Ministry of Electronics and Information Technology Government of India

# **DIGITAL BHARAT, SAKSHAM BHARAT** A COMPENDIUM ON **DIGITAL INDIA**



रविशंकर प्रसाद RAVI SHANKAR PRASAD



मंत्री विधि एवं न्याय एवं इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी भारत सरकार MINISTER OF LAW & JUSTICE and ELECTRONICS & INFORMATION TECHNOLOGY GOVERNMENT OF INDIA



#### MESSAGE

I am happy to learn that Ministry of Electronics and Information Technology (MeitY) has brought out a compendium on the transformative progress made under our Government's Digital India programme.

The fundamental philosophy behind the success of the digital transformation was elucidated by Prime Minister Shri Narendra Modi as IT+IT=IT (India Talent+ Information Technology = India Tomorrow). From this inspiring vision was born Digital India Programme, which is aimed at transforming India into a knowledge-based economy and a digitally empowered society by ensuring digital access, digital inclusion, digital empowerment and bridging the digital divide.

Today, provision of digital identity through 123 crore Aadhaar is helping the poor receive the benefits directly into their bank account and has led to a saving of Rs 1.1 lakh crore. A vast network of more than 3.10 lakh of digital services delivery centres, spread across 2.10 lakh Gram Panchayats, across the country has been created to provide access to more than 300 digital services including insurance, banking. pension and payments, especially in rural areas at an affordable cost. Over, 1.45 crore people have been imparted training under the world's largest Digital Literacy programme- PMGDISHA. More than 120 BPO units have come up in about 100 small towns of India across 20 States and 2 Union Territories. From 2 units in 2014, now India has 268 units manufacturing mobile handset and components. Promotion of Hardware Manufacturing in the country has created more than 4.5 lakh jobs opportunities (direct & indirect).

This compendium is more than a compilation of statistics and data about the scale and speed of digital transformation ushered in by my Government. It is also a record of how the digital revolution is transforming India socially and economically with inclusive growth, new business and job opportunities and a transparent and responsive governance structure. It also provides brief snapshots of the digital transformation and the evolving digital profiles of the States and Union Territories of India.

Digital India programme has been politics-neutral, centre-state-neutral and ideology-neutral. We have worked to make India a leader in the digital domain using technology that is low-cost, India-created and developmental. This has been instrumental in the large-scale adoption of digital technology as the country marches towards becoming a trillion dollar digital economy in the next few years.



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S S AHLUWALIA

Member of Parliament of Darjeeling Union Minister of State for Electronics & Information Technology Government of India



## MESSAGE

Digital India programme, launched in July 2015, is ensuring digital access to all, digital delivery of services, and digital inclusion – leading to digital empowerment of the society. Over the years, MeitY has taken up initiatives across many spheres, including e-governance, skills, and digital infrastructure, that have shown significant impact on the way that the nation lives and works.

The Government of India accords high priority towards the growth and sustainable development especially of the rural areas of India. India is a land of digital opportunities, Ministry of Electronics & Information Technology (MeitY) has been working in collaboration with various Central Ministries and State Governments under Digital India programme to leverage digital opportunities and bring about the long due changes required for this country.

The programme has ensured the Digital inclusion of all through providing access of robust digital infrastructure created under it, facilitating connect with rest of the world. It has ensured citizen participation and empowerment with technology that is transformative, affordable and sustainable.

I appreciate the efforts put in by the officers of MeitY in this endeavour to publish the compendium of Digital India; and happy to note that after days of deliberations and hard work, the book has come out. I hope this document will assist Academia as well as the Government to have a deep idea and understanding of Digital India programme, also its way forward.

With Warm Regards

S S Ahluwalia

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The Government of India has taken landmark initiatives under Digital India programme, which are unparalleled in scale, scope and impact. Ministry of Electronics & Information Technology (MeitY) is the torchbearer of the Digital India programme that symbolises the Government of India's resolve of connecting and empowering 130 crore citizens.

Digital India programme is designed to transform India into a knowledge-based economy and a digitally empowered society by ensuring digital services, digital access, digital inclusion, digital empowerment and bridging the digital divide.

The programme has transformed the digital profile of the country. Aadhaar has offered a digital identity to 123 crore persons, 3.12 lakh CSCs are providing doorstep delivery of services, UMANG and DigiLocker provide easy access to Government services, GEM provides more than 1 lakh businesses access to government procurement, 268 mobile handsets and component manufacturing units provide direct and indirect employment opportunity to over 6.7 lakh persons – these are just a few illustrative examples of how ICT is being leveraged for the benefit of the citizens.

Initiatives under Digital India have been designed with global benchmarks and latest technology frameworks, resulting in the ease of doing business, a less cash economy as well as a digitally connected nation.

The Digital India Compendium, titled **"Digital Bharat Saksham Bharat"**, focuses on all the thrust areas of Digital India including Digital Identity, Digital Infrastructure, Digital Literacy & Skilling, and Digital Delivery of Services to crores of citizens spread across the length and breadth of the country. This will definitely provide useful information and insights to the citizens, academia, researchers and various stakeholders of Digital India.

(Shri Ajay Sawhney)

## DIGITAL BHARAT, SAKSHAM BHARAT A COMPENDIUM ON DIGITAL INDIA

## PREFACE

India's digital story is one of an ICT - led development by use of technology that is affordable, inclusive and transformative. The Digital India Programme aims to transform India into a knowledge-based economy and a digitally empowered society.

Through Aadhaar, the Government has provided digital identity to 123 crore residents of the country with 99 % coverage of adult population. The combination of Jandhan bank Accounts, mobile phones and digital identity through Aadhaar i.e. JAM trinity is helping the poor in receiving the benefits directly into their bank account. A total of Rs. 6.21 lakh crore have been disbursed through Aadhaar based DBT to beneficiaries of 438 Government schemes which, have led to saving of over Rs. 1.1 lakh crore in the last 4 years by removing fictitious claimants. Increased use of Digital Payments in the country has brought about transparency and accountability. Over the past four years, digital payment transactions have grown multifold. BHIM/UPI has grown multi-fold in the span of two years. UPI consumers made over 67 crore transactions with a value of over Rs. 1 lakh crore in the month of January, 2019 alone. Currently, there are 134 banks offering UPI services to their customers.

Digital Delivery of Services has simplified the way citizens interact with the Government to avail various services and has enhanced the ease of living of the citizens. National Scholarship Portal has 1.4 crore students registered and scholarships worth Rs 5,295 crore disbursed in the last three years. Jeevan Pramaan has improved the ease of verification of pensioners using Aadhaar. 2.48 Crore Digital Life Certificates have been submitted since 2014. DigiLocker provides access to over 349 crore certificates in digital format on a single platform. To make governance easily accessible to people, UMANG (Unified Mobile Application For New Age Governance) is the platform created by the Government that enables access of 339 Government services to the citizens through their mobile phones, thus expanding the digital outreach of the citizens. There has been a stupendous growth in Electronic Transactions (e-Transactions) in various e-Governance services. Over 8,919 crore e-Transactions have been recorded since its inception, till December, 2018. Common Services Centres (CSCs) are bringing e-Services to the doorsteps of people in the rural areas in an affordable manner. There are around 3.12 lakh CSCs across the country providing over 350 services ranges across sectors like education, health, agriculture etc. and have generated employment to 12 lakh persons including 55,000 women. CSCs have become centres of digital empowerment being actively involved in providing digital literacy. Under Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), the Government is implementing the world's largest digital literacy programme under which 1.96 crore people in rural backward areas have already been imparted training to become digitally literate and a total of 6 crore will be trained, thus, bridging the digital divide and helping people access benefits of the digital world.

The BPO movement for smaller towns aims to create employment opportunities and secure a balanced regional growth by promoting local entrepreneurs, employment to women and differently-abled persons. It has the potential to generate around 1.5 lakh employment opportunities. 53,300 seats are allocated to 184 companies, resulting in setting up of 268 units distributed across 110 locations of 26 States & 2 UTs. BPOs have started operation at several locations, including, Bhaderwah, Budgam, Jammu, Sopore and Srinagar in Jammu and Kashmir, Guwahati, Kohima, Imphal in North-Eastern region, Baddi and Shimla in Himachal Pradesh, Patna and Muzzaffarpur in Bihar, Jaleshwar in Odisha.

The Government is promoting Electronics Manufacturing to accelerate the movement towards Make in India, Make for India, and Make for the World. Towards making India a manufacturing hub for electronics and mobile devices, 268 unique mobile and mobile component manufacturing units have been set up in last 4 years, providing direct and indirect employment opportunities to 6.7 lakh citizens.

To create an inclusive, safe and secure cyber space for sustainable development, the Cyber Swachhta Kendra (Botnet Clearing and malware analysis centre) has been setup to provide alerts to users for preventing loses of financial and others data.

All these have laid a robust foundation for India to become one of the leaders in digital transformation. Having built a strong foundation of digital infrastructure and expanded digital access and outreach, India is poised to accelerate towards a trillion-dollar digital economy.

'Digital Bharat, Saksham Bharat – A Compendium on Digital India' covers the entire gamut of the Digital India programme from policy to implementation perspective, highlighting the transformation led by Digital India, a story of Digital Empowerment and Digital Inclusion. The Compendium provides an apt platform to showcase India's position in the digital revolution as the country is generating future pathways powered by technology that is affordable and inclusive. The compendium is brought out with an objective to disseminate and propagate the success of Digital India among masses. It outlines initiatives that provide Digital Identity, Digital Infrastructure, Digital Literacy & Skilling, and Digital Delivery of Services to millions of citizens.

We express my sincere gratitude to Shri Ravi Shankar Prasad, Hon'ble Minister for Electronics & Information Technology and Law & Justice for spearheading the entire initiative of India's Digital Vision with his perspective. We are highly obliged to Shri S.S. Ahluwalia, Hon'ble Minister of State for Electronics & Information Technology for his guidance and support. We are especially grateful to Shri Ajay Sawhney, Secretary, MeitY for his perspective, steering the entire activity. We are grateful to Shri Pankaj Kumar, Additional Secretary, MeitY for the support in this endeavour. We also express our sincere gratitude to all the Officers of MeitY and its Organizations for their valuable inputs in the formulation of the compendium. In particular, the relentless efforts of the Officers of the Coordination Group of MeitY deserves a deep appreciation for carrying out the mammoth task of collection, compilation, analysis and presentation of the detailed national as well as State/UT – wise digital profikles in the form of the Compendium. The designing of the Compendium has been carried out by the NeGD team.

The Compendium outlines India's Digital journey showcasing increased landscape of ICT, thereby, improving lives of the 1.3 billion citizens- both socially as well as economically. Digital India is resonating among the common masses. Digital India, utilizing the power of digital platforms, has thus demonstrated a case study, where developing economies, through embracing technologies will be able to leapfrog towards sustainable and inclusive growth.

Chaudhary

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## DIGITAL BHARAT, SAKSHAM BHARAT A COMPENDIUM ON DIGITAL INDIA

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## DIGITAL INDIA: A BACKGROUND

In his speech on the occasion of Independence Day in 2014, Shri Narendra Modi, Prime Minister of India, said *"I dream of Digital India to connect each and every citizen of the country and provide easy, effective and economic governance (i,e. Good Governance) in the country."* 

To realize the vision, Digital India programme was envisioned as an ambitious umbrella programme to prepare India for a knowledge based transformation.

Launched in July 2015, Digital India programme was conceived as a game changer from the perspective of Good Governance with a synchronised and coordinated engagement of the entire Government. This transformational programme has been designed to build holistic capabilities across infrastructure, manufacturing, skills and delivery platforms which, in turn, will lead to the creation of a self-reliant knowledge economy. The focus of Digital India programme is on being transformative – to realise IT (India Today) + IT (Information Technology) = IT (India Tomorrow) and to make technology at the center to enable change.

Digital India programme identifies three vision areas - Digital Infrastructure as a Utility to Every Citizen, Governance and Services on Demand and Digital Empowerment of Citizens.

**Digital Infrastructure as a Utility to Every Citizen**, includes, availability of high-speed internet for delivery of services to citizens; digital identity for every citizen; mobile phone and bank account enabling citizens' participation in digital and financial space; shareable private space on a public cloud; and safe and secure cyberspace.

**Governance and Services on Demand**, includes, seamlessly integrated services across departments or jurisdictions; services availability in real time from online and mobile platforms; digitally transformed services for improving ease of doing business; leveraging GIS for decision support systems and development. **Digital Empowerment of Citizens**, includes, universal digital literacy; accessible digital resources universally; all documents/certificates to be available on cloud; ensuring citizen engagement through myGov; availability of digital resources/ services in Indian languages; and portability of all entitlements through cloud.

The programme is aimed at providing the required thrust to the nine pillars of growth: Broadband Highways; Universal Access to Mobile Connectivity; Public Internet Access Programme; e-Governance: Reforming Government through Technology; eKranti-Electronic Delivery of Services; Information for All; Electronics Manufacturing: Target Net Zero Imports; IT for Jobs and Early Harvest Programmes.

Digital India programme has been coordinated by Ministry of Electronics and Information Technology with Ministries and Departments in the Central and the State Governments, partnering it in their respective domain areas.

India is in a sharply accelerating 'lift-off' phase of its digital journey. Having built a strong foundation of digital infrastructure and expanded digital access, India is now poised for the next phase of growth — the creation of tremendous economic value and empowerment of millions of Indians as new digital applications permeate sector after sector.

India's story of digital transformation is one of digital empowerment and digital inclusion, for digital transformation based on technology that is affordable, inclusive and developmental. All this ensures that with an aim of Minimum Government, Maximum Governance, ease of living of the citizens is at the core of Digital India.

Digital India programme has transformed the lives of 1.3 billion citizens of India with a robust foundation of Digital Infrastructure, Digital Identity, Digital Delivery of Services, Digital Literacy, Digital Skilling, Digital Payments to ensure Digital Access to All and Digital Empowerment through inclusion.

## **1. DIGITAL ACCESS**

The core of Digital India programme is to create internet access for every citizen to improve accessibility even in the remotest part of the country. Digital India push is meant to serve the poor and protect their interests. Digital economy push by the Government has seen an allround increase and disbursal of benefits to the poor through digital means to their bank accounts by removing fictitious beneficiaries and middlemen. As envisioned by Hon'ble Prime Minister, 'New India' can be realised only if the fruits of development reach all. Digital India has facilitated access of the digital world to the citizens and has provided power to the masses.

