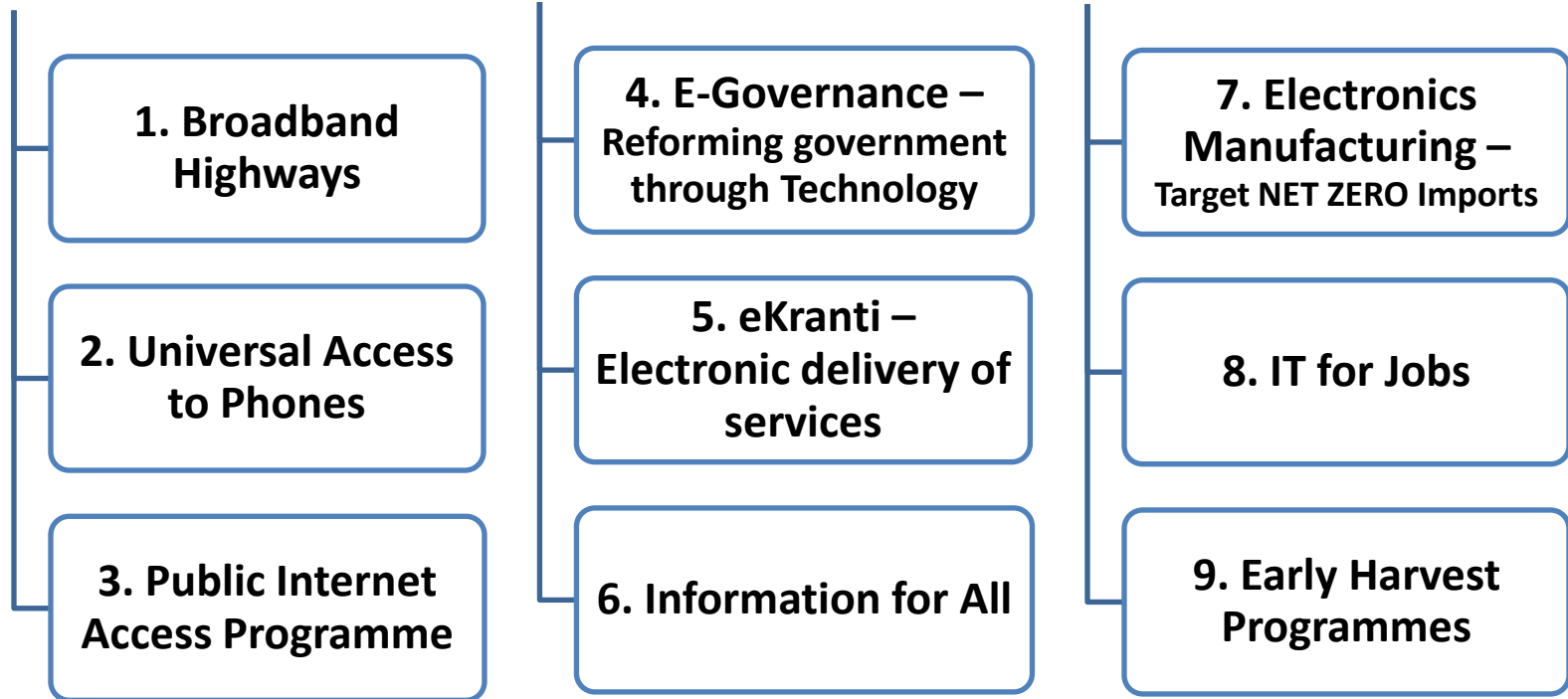- **Safe and secure Cyber-space**

## 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 **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**
- **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