## 1.1 Digital Infrastructure

Under Digital India programme, a key vision area is to provide a digital infrastructure as a utility to every citizen, starting from delivering digital identity to 1.3 billion citizens, linking about 2.5 lakh Gram Panchayats by an optical fibre network and improving access in the rural areas.

## 1.1.1 Digital Identity

#### **Overview**

Aadhaar is the world's largest digital identity that provides biometric programme and demographic based unique digital identity; which can be authenticated anytime, from anywhere and also eliminates duplicate and fake identities. It provides an identity infrastructure for the delivery of various social welfare programmes. The potential of Aadhaar can be realised, through its use of the infrastructure as a digital identifier and as a unique parameter by various Central Ministries, State Departments, PSUs and private sector entities to provide service delivery to residents in an integrated fashion. A total of 123.3 crore Aadhaar have been generated.

#### **Transformative Impact**

Aadhaar is not just a proof or identification of citizenship, but also an important digital identity used by citizens for various purposes, such as, availing benefits of Government services or schemes (such as LPG subsidy); access to Government based apps for Indian citizens (such as BHIM); proof for getting other important Government documents (such as a passport); and for other important aspects, such as, school scholarships, Digilocker for archiving documents, bank accounts under Prandhan Mantri Jan Dhan Yojana (PMJDY), provident funds account, pensions, driving license, insurance policies and loan waivers amongst other services.



#### Number of Aadhaar Generated





## 1.1.2 Direct Benefit Transfer

#### **Overview**

Direct Benefit Transfer (DBT) was started with the aim of reforming the Government delivery system by re-engineering the existing process in welfare schemes for simpler and faster flow of information/ funds and to ensure accurate targetting of beneficiaries, re-duplication and reduction of fraud. JAM, i.e., Jan Dhan, Aadhaar and Mobile are DBT enablers. As on December 31, 2018, more than 34 crore Jan Dhan accounts, over 123 crore Aadhaar and about 121 crore mobile connections provides a unique opportunity to implement DBT in all welfare schemes, across the country, including the States and UTs. Under JAM Trinity (Jan Dhan accounts, mobile and Aadhaar), Rs 6.23 lakh crore has been disbursed through Aadhaar based DBT to beneficiaries of 438 Government schemes, resulting in savings of around Rs 1.1 lakh crore by removing fictitious claimants.

#### **Transformative Impact**

DBT has brought efficiency, effectiveness, transparency and accountability in the Government systems and has infused confidence of citizens in governance. Use of modern technology and IT tools realises the dream of Maximum Governance, Minimum Government.

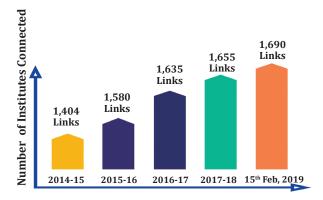
Year	2014-15	2015-16	2016-17	2017-18	2018-19 (Dec)
Total number of Banks live on Aadhaar Enabled Payment Systems (AEPS)	30	66	18	3.00	15
Total number of transactions on Aadhaar Enabled Payment Systems (AEPS) (in crore)	0.97	9.51	34.49	95.91	119.32
Active AEPS devices/ MicroATMs (in lakh)	0.15	0.72	1.49	1.44	2.14
Authentication Transactions (in crore)	39.07	104.84	403.57	1,261.93	815.40
Number of Unique Aadhaar linked to Bank Account (in crore)	9.81	9.23	17.95	15.72	4.55
Number of Banks live on Aadhaar Payment Bridge (APB)	187	266	139	52	26
Number of APB Transactions on Aadhaar Payment Bridge (APB) (in crore)	16.83	70.71	94.04	128.84	112.81
Number of Bank Accounts opened /linked using eKYC (in crore)	0.67	1.34	4.04	13.42	12.71

### 1.1.3 National Knowledge Network(NKN)

#### **Overview**

National Knowledge Network (NKN) project is aimed at establishing a strong and a robust Indian network that will be capable of providing secure and reliable, highspeed connectivity. National Knowledge Network (NKN) is inter-connecting system, which connects all knowledge and research institutions in the country through a high bandwidth network.

NKN the aims to interconnect more than 1,500 education and research institutes till 15 February 2019, 1,690 education and research institutes have been connected under NKN.



#### **Transformative Impact**

NKN has connected National Data Centre (NDC), 33 State Wide Area Networks (SWANS) and 30 State Data Centres (SDCs) across the country. Further, NKN has 31 Points of Presence (PoPs) in State Capitals, and provides backbone connectivity to various Departments too.

**International Collaboration:** NKN has signed Memorandum of Understandings (MoUs) with various international Research and Education Networks (RENs), such as, TEIN in Asia Pacific, GEANT in Europe, Internet2 in USA, LEARN in Sri Lanka and NORDUnet for Nordic countries, i.e., Denmark, Iceland, Norway, Sweden and Finland. Further, more than 35 research collaborations between Indian and European Institutes and around 50 collaborations between Indian and US Institutes are using NKN.

**International Points of Presence (PoP):** NKN has established its international Point of Presence (PoP) at Singapore, Amsterdam and Geneva (CERN). NKN PoP at New York has been planned for direct connectivity with Internet2 and CANARIE. NKN international PoPs help the users and researchers to collaborate with their international counterparts through dedicated low latency high-speed, secure network.

**Extension of NKN at SAARC Countries**: To bolster sub-regional collaboration among SAARC countries, NKN has already extended its connectivity to Sri Lanka (LEARN) in January, 2018. It is also in the process of extending its connectivity with the RENs of Bhutan, Bangladesh, Nepal and Afghanistan.

NKN peering International Content Providers: NKN has a direct peering/cache with Content Providers, such as, Google, Akamai and Microsoft, to enhance the quality of services and improve user experience over NKN.

NKN usage in Weather Forecasting: Using NKN, ISRO-MoES group collaborated with other international counterparts, such as, NOAA, EUMETSAT etc., which helped immensely in accurate weather forecasting and analysis. NKN has supported in establishing "EUMETSAT Terrestrial Broadcasting Reception", for receiving EUMETSAT data on real time basis. It has helped in setting a secure network for receiving database from NOAA-NESDIS (USA).

**NKN Support to Mission Mars:** ISRO Institutes, such as, IIRS and their Data Centre, ISSDC, are effectively using NKN for their science mission initiatives, including India's interplanetary mission 'Mars Orbiter Mission' and 'ASTROSAT'.

**e-Pragati using NKN Platform:** Prime Minister Shri Narendra Modi, launched a multi-purpose and multi-modal platform PRAGATI (Pro-Active Governance and Timely Implementation) in March 2015, which rides on NKN platform.

**Video Conference (VC):** Prime Minister Shri Narendra Modi, addressed (through VC) students of Smart India Hackathon 2017 simultaneously across 26 locations in the country. NKN platform is also used by Home Minister, Finance Minister and Foreign Minister to address various national and international events through video conferences.

## 1.1.4 BharatNet

The world's largest rural broadband connectivity project aims to connect all the Gram Panchayats (approximately 2.5 lakh) via broadband connectivity. The project provides affordable broadband services to citizens and institutions in the rural and remote areas, in partnership with the States and the private sector towards realisation of the vision of Digital India. BharatNet facilitates access to bandwidth in a nondiscriminatory manner to all eligible Service Providers for enabling them to provide services in the rural areas.

Phase-I of the project has been completed in December 2017, with over 1,00,000 Gram Panchayats being made Service Ready. Phase-II is targeted to be completed by March 31, 2019.

#### **Utilisation of BharatNet**

- 9,794 Commercial Fibre To The Home (FTTH) connections have been provided.
- To trigger the ecosystem and promote BharatNet utilisation, concessional tariff for bandwidth and

dark fibre for utilising the network for service delivery has been formulated and applied.

• Further, to enable Service Providers to test their equipments on BharatNet, free trials (i.e. 10 trials per Service Provider) are also are up by TSP (Telecom Service Provider) and being facilitated by BBNL (Bharat Broadband Nigam Limited). Airtel, Reliance Jio, Idea and Vodafone are conducting trials.

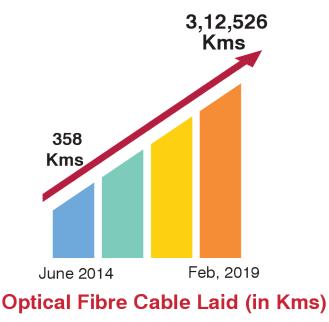
#### Last Mile Connectivity:

Telecom Commission on September 11, 2018, has approved a Last Mile Connectivity model through WiFi or other suitable technology. At each Gram Panchayat, 5 Access Points (APs) are being set up and out of these, 3 APs have to be installed at Government institutions and 2 APs at public places, including one at the Gram Panchayat.

#### **Transformative Impact**

BharatNet mission is providing broadband connectivity to approx 1 lakh Gram Panchayats and it is increasing broadband penetration in the rural areas to foster socio-economic development.

Connected 1,24,048 Gram Panchayats (as on February 16, 2019)



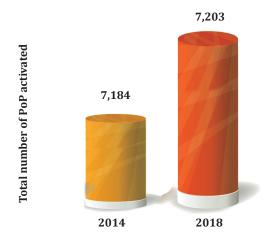
## 1.1.5 State Wide Area Network (SWAN)

#### **Overview**

The Government has approved the scheme for establishing State Wide Area Networks (SWANs), across the country, in March 2005. The main objective for setting up SWAN has been to connect all State/UT Head Quarters up to the Block Level via District/ sub-Divisional Headquarters, in a vertical hierarchical structure with a minimum bandwidth capacity of 2 Mbps per link. Each State/UT can enhance the bandwidth up to 34 Mbps between State Head Quarters (STQ) and District Head Quarters (DHQ) and upto 8 mbps between DHQ and Block Head Quarters (BHQ) depending upon utilisation. SWAN is envisaged as the converged backbone network for data, voice and video communications throughout a State/UT.

SWANs have been made operational in Andhra Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Dadra and Nagar Haveli, Daman and Diu, Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal and Andaman and Nicobar. Goa has its own set up.

SWAN has been integrated with National Knowledge Network (NKN) in 36 States/UTs at SHQ level and 540 at the district level to provide high bandwidth.



#### **Transformative Impact**

SWAN is an efficient and reliable communication network, which has significantly reduced communication gaps and has improved information flow among various levels and offices. It has also improved quality and decision making that has helped in implementation of the Government services faster and better.

## 1.1.6 National Information Infrastructure (NII) Pilot Project

#### **Overview**

NII Pilot Project aims to integrate the existing networks and infrastructure of SWAN, NKN, SDC, NDC, NICNET, and NOFN (BharatNet) under MMPs leverage it fully to enhance its potential and utility and ensure economy in expenditure. Under this project, integration of SWAN with NKN at States, Districts and NOFN at blocks has been done for high and reliable bandwidth. The pilot also provides an estimate on actual consolidated bandwidth requirement at State level. It has fulfilled the objective of identification and addressing mechanism of the challenges faced during pilot implementation up to Gram Panchayat level.

As a part of Digital India initiative, MeitY has implemented the NII pilot project in 7 States one district in each State/UTs and its block, and Gram Panchayats namely, Mysore (Karnataka), Thiruvananthapuram (Kerala), Peren (Nagaland), Chandigarh, Haridwar (Uttarakhand) and Puducherry. With a total outlay of Rs 45.5 crore, it covers 1,580 Gram Panchayats and its 4,740 Government offices for delivery of e-Governance services at the Gram Panchayat level.

#### **Transformative Impact**

NII has made available upgraded infrastructure from technological, administrative and e-Governance perspective. The initiative has helped to identify gaps/challenges that exist in the rural areas in the delivery of various e-Governance and other social sector services.

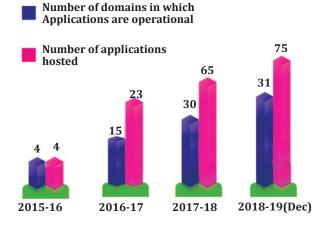
## 1.1.7 NCoG: National Centre of Geo-informatics

#### **Overview**

National Centre of Geo-informatics (NCoG) is a single source Geographic Information System

(GIS) platform for sharing, collaboration, locationbased analytics and decision support system, catering to the Central and the State Government Departments across the country. The GIS platform has the provision to integrate with Management Information System (MIS) data of Ministries/ Departments. Under this project, location-based datasets, such as, data related to Mining, Forests, Presence of Industries, movement of Freight, and Water Resources are collated with MIS data to bring out insights that are useful to support decision making. User Departments can now pinpoint its operations, assets on a map and plan better. NCoG has provided mobile applications for geo-tagging and creating evidence of completed operations under the Government schemes. The key features of NCoG as follows:

- 1:5000 Base map.
- Open Source and in-house development results in cost saving as there is no use of proprietary software.
- · Compatibility to multi-purpose geodatasets
- Dynamic Query Multiple customised reports and dashboards are available.
- Training Two way capacity building.
- Authentication the representation of data on GIS platform is authenticated by the user/owner. Department/agency.



#### **Transformative Impact**

NCoG has brought transparency and has improved planning. This has been made possible by the GIS solutions rolled out in the form of web portals and custom mobile apps empowered by space technology.

The Mining Surveillance System has helped curb illegal mining through automatic remote sensing detection. The district officials are notified and action taken by them is reported through mobile app. This ensures Good Governance. NCoG has enabled Mapping of all the Central Government land parcels, including that of CPSEs, and enables identification of land for specific purposes.

97, 575 Land parcels mapped

16,329 sq km Area mapped

110 CPSEs onboard

47 Ministries/Departments onboard

Industrial Information System holds information of 3500 Industrial Parks, Estates, Clusters etc. The information ranges from connectivity (rail, road, air and port)and availability of raw materials and internal and external infrastructure related to industrial parks etc. This facilitates development planning.

NCoG gives aGIS web portal for 117 aspirational districts implemented with various layers for infrastructure, agriculture, demographic details, education, health, energy, forest, industry, infrastructure, water resources, water supply, banks, skill development etc.

NCoG provides a ready to use 3D profiling of the country. It is crucial for developing flood simulation models and facilitates disaster management.



## 1.2 Digital Delivery of Services

The Government of India has provided digital delivery of services at the doorstep of citizens, especially in the remote areas of the country in an affordable manner. The Government has facilitated digital empowerment of citizen by providing more than 3,500 services electronically across the country. The electronic transactions of these services are approximately 9.1 crore on a daily basis. The Mobile First policy of the Government has increased accessibility and convenience of users even in the remote areas. Common Services Centres are offering 390 services in sectors, such as, education, health and agriculture etc. Digital delivery of services, such as, UMANG, Jeevan Pramaan, DigiLocker, eBasta, ORS, National Scholarship Portal and eSign etc., has improved the ease of living of the citizens.