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**

**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**

**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

**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 Developme
- 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)
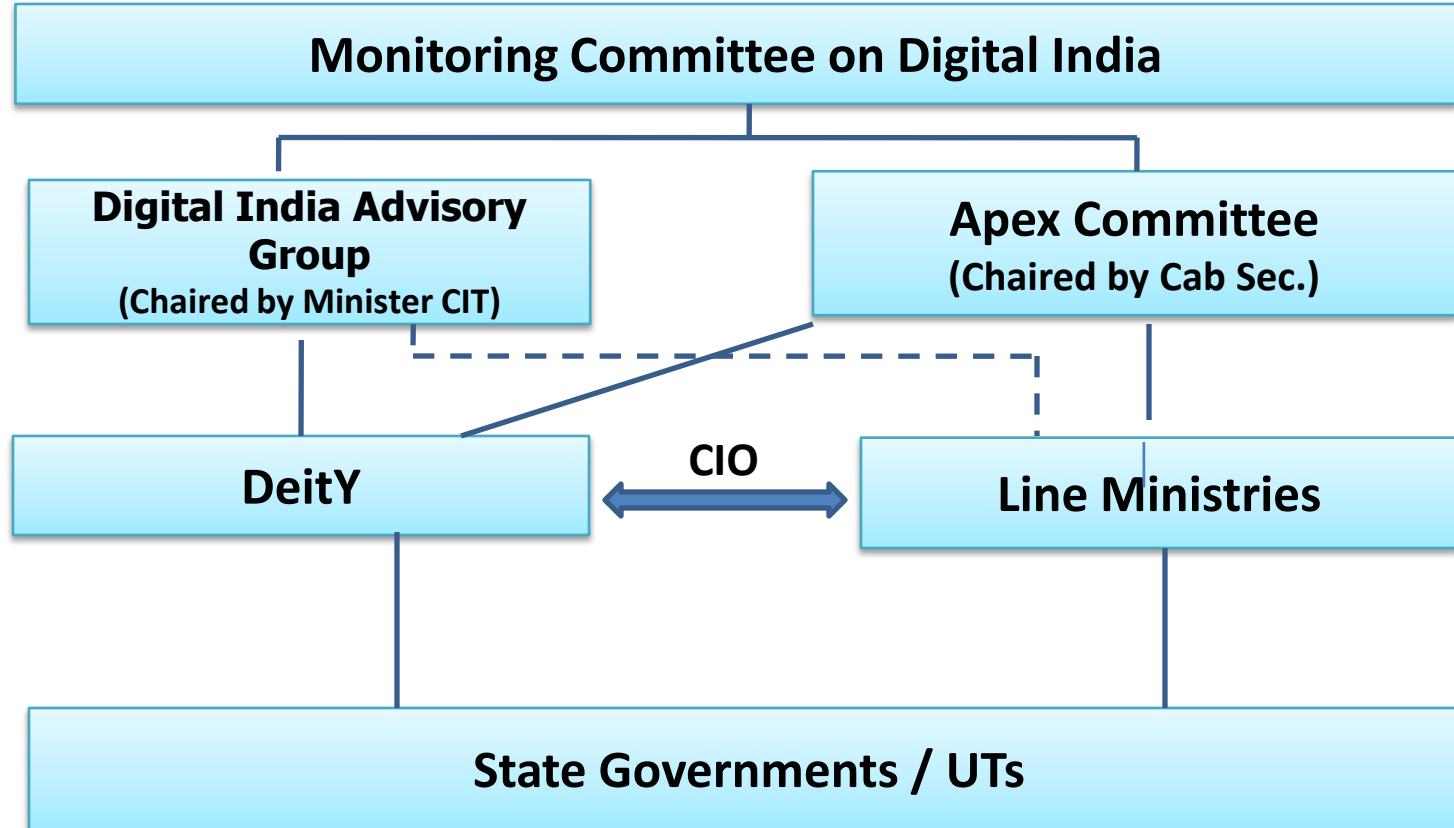
**In place by Dec 2014**

**National Portal for Lost & Found children**

- **Nodal Agency:** DeitY/ DoWCD

**In place by Oct 2014**

# 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

# DIGITAL INDIA

**MINISTER**
**(Communications & IT)**

**SECRETARY**
**(DeitY)**

Reorganisation of NIC

CIOs in important Ministries

**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**

**Joint Secretary**
**(e-Gov)**

**Joint Secretary**
**(Infrastructure Development)**

**Joint Secretary**
**(Capacity Building & Digital Enablement of Citizens)**

**Joint Secretary**
**(IT applications in un-covered areas & Process Re-engineering**

**Electronic Delivery of Services - eKranti**

**Public Internet Access Programme**

**Technology for Jobs**

**Information for All**

**E-Governance: Reforming Government through Technology**

# 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 Re-engineering — 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