In order to transform the quality of services and to provide integrated services, initiatives under 'e-Kranti' utilise the emerging technologies, such as, cloud and mobile platforms leading to automation of knowledge work, digital payments, Internet of Things and intelligent transportation and distribution. These initiatives ensure easy, effective and efficient governance and services to citizens.

### 1.2.1 Common Services Centres (CSCs)

#### **Overview**

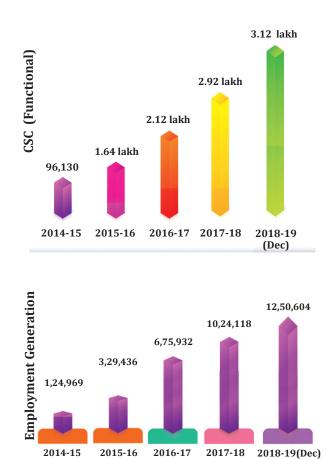
CSCs are the front-end access points for delivery of various electronic services to the citizens close to the place of residence, thereby contributing to a digitally and financially inclusive society.

Around 3.12 lakh Common Services Centres, spread all over the country, are ensuring digital delivery of services at the doorstep of the citizens, especially in the remote areas of the country in an affordable manner, creating digital empowerment by providing more than 350 services ranging from education, health, agriculture etc., and has been generating employment opportunities for rural youth. CSCs provide services like Financial Inclusion (Banking, DigiPay, Insurance and Pension), Healthcare services, Skill Development, BBPS, IRCTC, Utility Bill Payment, e-Commerce and e-Recharge etc.

#### **Transformative Impact**

Common Service Centres (CSCs) under Digital India programme have become an effective instrument for promoting a digitally inclusive society and empowering the citizens, including women, especially those living in the rural India. It is promoting Entrepreneurship through its selfsustainable model specially for women Village Level Entrepreneurs (VLEs). CSCs have provided employment to more than 12 lakh persons; out of these, 55,000 are women VLEs.

CSCs are digitally delivering various services to citizens close to the place of residence, such as, Ayushman Bharat enrolment, PAN card, banking and insurance. Now, railway ticketing services are made available through all the CSCs. Also, CSCs are playing a vital role in creating digital infrastructure in the villages including connectivity to convert the villages into Digital Villages. These Digital Villages have been transforming rural life, encouraging hopes and aspirations, promoting skills and is facilitating every citizen to actively participate in nation building.



## 1.2.2 DigiLocker

#### **Overview**

DigiLocker is a platform for issuance and verification of documents and certificates in a digital way, thus it is helping in eliminating use of physical documents. Indian citizens, who sign up for a DigiLocker account get a dedicated cloud storage space that is linked to their Aadhaar (UIDAI) number. The Organisations that are registered with DigiLocker can push electronic copies of documents and certificates (e.g. Driving License, Voter ID, school certificates) directly into the citizens' lockers. Users can also upload scanned copies of their legacy documents in their accounts. These legacy documents can be electronically signed using eSign facility. DigiLocker aims to provide a Digital wallet to every citizen, so that all the documents can be made available electronically at one place and can be accessed from anywhere at anytime. 108 agencies have been issuing documents to the citizens via DigiLocker. Over 250 types of documents have been onboarded.

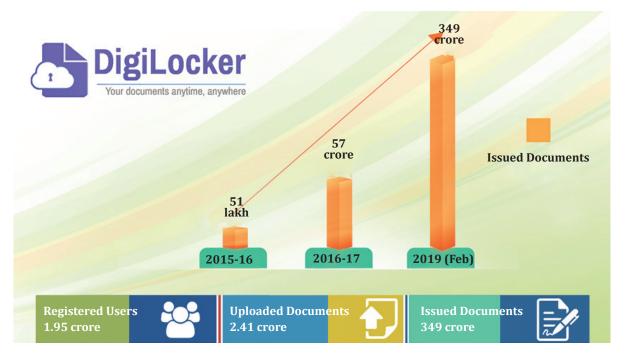
#### **Transformative Impact**

DigiLocker provides dedicated personal storage space in the cloud to the citizens. This system enables various organisations registered on Digilocker to push certificate links directly in the citizens' DigiLocker and allows access of the same on the citizens' consent. It facilitates online service, where documents can be shared and verified through an online mechanism.

It reduces the administrative overhead of the Government Departments by minimising the use of paper. DigiLocker aims towards a paperless system, where, users have ease of storing Government issued documents in their locker or account.

A user can share these electronic certificates/ documents online with various Departments and agencies registered on DigiLocker. Since the links of the Issued documents take the Departments/ agencies to a single source of trust, automatic verification happens in each case.





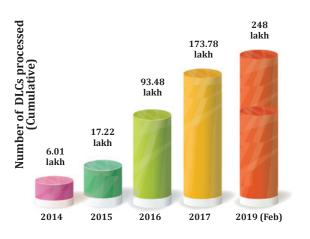
## 1.2.3 Jeevan Pramaan

#### **Overview**

Jeevan Pramaan is a biometric enabled digital service for pensioners. The Pensioners of the Central Government, the State Governments or any other Government organisation can avail the benefit of this facility. One of the major requisites for the pensioners, post their retirement from service, is to provide life certificates to authorised pension disbursing agencies, such as, Banks and Post offices etc. Following which, their pension is credited to their respective bank accounts. Digital Life Certificate (DLC) for Pensioners Scheme of the Government, known as Jeevan Pramaan, seeks to address this problem by digitising the whole process of securing a life certificate.

#### **Transformative Impact**

Jeevan Pramaan has provided relief to old aged persons by eliminating the need of physical visit to Pension Disbursing Agencies. It provides an opportunity for anytime, anywhere submission of Digital Life Certificate (DLC) by the pensioners. This has streamlined the pensioners' verification process at Pension Disbursing Agency. Cloud and Mobile enablement has enhanced the scalability and accessibility, and digitisation has cut down unnecessary logistic hurdles.





## 1.2.4 Mobile Seva

#### **Overview**

Mobile Seva is an innovative initiative aimed at mainstreaming mobile governance in the country. To leverage wireless and new media technology platforms, Mobile Seva app uses mobile devices and applications for delivery of public information and services to all citizens and businesses. It provides an integrated whole of Government platform for all the Government Departments and agencies in the country for delivery of public services to citizens and businesses over mobile devices using SMS, USSD, IVRS, CBS, LBS, and mobile applications hosted on Mobile AppStore (apps.mgov.gov.in). 1,000 mobile apps are hosted on the App Store for various domains and States, which are informative or service based. Over 4,129 Government Departments have been integrated with the platform for mobile governance services.

#### **Transformative Impact**

Mobile governance (m-Governance) is widening the reach of, and access to, public services for all citizens, especially in the rural areas by exploiting penetration of mobile phones in the country. It also leverages innovative potential of mobile applications in providing public services. Mobile Seva provides seamless integration with back-end Department that needs to be ensured through existing NSDG/SSDG eGov exchange infrastructure. A Common interface has been provided for various mobile based services, e.g., Short Messaging Service (SMS), USSD (Unstructured Supplementary Service Data), IVRS (Interactive Voice Response System), CBS (Cell Broadcasting Service), LBS (Location Based Services) and mobile applications etc. Moreover, a Mobile AppStore (apps.mgov.gov.in) has been created to facilitate the process of deployment of suitable mobile applications for delivery of public services through mobile devices.

#### Push SMSs per year (Cumulative)





## 1.2.5 UMANG (Unified Mobile App for New-Age Governance)

#### **Overview**

For ease of access to Government services and to fast track m-Governance in the country, UMANG has been developed as a unified platform to deliver major Government services through mobile phones. The platform enables the citizens to access primarily G2C services from the Central Government, State/UT Governments and local



bodies as well as from their agencies from a single mobile app. UMANG is a single mobile app that currently offers 336 Government services. The target is to provide more than 1,200 digital services through this platform.

72 applications (336 services) have been onboarded on UMANG as on February 16, 2019. More than 1.1 crore users have downloaded this app, since its launch in November, 2017.

#### **Transformative Impact**

Users need to download just one mobile app instead of downloading multiple mobile apps to avail major Government services. The app is relevant to all citizens of India and caters to important segments of the society, viz. farmers, students, pensioners, employees, women, patients and youth etc.

All such applications get a basic integration with DigiLocker, Payment Gateways and RAS (feedback). Being a single platform for major Government services, it may reduce the cost of awareness campaigns of various Government services as majority of such services can be promoted via one single app.

UMANG supports 13 Indian languages, in addition to English and hence, ensures accessibility. UMANG platform enables Departments to readily and quickly provision (with no expenditure) their services through mobile phones.



#### **Total Number of Downloads**

## 1.2.6 Government e-Marketplace (GeM)

#### **Overview**

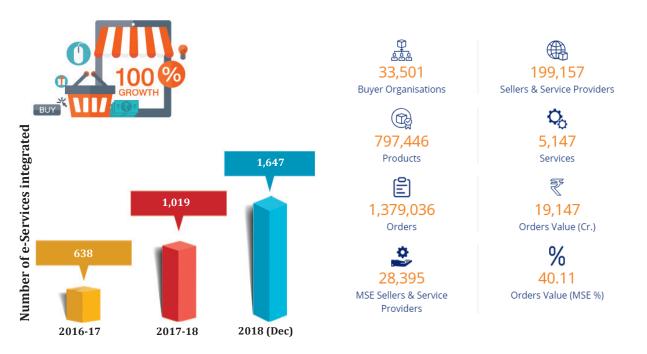
The Government has created a one-stop Government e-Marketplace (GeM) to facilitate online procurement of common use goods and services required by the various Government Departments/Organisations/PSUs.

On GeM platform, 33,501 buyer organisations, 1.99 lakh sellers and service providers and

7.97 lakh products have been registered.

#### **Transformative Impact**

GeM has enhanced transparency, efficiency and speed in public procurement. Entrepreneurs sitting in the remotest parts of the country can sell their commodities to the Government without any intermediaries. This has promoted entrepreneurship in the country. GeM also provides tools of e-bidding and reverse e-auction along with demand aggregation to facilitate Government users achieve the best value for money.





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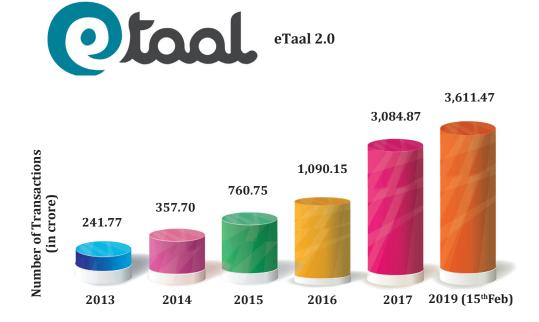
## 1.2.7 Electronic Transaction Agregation & Analysis Layer (eTaal)

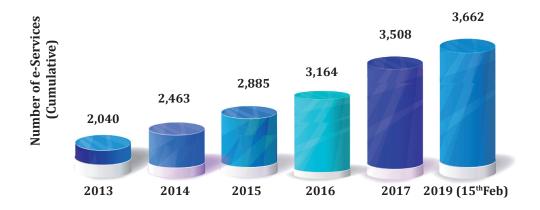
#### **Overview**

eTaal dashboard provides a real time aggregated view of e-services being delivered across different States and levels of Government. eTaal provides an aggregated view of e-transactions performed through implemented e-Governance applications, including the Mission Mode Projects (MMPs) defined under National eGovernance Plan (NeGP). eTaal automatically pulls e-transaction count from applications integrated with it using Web Services technology. The dashboard also facilitates quick analysis of transaction data of various applications in a tabular as well as a graphical form, enabling the user to drill down to the lowest level of detail without compromising on the privacy of the service-seeker or the security and integrity of the application software.

#### **Transformative Impact**

eTaal delivers public services using ICT tools to improve access, enhance transparency and reduce response time, while satisfying the conditions, such as, service is requested through electronic means (self-access or assisted access), including mobile devices. The Workflow or approval process is electronic. Database is electronic/digitised and service delivery is electronic too.





## 1.2.8 e-Sign

#### **Overview**

eSign, an online electronic signature service, was launched in July 2015, as an alternative to the dongle based digital signature. eSign can be integrated with service delivery applications via an Application Programme Interface (API) to facilitate a user to digitally sign a document. Using authentication of eSign user through e-KYC service, online electronic signature service is facilitated. There are 4.90 crore users using eSign.



#### **Transformative Impact**

It is an easy and secure way to digitally sign information anywhere, anytime. It is robust as it uses Aadhaar based e-KYC. It has eliminated hardware dongle based dependency. eSign has eliminated license based digital signature certificates too. The service provides pay per use model, rather than a fixed charge for a period of timeline.

**Easy and secure way to digitally sign information anywhere, anytime** - eSign is an online service for electronic signatures without using physical cryptographic token. Application service providers use e-KYC service to authenticate signers and facilitate digital signing of documents.

**Facilitates legally valid signatures** - eSign process includes signer consent, Digital Signature Certificate issuance request, Digital Signature creation and affixing as well as Digital Signature Certificate acceptance in accordance with provisions of Information Technology Act. In-built comprehensive digital audit trail to confirm the validity of transactions, is also preserved.

**Flexible and easy to implement -** eSign provides configurable authentication options in line with e-KYC service and also records the e-KYC ID used to verify the identity of the signer. The authentication options for e-KYC include biometric or OTP of the e-KYC service provider. eSign enables users easy access to legally valid Digital Signature service.

**Ensures privacy** - eSign ensures privacy of the signer by requiring only the thumbprint (hash) on the document to be submitted for signature function, instead of the whole document.

**Secure online service** - eSign service is governed by e-authentication guidelines. While authentication of the signer is carried out using e-KYC services, the signature on the document is carried out on a backend server of the eSign provider. eSign services are facilitated by trusted third party service providers - currently, Certifying Authorities (CA) licensed under the Information Technology Act. To enhance security and prevent misuse, eSign users' private keys are created on Hardware Security Module (HSM) and are destroyed, immediately after use.