**Electronic Storage –** 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 program – CSCs/ others**

- **Coverage:** 50,00,000
- **Timeline: 5 Years**
- **Cost: Rs 500 Cr**
- **Nodal Agency: DeitY**

**Digital Inclusion**

**Technology for Health- e-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**
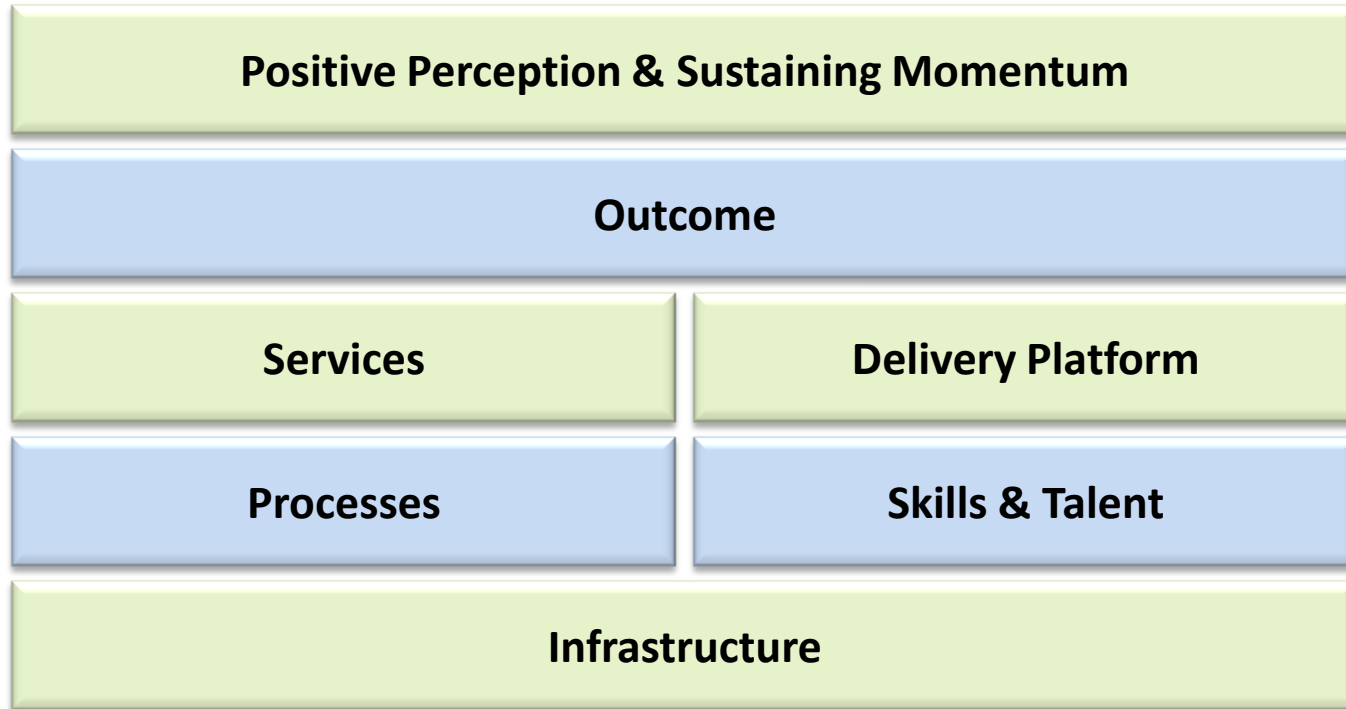- Coverage: 4,00,000
- Timeline: 5 years
- Cost: Rs 575 Cr