#### e-Sign issued (Cumulative)



## 1.2.9 MeghRaj

#### **Overview**

In order to utilise and harness the benefits of Cloud Computing, the Government has embarked upon an ambitious initiative - GI Cloud, which has been named as MeghRaj. The focus of this initiative is to accelerate delivery of e-services in the country, while optimising ICT spending of the Government. This will ensure optimum utilisation of the infrastructure and will make the development and deployment of e-Governance applications. Better the architectural vision of GI Cloud encompasses a set of discrete cloud computing environments spread across multiple locations, built on existing or new (augmented) infrastructure and following a set of common protocols, guidelines and standards issued by the Government of India. 960 application are running on 14,000 virtual servers.

#### **Transformative Impact**

MeghRaj has transformed the way in which, the Government manages its ICT services. It has provided cost-effective, agile and sustainable ICT resources for rapid deployment of citizen centric e-Governace services. The elastic nature of NIC cloud services allows departments not only to bring solutions to quick deployment but also to scale up, based on the demand of peak or low loads without any upfront investments.





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## 1.2.10 Rapid Assessment Systems (RAS)

#### **Overview**

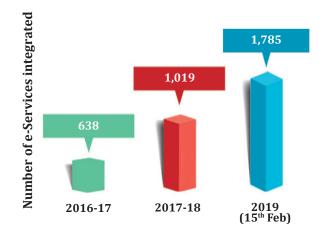
Rapid Assessment System (RAS) has been developed for continuous feedback on e-services delivered by the Central Government and the State Governments of India. This system has multiple channels for receiving feedback and is backed by analytics. These analytics help integrated Departments for continuous system improvement and better governance. The application uses stateof-the-art, API based technology, which makes it very simple for the Departments to integrate and use the feedback framework.

#### **Transformative Impact**

RAS reduces the currently lengthy and tedious system of assessment/feedback. It provides a mechanism for continuous measurement of Quality of Service (QoS). It facilitates analysing feedbacks and generating knowledge out of it, which in turn, helps in improving the users' or citizens' experience in availing public services. Through this service, citizens are able to provide feedback as soon as they avail the service. The application is rapid, secure, safe, and provides and supports the feature of language localisation in major languages – Hindi, Gujarati, Bengali, Kannada, Malayalam, Marathi, Punjabi, Tamil and Telegu.



## helps in improving governance





## 1.2.11 e-Office and Nationwide eMail Service

#### **Overview**

e-Office is a digital workplace solutions, which are built on Open Architecture and are easy to be replicated. e-Office brings transparent governance with automation of files and their easy tracking in real-time. It provides a digital repository for documents on policies, acts and regulations, manuals and standards.

Nationwide eMail Service is the single largest email service offered by a Government globally that provides a secure email service to its Government official for secure communication with a 24/7 support team. All services under email are offered free of cost to all officials under Ministries, Departments, Statutory Bodies, Autonomous Bodies, UT. The messaging service provides an integrated application solution with proactive management and maintenance in a single source solution. There are various in-house applications, like, Delegated Administrator, Log App, Pass App, Id look up, Profile Update, that are offered to users and Ministries and State administrators to make email services more effective. The new email services platform has been built based on five primary pillars, namely, security, performance, redundancy, service continuity and rich feature set.

#### **Transformative Impact**

This has improved data security and data integrity. It provides accountable and transparent governance with automation of files and their easy tracking in real time. It has streamlined process workflows and has improved efficiency in decision making. It is transforming the Government work culture and ethics by fostering innovation, saving efforts and time that were otherwise spent in unproductive procedures.

Central Government Ministries/Departments							
Year	Prior to 2014	2014-15	2015-16	2016-17	2017-18	2018 (till December)	
No. of Departments	43	51	60	72	78	79	
No. of e-file generated	25,729	72,816	1,61,347	3,51,207	8,54,661	11,44,253	

Over the years, the email services have seen an exponential	
increase in the no. of users and traffic of emails	

Year	2014-15	2015-16	2016-17	2017-18	2018 (till December)
Number of users	4.5Lakh	8 Lakh	16 Lakh	16 Lakh	20 Lakh
Number of mails	134 Crore	220 Crore	335 Crore	552 Crore	718 Crore

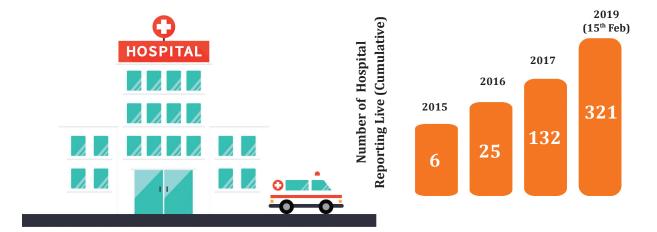
## 1.2.12 e-Hospital

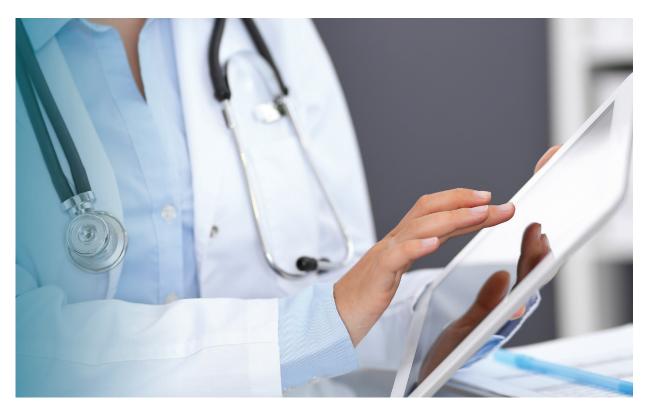
#### **Overview**

e-Hospital is a one-stop solution for connecting patients, hospitals and doctors on the digital platform. It manages key functional areas and processes of hospitals and enables a patient to book an appointment with a doctor online without standing in long queues. A doctor can also view patients' records, i.e., lab reports, and scan reports etc., to take a quick diagnostic view and provide better patient care. e-Hospital has been implemented in more than 321 hospitals across the country from which over 260 hospitals are reporting live transcations.

#### **Transformative Impact**

It is an easy to use platform for onboarding hospitals to manage their registration and appointment processess. Cloud availability relieves hospitals from application and server management. Pharmacy automation has minimised medication errors and has decreased medicine dispensing time. There is instant access to information on blood availability in major hospitals. Picture Archiving and Communication System (PACS) integration is helping radiologists make accurate observations by studying both clinical data from e-Hospital and imaging data from PACS-diagnostic devices.

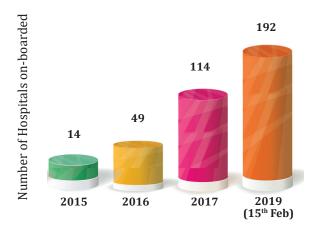




## 1.2.13 Online Registration System (ORS)

#### **Overview**

Online Registration System (ORS) is a framework to link various hospitals across the country via Aadhaar based online registration and appointment system, where counter based OPD registration and appointment system through Hospital Management Information System (HMIS) have been digitised. ORS has facilitated more than 22 lakh appointments since its inception.



#### **Transformative Impact**

This has simplified appointment process, where appointments can be taken from AIIMS and other renowned hospitals, from anywhere or even from the remotest of locations. This has led to elimination of visits to hospitals exclusively for taking appointments/registrations/inquiries. Thus, the initiative saves time, effort and cost. ORS facilitates quick hospital onboarding and enables system hospitals to easily manage their registration and appointment process and monitor the flow of patients. It provides dashboard reports and thereby, making hospital administration more efficient.

## 1.2.14 e-Sushrut

#### **Overview**

Centre for Development of Advance Computing's (C-DAC) e-Sushrut, a Hospital Information System (HIS) has been developed with the objective of streamlining the treatment flow of a patient in the hospital, while allowing doctors and other staff to perform to their maximum abilities, in an optimised and an efficient manner. eSushrut uses a network of computers to gather, process and retrieve patient care and administrative information for all hospital activities to satisfy the functional requirement of users. It also helps as a decision support system for hospital authorities to develop comprehensive healthcare policies.

#### **Transformative Impact**

eSushrut developed by C-DAC is modular, thus ensures sustained benefits through changes in technology, protects and provides optimal returns from the investment. It is modelled on a unique combination of a patient centric and medical staff centric' paradigm, beneficial to the recipients and the providers of healthcare.



## 1.2.15 Telemedicine

#### **Overview**

Telemedicine solutions developed by Centre for Development of Advanced Computing (C-DAC) enables patients in the remote to engage in live consultation with doctors situated elsewhere, sharing medical records and test reports online.

Telemedicine solutions have been deployed in many States in India, including Odisha, Tamil Nadu, Kerala, Punjab, Sikkim, Mizoram, Himachal Pradesh and Rajasthan. The solution has also been deployed abroad. Three variations of these solutions (Mercury, Sanjeevani and Dhanwanthari) are currently operational in many centres across Kerala, Tamil Nadu, Odisha, Punjab, Himachal Pradesh and other countries, such as, Tanzania and Myanmar. C-DAC has also developed Mobile Tele-Oncology System and Mobile Tele-Ophthalmology System.

#### **Transformative Impact**

In view of the shortage of doctors and hospitals in rural areas of the country, telemedicine solutions have become an attractive option to enable quality healthcare everywhere.

## 1.2.16 National Scholarship Portal (NSP)

#### **Overview**

National Scholarship Portal (NSP) is a one-stop solution through which various online services related to scholarships, ranging from student application, application receipt, processing, sanction and disbursal of various scholarships to students are enabled. The Mission Mode Project (MMP) of National Scholarship Portal, under the National e-Governance Plan provides a common electronic portal for implementing various Scholarships schemes launched by the Union Government, State Governments and Union Territories across the country.

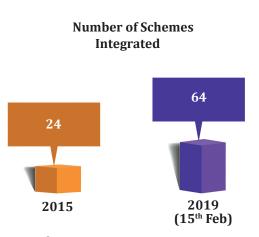
This initiative provides a Simplified, Missionoriented, Accountable, Responsive and Transparent, 'SMART', system for faster and effective processing of scholarships applications and delivery of funds directly into the beneficiaries' bank accounts without any leakages. The main features of the portal are as follows:

- Ensures timely disbursement of scholarships to students
- Provides a common portal for various scholarships schemes of the Central and State Government



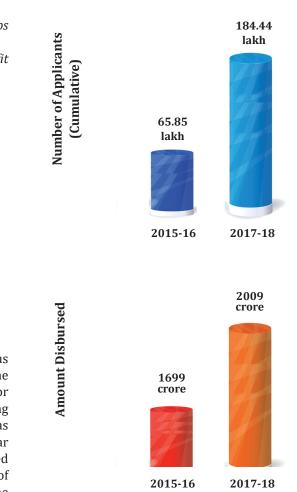


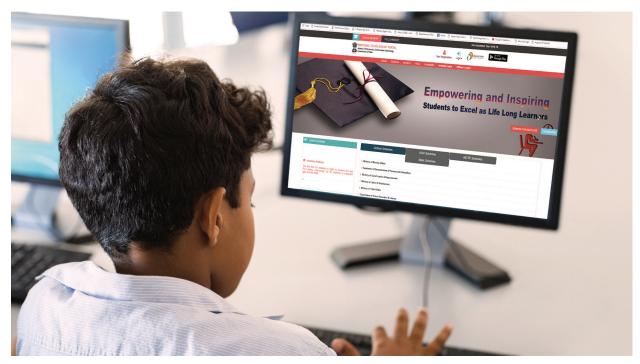
- Creates a transparent database of scholars.
- Avoids duplication in processing.
- Enables harmonisation of different scholarships schemes and norms.
- Brings about application of Direct Benefit Transfer.



#### **Transformative Impact**

NSP provides a common portal for various Scholarship schemes of the Central and the State Governments, i.e., one-stop solution for scholarship applications, irrespective of disbursing Ministries / Departments. The disbursal time has been reduced significantly too. Through Aadhaar based verification, this system has eliminated fake and duplicate applicants. Real time status of application is available to students and real time monitoring of the scholarship scheme is available to administrators.





## 1.2.17 Virtual Classrooms

#### **Overview**

Smart Virtual Classroom is a scheduled, online, teacher-led training session, where teachers are not present with learners physically but interact via a public network in an online learning environment. It typically comprises solution for capturing audio/video and integration of other electronics devices, Interactive White Board, Projector, Personal Desktop and UPS etc.

A central location has been established for Hosting MCU, scheduling software, recording/streaming solution for enabling storage of live sessions, offline access and multiparty conferencing. 50 Highend smart virtual classrooms have been set up in each of identified 50 District Institutes Education Training (DIETs) equipped with hardware based Video Conferencing and electronic teaching aid equipments. 3,204 Smart virtual classrooms have been set-up in 7 States, namely, Andhra Pradesh, Tamil Nadu, Gujarat, Rajasthan, Haryana, Himachal Pradesh, Tripura, equipped with Software based Video Conferencing and electronic teaching aid equipments. A knowledge aggregation portal has been established that would contain redirection links to course contents generated and available on the internet. Hands-on operational training is imparted to DIETs/ school staff with a training manual. 9,664 Sessions have been conducted, till December 2018, in which 65,56,600 students have attended and 64,814 teachers have been trained.

#### **Transformative Impact**

Smart Virtual Classroom is just like a real classroom. A student in a Smart Virtual Classroom participates in a synchronous manner, which means that teacher and students are logged into video conferencing sessions and experience virtual classroom environment by making use of electronic interactive white-board, projector and personal Desktop. It allows participants to communicate with one another, view presentations or videos, interact with other participants, and engage with resources in work groups. Smart Virtual Classroom also has the ability to record the class/session as it happens, including any presentation audio and visuals. This means that the content is accessible even after being delivered. An added benefit for those, who want a quick refresher, or perhaps did not fully understand during the class.



## 1.2.18 Eduroam

#### **Overview**

eduroam is a global service that enables students, researchers and stafffrom participating institutions to obtain internet connectivity across campus. Students, researchers and staff, when visiting other participating institutions can simply open their laptop or activate their smartphone or other portable devices through WiFi for connectivity. With eduroam, a user gets internet access not only via own institution's wireless network but when visiting other participating universities, colleges, research centres and libraries too.

This facility enables users visiting other eduroam enabled institutions, globally to get authenticated and connected to visiting institutions network using their home institution ID and password for free internet access. 250 Institutes of India have eduroam connectivity.

#### **Transformative Impact**

eduroam helps national or regional research and education community to connect better with their peers across the world and thus, it promotes a

#### sense of equality.

The benefits of eduroam service are immense for individuals, institutions and particularly for Research and Education Networks (RENs).