4 Lakhs workforce ready for Electronics
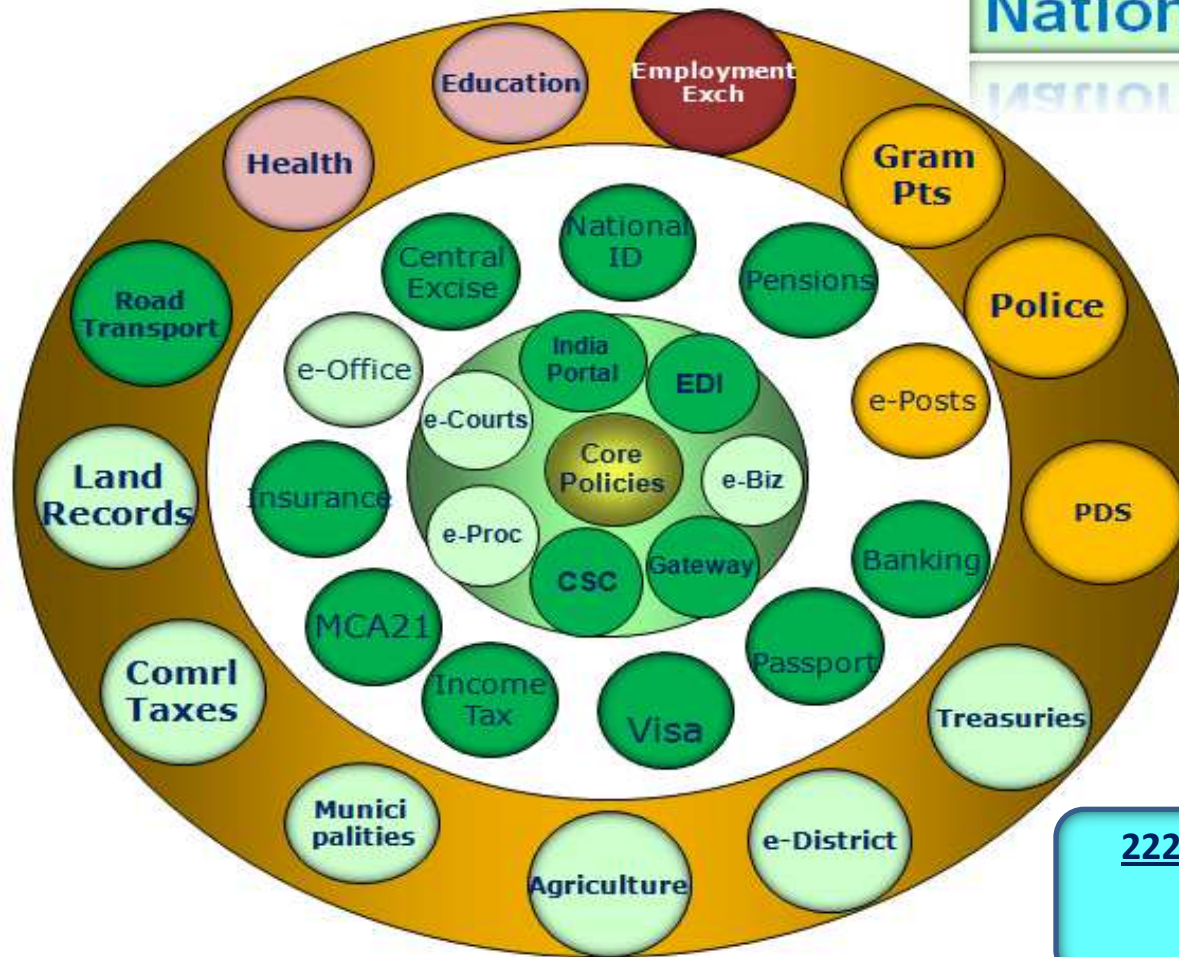
**National Electronics Mission**
- Empowered Inter-ministerial body to expedite implementation
- Approval in 6 months

Fast track implementation

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

| Positive Perception & Sustaining Momentum |
|---|

| Outcome |
|---|

| Services | Delivery Platform |
|---|---|

| Processes | Skills & Talent |
|---|---|

| Infrastructure |
|---|

# National e-Governance Plan



**222 Services provided (out 0f 252 planned)**
**Over 11 Cr e-Txns/month**
**(from Jan'14-July'14)**

# 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 |