For individuals, the ability to turn on a smartphone, tablet or laptop and immediately get high performance, secure WiFi access transforms the learning experience. There is no more a need to find free (and possibly insecure) WiFi hotspots, borrow someone else's identity or apply for a temporary account. The users' existing credentials are used to access WiFi, wherever they need connectivity.

For institutions, there is no longer a need to provide insecure shared usernames and passwords or to respond to requests for access. Access can be controlled easily and the workload of issuing and cancelling ad hoc identities is removed.

For Research and Education Networks (RENs), eduroam offers a unique value added service to the institutions, users and wider community. By providing eduroam capabilities, RENs can offer a highly visible, highly valued service that directly impacts institutions and users.



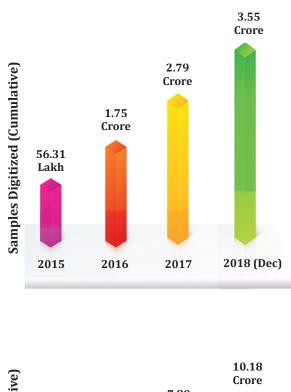
## 1.2.19 Soil Health Card

#### **Overview**

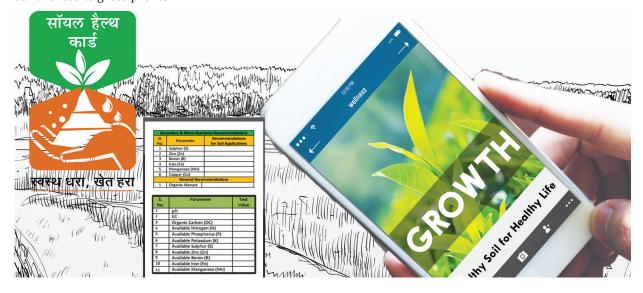
Soil Health Cards (SHC) provide farmers with the nutrient status of their land and gives recommendations on the dosage of fertilizers, bio-fertilizers, organic fertilizers as well as soil amendments to maintain soil health in the long run. Soil Health Card portal is a web and mobile based application system for generation of Soil Health Cards, which are to be distributed to farmers under Soil Health Card scheme in a uniform format in 22 languages and 5 dialects. SHC contains the status of the soil with respect to 12 parameters, namely, N,P, K (Macro-nutrients); S (Secondary- nutrient); Zn, Fe, Cu, Mn, Br (Micro - nutrients); and pH, EC, OC (Physical parameters). It has an automated engine for calculation of fertilizer recommendations based on soil test values using General Fertilizers Recommendations and Soil Test based Crop Response. Soil Health Card portal has a tracking and alert system, informative dashboards, and GIS maps for indicating soil health and monitoring progress.

#### **Transformative Impact**

Soil Health Card scheme is beneficial for farmers. The scheme generates awareness regarding the importance of soil health and application of fertilizers as per the soil test results. Soil Health Cards gives farmers a proper idea about the nutrients their soil is lacking, so they can use a balanced dosage of fertilizers and micro nutrients. Application of the recommended dose of fertilizers results in healthy plants and a significant increase in income. Reduced cost of cultivation also contributes to gross profits.







## 1.2.20 eNAM

#### **Overview**

National Agriculture Market (NAM) is a PAN India electronic trading portal, which networks the existing Agriculture Price Monitoring Committee (APMC) mandis to create a unified national market for agricultural commodities. The eNAM portal provides a single window service for all APMC related information and services. This includes commodity arrivals and prices, buy and sell trade offers and provision to respond to trade offers, amongst other services. 585 Mandis across 16 States and 2 UTs are live on e-NAM and 1.41 crore farmers have been registered on this platform.



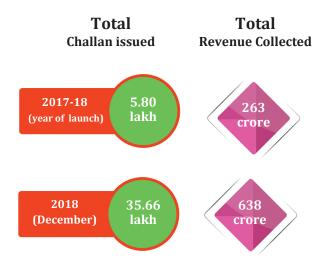
#### **Transformative Impact**

e-NAM is helping in promoting uniformity in agriculture marketing by streamlining the procedures across the integrated markets. It is removing information asymmetry between buyers and sellers and is promoting real time price discovery based on actual demand and supply.

## 1.2.21 e-Challan

#### **Overview**

e-Challan is a comprehensive digital solution for Transport Enforcement wing and Traffic Police delivered through an android based mobile application and a web portal. It aims at improving service access and transparency in the system. On the spot challan facility is available with geotagging of challan spot. Anywhere, any time challan investigation/disposal can be done using this platform.



#### **Transformative Impact**

e-Challan provides an On the go system, where availability of mobile as well as web applications make systems work in offline and online mode. it provides multi-language support, e-challan wallet, voice communication, stolen vehicle reporting and real time checking, map based report, and postal/ court integration etc. and ensuring transparency and efficiency.

It has increased All India real time vehicle details, tax details, insurance details, past offence history etc., are available for enforcement officers anytime, anywhere to catch violators. Online and offline options for challan and payments is made available anytime, anywhere.

eChallan provides a big database for decision makers to make decision based on data. and addressing Human Resource availability issue e-Challaning process is automated through CCTV GPS and other latest technology based challaning. This system serves both the Transport and Traffic Departments of multiple States/UTs.

## 1.2.22 e-Vahan and e-Sarathi

#### **Overview**

Vahan 4.0 is a centralised, one-stop solution for services, such as, vehicle registration, permit, tax payments, fees payments etc. Sarathi 4.0 is a one-

stop solution for services, like, issuance of driving license, learner license and international permit etc. Features, such as, mobile apps, API based integration and e-payments and Aadhaar linkage have also been introduced.

#### **Transformative Impact**

Centralized web enabled solutions have been rolled out in 1100+ RTOs and 19,000 Dealer Points, across 31 States/ UTs. Enabling citizen centricity, Vahan 4.0 has 100+ online services for citizens, which has decreased foot-falls in RTOs and has increased transparency. Comprehensive Dashboards, MIS and Analytics portal has brought decision making and monitoring in place. Extended services through eDistrict, CSC, eMitra centres, UMANG, DigiLocker, along with Private Fitness Centres, Driving Schools, Test Tracks, have created an Integrated Ecosystem with an extensive facility of ePayments anytime, anywhere. More than 50% of receipts have been generated through digital mode.

These services have brought significant impacts on the way transport services are delivered, such as, online appointments and online status information etc. The services have added more digital payment options; facilitated advanced searches, reporting, dashboards and analytics; enabled integration with all PUC centres across the country; and have provided an extended range of citizen centric services through mParivahan. The initiatives have integrated a secure platform for communications, such as, API, SMS and email.

YEAR	2014-15	2015-16	2016-17	2017-18	2018 (December)
	VAHAN				
Total Revenue (in Rs)	21,000 crore	24,000 crore	29,000 crore	40,000 crore	38,000 crore
Total Transactions	6.20 crore	6.79 crore	7.12 crore	8.70 crore	5.05 crore
Total Vehicle Registration	1.48 crore	1.55 crore	1.65 crore	1.83 crore	1.48 crore
SARATHI					
Total Revenue(in Rs.)	0 crore	0 crore	81.27 crore	894 crore	1376 crore
Total Driving Licenses	0 crore	0 crore	1.64 crore	1.61 crore	1.39 crore
Total Learner Licenses	0 crore	0 crore	1.03 crore	1.13 crore	0.90 crore

## 1.2.23 e-Courts

#### **Overview**

e-Courts is a Pan-India Judicial Management Information System for facilitating National Judicial Data Grid (NJDG), Supreme Court, High Courts and District Courts. e-Courts has been helping in transforming Indian Judiciary by Information and Communication Technology (ICT) enablement of courts for enhancing judicial productivity and providing citizen-centric services.

National Judiciary Data Grid (NJDG) is a part of eCourts Integrated Mission Mode Project, which works as a monitoring tool to identify, manage and reduce pendency; provides timely inputs for making policy decisions to reduce delay and arrears; and promotes transparency and access of information for all the stakeholders. NJDG provides information on cases pending, cases disposed and cases filled for both the High Court and the District Court complexes in areas of civil and criminal cases. Information on category-wise pending cases and period-wise pending cases are also available on NJDG portal.

e-Courts has been implemented in 39 High Courts and 3,067 District level courts. More than 10.8 crore cases have been registered, using this platform and 7.9 crore judgements have been made.

#### **Transformative Impact**

eCourts has enhanced judicial productivity, both qualitatively and quantitatively to make the justice delivery system cost-effective, predictable and reliable. It has helped in litigations, adjudication pattern analysis and impact analysis of any variation in governing factors relating to law, amendments, jurisdiction and recruitment.



## 1.2.24 IVFRT: Immigration, Visa and Foreigner's Registration and Tracking

#### **Overview**

Immigration, Visa and Foreigners' Registration and Tracking (IVFRT) is a biometric enrolment software, which implements an integrated and secure service delivery framework that facilitates legitimate travellers, enhancing the country's security from inimical foreign elements with its rich features and modules. It is modernising and upgrading the immigration services, and is providing a centralised system to share the information between agencies.

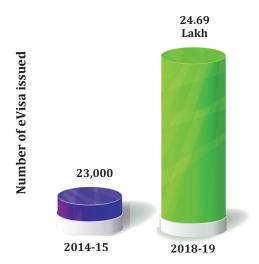
**Immigration Control System (ICS)** has been developed for Bureau of Immigration and Intelligence Bureau (IB) to provide accurate and effective inspection, and facilitate speedy immigration clearance to the in-bound and out-bound immigrants and visitors at different Immigration Check Posts (ICPs) in the country.

**e-VISA** is a fully online system to facilitate foreigners to get Indian Visa (e-VISA) without approaching the Mission and Service Provider i.e. with an ultimate objective to extend contactless, faceless and cashless service. It collects biometric data for authentication of travellers' identity with intelligent document scanners and biometrics at Missions, Immigration Check Posts (ICPs) and Foreigner Regional Registration Offices (FFROs)/ Foreigners Registration Offices (FROs).

IVFRT applications have been implemented in



169 Indian Missions abroad. e-Tourist Visa (eTV) has been introduced in 166 countries, 26 airports and at 5 Sea Ports. More than 62 lakh evisas have been issued. ICS facilitates daily clearance of International Arrival/Departure of more than 1,80,000 travellers per day. ICS is running on 91 Immigration Check Posts across India.



#### **Transformative Impact**

eVisa has enhanced dissemination of information on visa, immigration and foreigners security at Missions, ICPs and FRROs/FROs. It facilitates background checks of foreigners, assists in visa issuance at Indian Missions abroad, providesreceipt of passenger information from airlines with APIS, and collects visa application for visa outsourcing agencies.

## 1.2.25 Open Government Data (OGD)

#### **Overview**

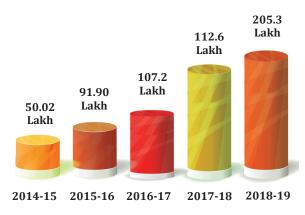
The Open Government Data (OGD) platform of India (https://data.gov.in) was set-up by National Informatics Centre (NIC) under MeitY in compliance with Open Data Policy (NDSAP) of India. The objective of the policy is to provide proactive access to the Government owned shareable data, along with its usage information in open/machine readable format, through a wide area of network across the country, in a periodically updated manner. It facilitates community participation for further development of the product with visualisations, APIs and alerts etc. It has an easy to use and user-friendly interface with dynamic/ pull down menus, search based reports, secured web access, bulletin board based on Dublin Core metadata standards and parametric, and dynamic reports in exportable format. The platform reflects how innovative use of Information Technology has led to a paradigm shift in accommodating huge data potential of the country.

144 Central and State Departments have placed 2.61 lakh resources and 4,495 catalogs on OGD platform. 10,763 Application Programming Interface (API) have been created.

#### **Transformative Impact**

It provides a single window access to datasets and applications published by different Ministries/ Departments/Organisations/States in an open format. Suggestions and requirement of data can be submitted by the citizens or communities to help prioritise data sharing by participating Ministries/Departments. The platform enables better discovery and usage of the Government datasets through visualisations and development of apps, mash-ups etc. Visualization platform has the facility to create maps different chart options, like, radar, bar, line, area, pie, column etc. Application Programming Interfaces (APIs) to Query Datasets, Direct and dynamic query to access data items of selected datasets have also been provided through APIs. A separate community portal (http://community.data.gov. in) has been launched to provide a common platform for knowledge sharing through discussion and to contribute through blogs, infographics, visualizations etc., using data available on the portal. Users can create visualizations of their own data using the visualisation engine service of OGD platform.

#### **Total Number of Downloads**



## 1.2.26 MyGov

#### Overview

MyGov platform is a unique path-breaking initiative, which was launched on July 26, 2014. It is a first-of-its-kind participatory governance initiative involving the common citizen at large. The idea of MyGov brings the Government closer to the common man by use of an online platform to create an interface for healthy exchange of ideas and views involving the common citizen and experts with a ultimate goal to contribute towards the social and economic transformation of India. In its short span of existence, MyGov platform has been more than successful in keeping the citizens engaged on important policy issues and governance, be it Clean Ganga, Girl Child Education, Skill Development and Healthy India to name a few. Without a doubt, this platform has made inroads in diminishing the gap, which has traditionally existed between the citizens and the Government.

MyGov has also transformed the way government delivers its objectives. MyGov through a dedicated performance dashboard (https://transformingindia.mygov.in/performance-dashboard/) highlights the achievements of key programmes run by the incumbent Government.

MyGov has created a unique platform to determine the best government schemes that a citizen of India is eligible for. Transform India portal (www.tranformingindia.mygov.in) helps the Government disseminate information about various schemes at one centralised platform.

MyGov has promoted participative governance not only on digital platforms but through various onground engagements. Fridays at MyGov (https://innovate.mygov.in/fridays-at-mygov) is a step further in participative governance, aimed at inviting change makers, social media influencers, subject matter experts to meet with representatives of the Government and the Union Ministers. The Meet-up is an informal dialogue aimed at facilitating a free and constructive exchange of ideas between the decision-makers, stakeholders and experts across various sectors. MyGov has hosted around 15 such engagements with various Ministers in the last one year. The platform has also promoted engagement of corporate volunteers through Self4Society (https://self4society.mygov.in/). This is the Government's largest volunteering platform for digital workforce to contribute volunteering services towards building a New India.

MyGov has enabled the Nation's youth to contribute towards Swachh Bharat through one of the largest Internship programmes.

In the last one year, myGov has supported all the States to promote participative Governance and has helped in opening 3 State instances, i.e, for Manipur, Tripura and Arunachal Pradesh.

The following data provides an insight on the Year wise user engagement on MyGov.

	2014-15	2015-16	2016-17	2017-18	2018-19	2019 (As on 31st Jan)
Registered Members	7,14,696	10,93,796	21,16,641	1,12,69,62	21,57,870	4,15,400
Tasks	128	263	198	122	96	8
Polls	0	247	186	92	9	3
Groups	25	19	12	15	1	0
Number of discussions	105	376	162	128	38	3
Number Of submissions	4,96,901	23,81,603	9,44,100	4,46,694	1,88,559	30,646

The platform has other portals/services of citizen engagement, wherein thousands of citizens engage every week. They are:

- Quiz.mygov.in
- Innovate.mygov.in
- Pledge.mygov.in
- Survey/polls
- Social Media handles and pages on Facebook/ twitter/Instagram/YouTube.

A few key citizen engagements in the last one year are as follows:

Name of Initiative	Number of People Engaged	
Swachh Bharat Summer Initiative	3 Lakh Registration	
Youth Parliament 2019	7.5 Thousand Registration	
Self4Society	52 Thousand Registration	
Gandhi Quiz	1.2 Lakh Participation	

#### **Transformative Impact**

MyGov enables Ministries, Departments and autonomous bodies of the Government to seek creative inputs, such as, logos, mascots, videos and songs for the upcoming projects or policies. It facilitates disseminating information by publishing blogs, infographics, e-books, editorials and testimonials and encourages innovation and foster creative collaborations among government, academia and community.

The platform provides a dashboard to monitor performance of the incumbent Government in the delivery of governance in key National schemes/ programmes.It provides citizens to identify the schemes/programmes they are eligible for and gives guidelines for applying to those schemes/ programmes. MyGov provides an avenue of offline engagement of citizens in achieving the national goals of various programmes/schemes and bridges and facilitates dialogue, exchange of ideas between Ministries and citizens of India.

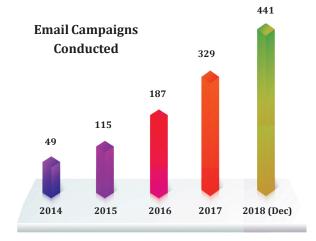
## 1.2.27 eSampark

#### **Overview**

eSampark is an Early Harvest programme under Digital India mandate of the Government. The objective of eSampark is to become the Governments IT platform for sending public service messages in the form of email/SMS across the Government bodies and the citizens establishing proactive communication by digitisation of campaigns. The initiative enables Government bodies to send out customised targetted campaigns, also facilitating with real time statistics of email campaign that enables the bodies to check the success rate of the campaign. Thus, improving efficiency of Governance and e-Governance efforts.

eSampark is utilised by over 30 Ministries/ Departments to send out informational messages . The portal has sent over 1,121 email campaigns to over 602.54 crore email addresses.

	2014	2018
Validated Email Addresses	Over 32 lakh	Over 4.82 crore
Validated Mobile Number	Over 82 lakh	Over 101 crore



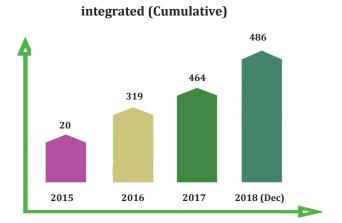
#### **Transformative Impact**

eSampark has improved efficiency of Governance and e-Governance efforts. The initiative has also helped to maintain a centralised database of all the Government and the citizens along with their profiles including skill-sets (profession) and gender etc.

## 1.2.28 eSangam: Service Delivery Gateway (NSDG)

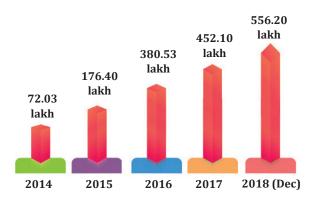
#### **Overview**

It is a middleware infrastructure implemented by C-DAC, Mumbai, acting as a standard based routing and message switch, which provides seamless interoperability and exchange of data across heterogeneous applications of geographically dispersed departments. The National e-Governance Service Delivery Gateway (NSDG), a MMP under NeGP, can simplify this task by acting as a standards-based messaging switch and providing seamless interoperability and exchange of data. It offers a shared Services Hub for Departmental Application, such as, Payment Gateway Services, Mobile Gateway Services, and Authentication services (via UID). eSangam National Gateway is hosted at NIC Data Centre (Primary DC) in Delhi with its Disaster Recovery Centre (DR) at NIC, Hyderabad.



Number of services

**Transaction Count (Cumulative)** 



#### **Transformative Impact**

eSampark has provided core infrastructure for achieving standards-based interoperability between various e-Government applications implemented at various levels and at geographically dispersed locations. It has also enabled integration across the Central, the State or local Governments, thereby, enabling Integrated Service Delivery along with provision to provide joined up services.



## 1.2.29 e-District

#### **Overview**

e-District is a Mission Mode Project (MMP) that aims at electronic delivery of identified high volume citizen-centric services at the District or sub-District level. Ministry of Electronics & Information Technology (MeitY) is the nodal Ministry for e-District MMP. This MMP is being implemented by the State Governments/UT Administrations through their designated agencies. The MMP envisages leveraging and utilising the four pillars of e-infrastructure, namely, State Data Centre (SDC), State Wide Area Network(SWAN), State Service Delivery Gateway (SSDG) and Common Services Centre (CSC). The objectives of the e-District project are to ensure an end-to-end workflow; to ensure delivery of e-Services by undertaking Business Process Re-engineering (BPR) of services; and providing easy, anywhere and anytime access to Government services.

2,651 e-District services have been launched in 687 Districts of the country.

#### **Transformative Impact**

It has assured, reliable and efficient delivery of high-volume, citizen-entric services electronically and faster at the District level, which has resulted in saving time and money of the citizens. It has modernised District Administration with transparency and Good Governance, resulting in the empowerment of citizens.

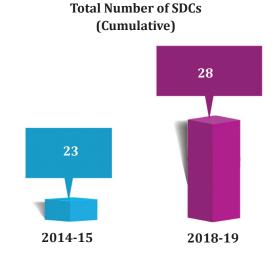
## 1.2.30 State Data Centre

#### **Overview**

State Data Centre (SDC) is one of the important elements of the core infrastructure for supporting e-Governance initiatives of National e-Governance Plan (NeGP). Under NeGP, it is proposed to create State Data Centres for the States/UTs to consolidate services, applications and infrastructure for provide efficient electronic delivery of G2G, G2C and G2B services. These services can be rendered by the States through a common delivery platform, seamlessly supported by core Connectivity Infrastructure, such as, State Wide Area Network (SWAN) and Common Service Centre (CSC) connectivity extended up to Villages level. State Data Centre would provide various functionalities and some of them are Central Repository of the State, Secure Data Storage, Online Delivery of Services, Citizen Information/Services portal, State Intranet Portal, Disaster Recovery, Remote Management and Service Integration etc.

#### **Transformative Impact**

SDCs have enabled various State Departments to host their services or applications on a common infrastructure and has ensured better operation and management control. It has also minimised the overall cost of Data Management, IT Resource Management, Deployment and other costs.





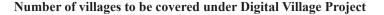
## 1.2.31 Digital Village

#### Overview

The Digital Village project has been approved by Ministry of Electronics and Information Technology (MeitY) on October 31, 2018 to be implemented by CSC E-Governance Service within three years in 700 Gram Panchayats (GP)/ Villages with at least 1 GP/District/State (and UT) of India. This project will demonstrate the capability of Optical Fibre Cable (OFC), which is being provisioned by BharatNet in rural India to reach out basic services of Health (Tele-Health and Tele-Veterinary consultation), Education, G2C and B2C, Financial, Skill Development services and Solar panel powered street lights.

Through this project, it is envisaged that in three years time the village will become digitally aware, such as, to fully benefit from education, health and skill services that are offered through the ICT enabled platform provisioned under the project.

In the budget of 2019-20, it has been announced that the scheme will be extended to cover 1,00,000 villages over the next five years.





# 2. DIGITAL EMPOWERMENT THROUGH DIGITAL INCLUSION

Under Digital India programme, initiatives are provided at a low-cost with enhanced easy access to all, from payments, education to medical health and thus, bringing about digital inclusion. Aadhaar and DigiLocker systems usage of digital services are rising from the hinterland and the semi-urban and semi-rural areas. Digital Payments, combined with Aadhaar and Jeevan Pramaan, has eliminated the need for the pensioners to visit Banks and Government offices. Citizens are leveraging Common Service Centres for getting their pensions and interacting with the Government, utilising Government services and thereby, enhancing the ease of living. The metamorphosis in rural India is based on Digital Literacy, leading to Digital Empowerment and ensuring Digital Inclusion of all.

## 2.1 Digital Skilling

Along with digital access and digital inclusion, digital skill is crucial for the success of Digital India. The digital divide is a manifestation of exclusion, poverty and inequality. Digital skills provide opportunities to the underserved and the marginalised sections for empowering them. Concerted efforts have been made by the Government towards making people digitally literate in the rural households and through running skilling initiatives at higher education level.

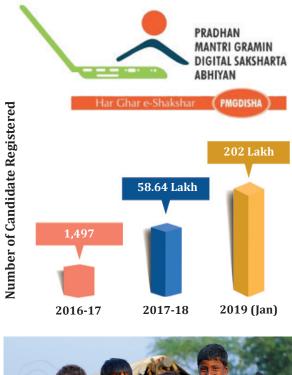
## 2.1.1 Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

#### **Overview**

The objective of the programme is to make 6 crore persons in rural areas, across States/UTs, digitally literate, reaching to around 40% of rural households by covering one member from every eligible household.

#### **Transformative Impact**

The scheme empowers the citizens in the rural areas by training them to operate a computer or a digital access device (such as tablets, smart phones etc.), send and receive emails, browse internet, access Government services, search for information, undertake digital payment etc., and hence, enable them to use Information Technology and its related applications in the process of nation building. The scheme aims to bridge the digital divide, specifically targetting the rural population, including the marginalised sections of the society, such, as Schedule Castes(SC)/Schedule Tribes(ST), minorities, BPL, women and differently-abled persons.





## 2.1.2 Electronics and ICT Academy

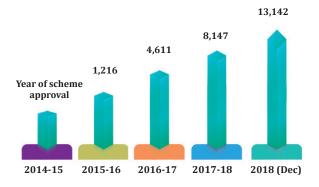
#### **Overview**

In November 2014, MeitY approved a scheme entitled "Scheme of Financial Assistance for setting up of Electronics and ICT Academies", for faculty/mentor development or upgradation to improve the employability of the students in various streams. As per the scheme, 7 Electronics and ICT academies in two categories have been set up and are operational at premier and leading academic institutions viz., (i) NIT, Warangal (ii) IIITDM, Jabalpur (iii) IIT, Guwahati (iv) NIT, Patna (v) IIT, Kanpur (vi) IIT, Roorkee, and (vii) MNIT, Jaipur. Academies at IIT, Roorkee and MNIT, Jaipur have been set up under Category 'B' with an annual target to train 1,600 faculty per year and other 5 academies have been set up under Category 'A' with an annual target to train 4,000 faculty per year.

#### **Transformative Impact**

Under the scheme, faculty training in globally emerging areas of Electronics & ICT domains would certainly lead to enhancement of the employability aspects of the students. All passed students would be industry ready and readily employable. The training on usage of ICT tools in the teaching and learning processes for faculty of other streams, viz., Arts, Commerce and Science, would have a transformative impact in terms of their teaching styles and capabilities leading to an enhanced comprehension by the students of these streams.

#### Trained Beneficiaries (faculty/ students / others)





## 2.1.3 Visvesvaraya PhD Scheme for Electronics & IT

#### **Overview**

MeitY has initiated "Visvesvaraya PhD Scheme for Electronics and IT" with the objective to enhance the number of PhDs in Electronics System Design & Manufacturing (ESDM) and IT/IT Enabled Services (IT/ITES) sectors in the country to give a thrust to Research & Development and to create an innovative ecosystem to enhance India's competitiveness in these knowledge intensive sectors.

The scheme aims to support 1,500 PhD candidates, including both full-time (500) and part-time (1,000) candidates in each of the ESDM and IT/ ITES sectors.

Under the scheme, 956 full-time PhD scholars and 200 part-time PhD scholars are pursuing PhDs at 91 academic institutions across the country in these technology areas.

The scheme also supports 155 awardees of "Young Faculty Research Fellowship" to encourage and recognise young faculties involved in research and technology development in ESDM and IT/ITES sectors with the objective to retain and attract bright young faculty members in these sectors.

#### **Transformative Impact**

The scheme will enable India to compete globally in the coming decades. Specialised manpower will be available in the field of ESDM and IT/ ITES to take up national goals, challenges and societal problems.

YEAR	Full-Time PhD Enrolment	Part-Time PhD Enrolment	Number of awardees of " Young Faculty Research Fellowship"
2014-15	130	16	11
2015-16	732	139	64
2016-17	892	178	125
2017-18	943	188	128
2018 (December)	956	200	155



## 2.1.4 Schemes on Skill Development in ESDM Sector

#### **Overview**

The two schemes for Skill Development in ESDM sector covers all the States/UTs of the country, in order, to facilitate creation of an ecosystem for the development of ESDM sector in the entire country and facilitating skill development for 4.18 lakh persons in ESDM. The scheme utilises the existing human resource, who are undergoing studies in schools (IX standard onwards)/ITIs/Polytechnics/ Undegraduate Colleges (engineering and non-engineering) and school drop outs or unemployed youth by providing them with additional skills that are recognised by the industry for employment in the ESDM sector.

The scheme provides for 75% of training fee as assistance for training courses identified by Electronics Sector Skills Council, Telecom Sector Skills Council and NIELIT. It also provides for 100% fee reimbursement to 40% of the seats, which would be reserved for candidates belonging to SC/ST/economically weaker sections. Further, registration-cum-certification fee per successfully certified candidate would also be reimbursed to assessing/certifying agencies.

YEAR	Students Enrolled & Trained	Students Certified
2014-15	964	677
2015-16	44,011	30,802
2016-17	1,70,036	12,156
2017-18	68,618	42,895
2018 (Scheme on Hold)	0	0
Total	2,83,629	1,95,440

\* The cumulative Enrolments had exceeded the targets till 2017-18. Hence, enrolments in the Schemes were put on-hold and there is no enrolment in 2018-19 till 31st Dec 2018.

#### **Transformative Impact**

The Impact Assessment of the two schemes for Skill Development in ESDM Sector was conducted by C-DAC. The Impact on Students include improved skills level, increased employability, increased employment opportunity, increased self-confidence, betterself-esteem, financial independence, support of family and enhanced social and financial status of students' families. Further, the scheme provides trained students, who are ready for employment and enables students placement at Industry and creation of assets for continuous conduct of training.

## 2.1.5 IT for Masses

#### **Overview**

IT for Masses programme aims at gender empowerment and Development of Scheduled Castes and Scheduled Tribes by funding projects in area of creating IT infrastructure, providing IT training and promoting entrepreneurship amongst women, Schedule Castes (SCs) and Schedule Tribes (STs).

#### **Transformative Impact**

The initiative is empowering Schedule Castes and Schedule Tribes, and women through capacity building in ICT and IT training for enhancing their employability.



## 2.1.6 Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

#### **Overview**

An umbrella programme, entitled "Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)", was initiated in December 2014 at 60 academic/Research & Development institutions spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. This has been initiated with an aim to train 50,000 persons as specialised manpower over a period of 5 years in the area of VLSI design and inculcate the culture of System-on-Chip/System Level Design at Bachelors, Masters and Research levels.

The state-of-the-art VLSI Design lab equipped with EDA Tools has been set-up at all 60 Institutes. 29,000 Persons have been trained at B. Tech, M. Tech and PhD. levels in the area of VLSI design/ System design in the first three years of the programme. 1000 Journal/conference papers have been published already and 1 Patent has been filed. Development of working prototypes of 15 systems are in progress.

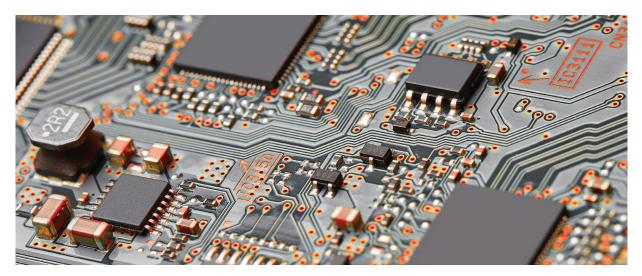
## 2.1.7

## Indian Nanoelectronics Users Programme (INUP) for generating skilled manpower in Nanoelectronics area

#### **Overview**

"Indian Nanoelectronics Users Programme (INUP)", a joint project of IISc, Bangalore and IIT, Bombay, has been initiated to generate skilled manpower in the area of nanoeletronics by organising hands on workshops and to train them by undertaking the R&D projects on different aspects of nanelectronics. The approach adopted under this project is to make available large research facilities created at nanoelectronics centres at IISc, Bangalore and IIT Bombay to the researchers across the country.

A total number of 5,200 persons have been trained. 400 journal/conference papers have been published and 30 patents have been filed, and 400 thesis have been supported. A total of 400 short term projects and 250 medium term projects in nanotechnology have been supported and 30 familiarisation workshops in Nanoelectronics have been conducted by IISc, Bangalore and IIT, Bombay.



#### **Transformative Impact**

The programme will result in generation of more than 50,000 industry ready manpower specialised in VLSI/ System design area. Thus, further increasing the global market share of India in VLSI design area and quality research base in the country.

## 2.1.8 National Digital Literacy Mission(NDLM)/ Digital Saksharta Abhiyan(DISHA)

#### **Overview**

Government had implemented the National Digital Literacy Mission or the Digital Saksharta

Abhiyan (DISHA) or National Digital Literacy Mission (NDLM) to impart IT training to 52.5 lakh persons, including Anganwadi and ASHA workers and authorised ration dealers in all the States/UTs of the country, so the non-IT literate citizens are trained to become IT literate to enable them to actively and effectively participate in the democratic and developmental process and enhance their livelihood.

In line with the objective of the National Policy on IT, 2012 to make one person e-literate in every household in the country, a scheme for IT Mass Literacy (renamed as National Digital Literacy Mission) was launched with an objective to provide IT training, relevant to the need of the trainee to enable the beneficiaries to use IT and related applications for their livelihood earning and employability. The training target of 52.5 lakh persons under this scheme has been achieved in December 2016.

#### **Transformative Impact**

It has made the citizens IT literate, specially the rural and the marginalized population to operate digital devices, like, mobile phones, tablets etc., send and receive emails and search Internet for information etc. The citizens have also been trained to effectively access various e-Governance services that are offered to the citizen by the Government and other agencies.



## 2.1.9 Information Security Education and Awareness (ISEA) Project

#### **Overview**

ISEA project aims at capacity building in the area of Information Security to address human resources requirement in the country; training of Government personnel; and creation of mass information security awareness. Information Security Education and Awareness (ISEA) project was completed in 2014 and Phase II of the project was approved in April 2014 with an outlay of Rs 96.08 crore for a period of 5 years.

Under the ISEA-Phase II project, 1.14 lakh persons are proposed to be trained under formal and nonformal courses and faculty training is provided through NIELIT and CDAC. The project provides training to more than 13,000 Government officials and creates mass information security awareness targetted towards Academic users, Government users and General users (approximately 3 crore Internet users in five years through direct and indirect mode).

#### Number of Candidates Trained (Cumulative)



Number of Government Officials trained (Cumulative)



Number of Awareness Workshops (Cumulative)



#### **Transformative Impact**

It has generated core research manpower to undertake basic/fundamental research, applied research, research in the area of product/solution design and development and in selected thematic areas of national strategic importance to build indigenous solutions.

## 2.1.10 National Institute of Electronics and Information Technology (NIELIT)

#### **Overview**

NIELIT is an autonomous scientific society. It is actively engaged in Capacity Building and Skill Development in the areas of Information Technology (IT); Electronics; Communication Technologies; e-Governance and related verticals.

It offers courses in the Formal Sector in association with State Universities/Technical Board, such as, ME/M.Tech, BE/B.Tech, MCA, BCA programmes, PG Diploma courses. NIELIT, Aurangabad centre is also facilitating conducting PhD programmes in the area of Electronics.

Courses are also offered at various levels, such as, 'O', 'A', 'B', 'C' Level; Short Term Courses in niche areas; and IT Literacy programmes for the proliferation of Digital Literacy in the country; besides specialised programmes in e-Governance targetted towards empowering the employees of the State Governments. In addition, NIELIT has also created expertise for the roll out of customised skill development programmes, as per specific needs of public and private sector firms.

NIELIT is one of the National Examination Bodies which accredits institutes/organisations for the conduct of Electronics & IT courses in the Non-Formal Sector. NIELIT is well represented in the country and has PAN India presence through a network of 43 own centres and a network of about 800+ Accredited Training Partners and about 8900+ Digital Literacy Facilitation Centres.

NIELIT is amongst the front-runners that have aligned 75 Skill Oriented courses with National Skills Qualifications Framework (NSQF) at different levels ranging from Level 2 to 8. (NSQF is a competency-based quality assurance framework that organises qualifications in terms of aptitude, knowledge, skills and learning outcomes, whether they are obtained through formal, non-formal or informal learning.)

NIELIT qualifications are widely accepted at both National and International level. Owing to the quality, some of the NIELIT Digital Literacy courses are linked with both promotion and recruitment by a number of State Governments viz., Arunachal Pradesh, Bihar, Chandigarh, Daman and Diu, Gujarat, Rajasthan, Sikkim, Uttar Pradesh and a few Government Departments viz; DGE&T (for trainees of ITIs/ITCs under Craftsmen Training Scheme (CTS), UPPCL, O/o the CGA (JAO exam) for recruitment/in-service promotion/increment purposes.

Since inception, NIELIT has trained about 55+ lakh candidates. Examinations of Digital Literacy programmes are conducted in the online mode and digitally signed e-certificates are issued to successful candidates. About 15.48 lakh digitally signed e-certificates have been kept in digital locker of the students. NIELIT is among the foremost educational institute in the country to institutionalise the mechanism, i.e., linking of e-certificates with Digital Locker.

Taking into account the high rate of obsolescence in IT and Electronics and emergence of disruptive technologies, NIELIT has been making efforts to update its repertoire of courses in upcoming technologies such as Artificial Intelligence, IoT, Big Data, Cloud Computing, Robotics, 3D Printing etc. In this regard, prominent NIELIT centres, such as, Aurangabad, Calicut, Kolkata etc, are in the process of being identified as Technology Resource Centres to offer Blended Learning programmes under the FutureSkills Prime initiative, which is being jointly conceived by MeitY and NASSCOM. As upskilling/re-skilling eco-system in emerging and futuristic technologies would facilitate continuous enhancement of skills and knowledge of IT professionals in line with their aspirations and aptitude. Institutionalisation of Blended Learning mechanism through Technology Resource Centres and affiliated training partners using hub-n-spoke model would widen reach and also ensure deeper penetration in the country. NIELIT is expected to render a pivotal role in the re-skilling/up-skilling ecosystem as well.



## **2.2 Digital Payments**

## 2.2.1 **Promotion of Digital Payments -**BHIM, UPI, Bharat QR, Aadhaar **Payments**

#### **Overview**

Recognising the importance of a less cash economy, creating a digital payment ecosystem has been identified as one of the thrust areas in the Budget announcements of the year 2017-18. Setting up of a dedicated Mission, now named as DigiDhan Mission, was announced with a target of 2,500 crore digital payment transactions during the Financial Year 2017-18 through Unified Payment Interface (UPI), Unstructured Supplementary Service Data (USSD), Aadhaar Pay, Immediate Payment Service (IMPS) and Debit cards.



Some of the important initiatives taken by MeitY for promotion of Digital payments are as under:

• A new educational channel "DigiShala" for creating awareness regarding various forms of electronic payments to the citizens was launched on December 9, 2016. DigiShala is available on DD Free Dish and Dish TV's channel number 2032. A dedicated website, www.cashlessindia.gov.in, was launched on December 9, 2016, to serve as a knowledge repository providing information on different

Modes Of Digital Payments	Total Number of Transactions (In crore)
AePS	119.52
IMPS	122.48
USSD	0.09
UPI + BHIM	320.70
Debit Card	327.85
RTGS	9.98
NEFT	166.97
NACH	209.23
NETC	17.90
PPI	330.10
Credit Card	128.62
Closed Loop Wallet	61.37
Internet Banking	114.32
Mobile Banking	82.21
Others	171.08
Grand Total	2,182.65

Source of Data: RBI Payments Indicator Report, NPCI website, Banks & Closed Loop wallets



BHIM UPI Value (in billion)



types of digital payment methods and schemes to create awareness among citizens.

- BHIM App was launched on December 30, 2016. Subsequent to its launch, following incentive schemes are being executed to encourage usage of this App :-
  - BHIM referral bonus scheme for individual.
  - Incentive on transaction over BHIM UPI.
  - BHIM Aadhaar Merchant Incentive Scheme.
- BHIM-UPI has grown multi-folds in a span of two years. UPI consumers made over 67 crore transactions with a value of over Rs. 1 lakh crore in the month of January 2019 alone. There are 134 banks offering UPI services to their customers.
- BHIM downloads have reached 39.8 million (Android) 1.93 million (iOS), with transactions worth approximately Rs 93,212.90 crore (by value) and 23.91 crore (by volume), as on December 31, 2018.

#### **Transformative Impact**

Digital Payment services have enabled convenience and ease of transaction, and have made transactions involving cash withdrawal much more secure. Driving the development and modernisation of the payment system, it has promoted transparency and accountability; reduced transaction costs ;and have decrease the size of the grey or informal economy. The services have helped business people grow their customer base and resource pool, far beyond the limitations of their immediate geographic area.

Digital Payments promotes green environment as no tree will be cut for printing paper money. It has reduced overall corruption, boosting the rural economy and have facilitated better development of the rural masses.

A cash less economy reduces pollution too. The need for producing paper, printing money and distributing it could also be avoided, lowering the carbon footprint of the world. It reduces the risk of transferring diseases. The citizens would be less likely to become ill due to contamination from bank notes and coins, as cash has been identified as disease carriers and a medium of diseases transmission.

## 2.2.2 Aadhaar Enabled Payments

#### Aadhaar Payment Bridge (APB)

With this, payment can be made to a person's bank account via his/her Aadhaar number, provided it is linked to his/her Aadhaar number. Over, 405.43 crore successful transactions have been done to remit over Rs 1, 57,206 crore(October 31, 2018).



## Aadhaar Enabled Payment System (AEPS)

A person can do basic banking transactions from his/her bank account at Micro-ATMs using biometric authentication. Over 279.5 crore successful transactions have been done across nearly 7.5 lakh Micro ATMs.

#### Aadhaar Pay

The merchant version of AEPS works on a low cost android phone with a single finger biometric devices. It enables a merchant to take cashless payment from customers. Over 86 banks are already live on Aadhaar Pay system and have done over 53.48 lakh successful transactions.

#### Pay to Aadhaar

This facility enables the citizens to make a payment to Aadhaar linked bank accounts of other residents using Aadhaar. Launched early in 2017, it has been deployed by over 97 banks and enables over 61.65 crore Aadhaar linked bank accounts to start receiving money using Aadhaar as the financial address. Over 32.27 lakh successful transactions have been made, since its launch.

MeitY has been actively engaged in promotion of Bharat Bill Payment System (BBPS) and in pursuing all the Utility Billers (Power/Gas/ Water/Telecom/DTH) throughout the country for onboarding on BBPS. Bharat Bill Payment System is a unified platform, which aggregates multiple billers onto a single platform. BBPS provides an interoperable and easily accessible bill payment service to consumers. Onboarding of all utilities on the BBPS platform would be a major enabler of Digital Payments by providing an easy interface to citizens for digital payment of bills. As a result of efforts made by MeitY and National Payment Council of India (NPCI), the number of BBPS onboarded billers hassignificantly increased from 33 in April 2017 to 120 on January 2019.

A special campaign has been undertaken in 100 smart cities, wherein, 9 Ministries/Departments/ Agencies accelerated the adoption of digital payments from July 1, 2018 to October 31, 2018. A Smart City Dashboard (http://digipay.gov.in/ dashboard/default.aspx) has been created for reporting of digital payments in smart cities. The Ministries/ Departments /Agencies that are being monitored and are required to upload the progress made in promoting digital payments on the Dashboards include Ministry of Housing and Urban Affairs, Ministry of Civil Aviation, Ministry of Petroleum & Natural Gas, Department of Posts, Ministry of Railways, Ministry of Power, Ministry of Road Transport Highways, Department of Telecom and Department of Financial Services.

Further, a page on "Digital State" has been added on the dashboard, for monthly reporting of Digital Payment Data on various parameters by States/ UTs.



## 2.2.3 Incentive Schemes for the promotion of Digital Payment

To promote digital payments, Meity has launched several initiatives, including monetary incentive schemes. To promote BHIM app, the Government has launched Incentive schemes to popularise digital transactions.

#### **BHIM Aadhaar**

The Government has also launched BHIM Aadhaar, a merchant version of Aadhaar Enabled Payment System. This has been specifically beneficial for those, who do not have debit cards, mobile wallets and mobile phones. The app is linked to a biometric scanner instrument to validate the customer's biometrics. During the payment process, the customer will be required to input their Aadhaar number, followed by selecting their respective bank. The transaction is then validated through the scan of the consumer's biometrics, which acts as their password or pin. The amount gets automatically deducted from their Aadhaar-linked bank account and is credited to the merchant's Aadhaar-linked bank account.

#### • BHIM Aadhaar incentive scheme:

- BHIM Aadhaar transactions are given an incentive @ 0.5% of the transaction value for the transactions greater than or equal to Rs 25 and less or equal to Rs 10,000 with a minimum incentive of Rs 2 per transaction and a maximum incentive of Rs 50 per transaction. Maximum incentive is restricted to Rs 2,000/- per merchant per month. No incentive is to be offered to bank.
- Entire incentive of 0.5% of the transaction value has to be passed on to the merchant by the acquiring bank and no part of the incentive can be retained by the acquiring bank to defray any of its banking/operating costs.
- MDR (Merchant Discount Rate) Reimbursement Scheme:
  - In order to promote digital transactions, MeitY has come out with MDR Reimbursement scheme for a period of two years from January 1, 2018. As per the scheme, the Government will bear the Merchant Discount Rate (MDR) charges on transactions up to Rs 2,000 per transaction made through Debit Cards, BHIM United Payments Interface (UPI) or Aadhaar Enabled Payment Systems.



## **3. DIGITAL ENTREPRENEURSHIP AND INDUSTRY**

The strong foundation of Digital India Programme has generated new pathways for a Digital Economy and has enabled initiatives across the globe to foster acceleration of digital entrepreneurial activity related with creation and development of 'digital startups'. The Digital Entrepreneurship ecosystem created under Digital India for Hardware and Software Industry promotion, startups, Incubation etc., has the potential to invigorate the market, create new jobs, unleash the growth potential, and renew hope brought on by the burgeoning prosperity of e-businesses shining globally and high-flying startups. Digital India led developments and advances in infrastructure through various promotional schemes and incentives supported by the Government have created several opportunities for all.

## 3.1 Promotion of Electronics Manufacturing

The demand of Electronics System Design and Manufacturing (ESDM) is estimated to grow exponentially to USD 400 billion by 2023-24. The Government attaches high priority to Electronics and IT hardware manufacturing. It has the potential to generate domestic wealth and employment, apart from enabling cyber secure ecosystem. The electronic manufacturing sector requires continuous push with the overall objective of promoting Make in India, not only to meet the domestic demands but to promote India as a hub for electronics manufacturing too. Several policy initiatives under Digital India and Make in India programmes are designed to facilitate investment, foster innovation, protect intellectual property, and build best-in-class manufacturing infrastructure towards creating conducive environment for attracting investment in the electronics hardware manufacturing sector. The Government will ensure a level playing field for domestic manufacturers to enable them to compete with imports in the sector by rationalization of tariff structure, simplification of procedures, providing incentives and upgrading infrastructure. As a result of various measures taken over the last few years, production of electronics hardware has shown a significant increase. Indian electronics hardware production has increased from Rs 1,90,366 crore in 2014-15 to Rs 3,87,525 crore in 2017-18, registering a Compound Annual Growth Rate (CAGR) of 26.7%, against a growth rate of 5.5% in 2014-15. Keeping in view the increasing demand, the continuous push to the electronic manufacturing sector is required as demand of electronics is also met from imports.





## Production, Export and Import data for the Electronics Sector

Projected Demand of Electronics (Source : IESA- Report) USD 171 - 228 Billion by 2020 USD 400 Billion by 2025



#### Growth in Production of key segments of Electronics

#### Note:

Value Addition in electronics manufacturing in India is about 15% at present Value Addition in electronics manufacturing in China is about 40-42% at present

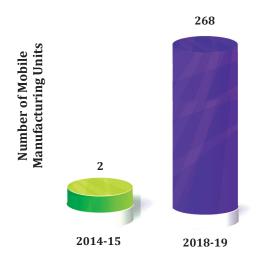
## 3.1.1 Phased Manufacturing Programme - Mobile Manufacturing

#### **Overview**

To promote depth in manufacturing of domestically manufactured Cellular mobile handsets, a phased manufacturing roadmap has been prepared keeping in view, the state of play of the design/ manufacturing ecosystem in the country, wherein through appropriate fiscal and financial incentives, indigenous manufacturing of cellular mobile handsets shall be promoted over a period of time.

There has been almost 29% rise on the production of mobile phones to reach 22.5 crore units, vis-avis, 17.5 crore units last year. It is estimated that about 6.7 lakh persons are employed (directly and indirectly) by the units manufacturing mobile phones and parts/components thereof jump of 29% in terms of units made in manufacturing of mobile phones has reached 22.5 crore units in 2017-18 from 17.5 crore in 2016-17.

About 268 unique units are manufacturing cellular mobile phones and parts/components thereof in the country. The scheme has employed about 6.7 lakh persons (directly and indirectly) by the units manufacturing mobile phones and parts/ components thereof.



#### **Transformative Impact**

Progressively increasing the domestic value addition for establishment of a robust cellular mobile handsets manufacturing eco-system in India, the PMP (Phased Manufacturing Programme) has enabled the Cellular mobile handset and related sub-assembly/component industry to plan their investments in the sector.



## 3.1.2 M-SIPS (Modified Special Incentive Package Scheme) Overview

To offset disability and attract investments in Electronic manufacturing, Modified Special Incentive Package Scheme (M-SIPS) provides 20-25% subsidy for investments in capital expenditure for setting up of new electronic manufacturing facility or expansion of the existing electronic manufacturing facility. M-SIPS incentives are available in any industrial area notified by Centre/State/local authorities across the country. The incentives are available for 44 categories of electronic products and product components. The scheme was open to receiving applications till December 31, 2018. The incentives are available for a period of 5 years from the date of approval of the application.

Under MSIPS, 421 applications are under active consideration. Out of these 421 applications, 193 applications with proposed investment of approximately Rs 41,611 crore have been approved; 19 applications with proposed investments of Rs 12,841 crore have been recommended by the Appraisal Committee for approval; 209 applications with proposed investment of Rs 58,019 crore are under appraisal. Under the scheme, Rs 422.46



crore of incentives has been disbursed to 46 applicants. Out of these, Rs 200.75 crore has been disbursed in the financial year 2018. Under MSIPS, 128 units have commenced production. These 128 units have generated total employment (direct and indirect) of 65,109 and paid taxes amounting to Rs. 8, 2162 crore to the Government.

The scheme has attracted investments in ESDM. M-SIPS has been able to create a positive impact on investment in electronics sector. Besides expediting investments into the Electronics System Design and Manufacturing (ESDM) sector in India, the amendments in M-SIPS are expected to enhance employment opportunities and reduce dependence on imports.

## 3.1.3 Electronics Development Fund (EDF)

#### **Overview**

Creating a vibrant ecosystem of innovation, Research and Development (R&D) with active industry involvement is essential for a thriving electronics industry. It is with this objective that an Electronics Development Fund (EDF) has been set-up as a "Fund of Funds" to participate in professionally managed "Daughter Funds", which, in turn, will provide risk capital to companies developing new technologies in the area of Electronics, Nano-electronics and Information Technology (IT).

EDF has invested Rs 53.52 crore in six Daughter Funds, which, in turn, have made investments of Rs 177.37 crore in 47 ventures/startups. Total employment in supported startups was around 4,200.



#### **Transformative Impact**

EDF has significantly helped to attract venture funds, angel funds and seed funds towards R&D and innovation in the specified areas. It has helped in creating a battery of Daughter funds and Fund Managers, who is seeking good startups and selecting them based on professional considerations. It has also helped to develop entrepreneurship and has promoted value addition in the ESDM sector.

## 3.1.4 Electronics Manufacturing Clusters (EMC)

#### **Overview**

To offset the disability faced by electronics manufacturers in need of ready land availability with reliable infrastructure for setting up of their manufacturing facilities in the country, the Government offers a package of incentives into the Electronics Systems Design and Manufacturing (ESDM) sector within Electronics Manufacturing Clusters (EMCs). EMCs aid the growth of the ESDM sector, help development of entrepreneurial ecosystem, drive innovations and catalyse the economic growth of the region by increasing employment opportunities and tax revenues.

Under the scheme, final approval has been accorded to 20 applications for setting up Greenfield Electronics Manufacturing Cluster and to 3 applications for setting up of Common Facility Centre in Brownfield Cluster over an area of 3,565 acres with project cost of Rs 3,898 crore in 19 States across the country. These EMCs are projected to attract an investment of Rs 54,830 crore and are expected to generate approximately 6.43 lakh employment opportunities. As of now, approximately 148 companies have booked over 658 acres of land; out of which, 17 companies have commenced their commercial production with an investment of Rs 4,390 crore in various verticals of electronics segment and have provided employment opportunities to over 8,720 persons.

#### **Transformative Impact**

The EMCs have attracted domestic and global investments for the growth of the ESDM sector, helped in development of entrepreneurial ecosystem, drive innovation and catalysed the economic growth of the region by increasing employment opportunities and tax revenues.

## 3.1.5 Rationalisation of Tariff Structure

Tariff structure has been rationalised to promote indigenous manufacturing of electronic goods, including, inter-alia, Cellular Mobile Handsets, Televisions, Electronic Components, Set Top Boxes, LED Products, Medical Electronics and Microwave Ovens etc. As a result, the production of LCD/ LED TVs has gone up from 1.5 crore units in 2016-17 to 1.6 crore units in 2017-18. The production value of Light Emitting Diode (LED) products has gone up from Rs 7,134 crore in 2016-17 to Rs 9,630 crore in 2017-18.



## 3.1.6 Requirements for Compulsory Registration Order, 2012

#### **Overview**

Keeping in view the safety of Indian consumers and to curb the inflow of substandard electronic products, the "Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012" was notified under the provision of Compulsory Registration Scheme of BIS Act, 1986. This order had come into effect from July 3, 2013.

44 Products categories have been added to the schedule of the order. The order has come into effect for all the notified products/standards.

The Indian Language support for Mobile Phones, as per IS 16333 (Part 3), has been added to the schedule of this Order on October 24, 2016. The standard provides for inputting of text in English, Hindi and at least one additional Indian official language, along with facility of readability in phones for all 22 Indian official languages and script supporting these languages. The Order has come into effect from May 1, 2018.

## **Transformative Impact**

The Compulsory Registration scheme has resulted in high compliance of notified electronic goods to Indian safety standards and more than 15,000 registrations have been granted by BIS to manufacturing units covering approximately 75,000 products models/series.

## 3.1.7

## Development and Implementation of Indian Conditional Access System (iCAS)

#### **Overview**

Keeping in view the huge indigenous requirement on account of roadmap for digitisation of the broadcasting sector, Conditional Access System, entitled iCAS, has been developed to promote indigenous manufacturing of Set Top Boxes (STBs). The iCAS is available to domestic STB manufacturers at a price of USD 0.5 per license for a period of three years as against market price of USD 3-5 per license for other competing products.

The implementation of iCAS is underway. Over 14 lakh STBs with iCAS have been deployed with more than 150 operators. Doordarshan is leveraging the developed technology to upgrade its Dish DTH platform.

## 3.2

## Promotion of IT/IT enabled Services

The Indian IT-Business (IT-BPM) industry has played a key role in India's economic growth over the last ten years. Over the last decade, the industry has grown over five fold in revenue terms, thus contributing a substantial share to India's GDP. More importantly, the industry has led the economic transformation of the country and altered the perception of India in the global economy.

Driven by the increased digital adoption and growing Internet Economy, India's domestic IT-

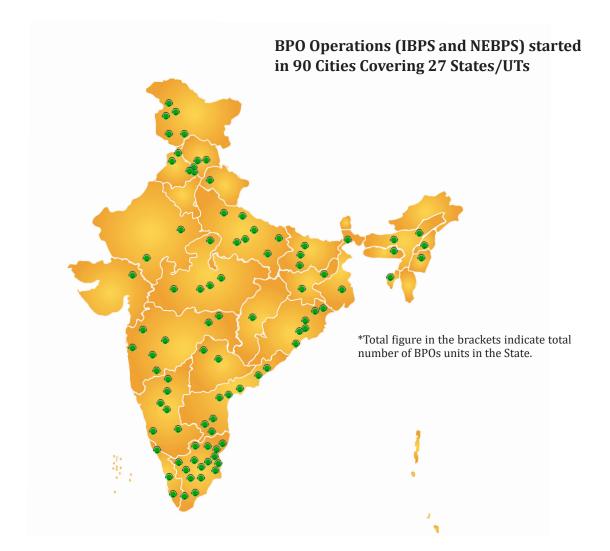
BPM (excluding hardware) is expected to reach USD 29 billion at 11% growth in FY 2018-19. India has the second largest Internet user base after China with over 432 million subscribers and has more than 300 million smartphone users.

The IT/ITeS sector is in a transitional phase and in order to sustain its competitive advantage in the global market, a focussed strategy has been adopted under the Digital India programme.

## 3.2.1 BPO Promotion Schemes

#### **Overview**

The Government has initiated India BPO Promotion Scheme (IBPS) under the Digital India programme, for promotion of BPO/ITES operations across the country and for creation of employment opportunities, with an outlay of Rs 493 crore. The scheme provides financial support along with



Andhra Pradesh: (8) Bhimavaram | Chittoor | Guntupalli | Guntur | Mangalagiri | Tirupati | Visakhapatnam | Vizianagaram Assam: (2) Guwahati | Majuli Bihar: (3) Gaya | Muzaffarpur | Patna Chandigarh U.T.: (1) Chandigarh Chhattisgarh: (1) Raipur Gujarat: (1) Ahmedabad Haryana: (1) Panchkula Himachal Pradesh: (2) Baddi | Shimla Jammu and Kashmir: (5) Bhaderwah | Budgam | Jammu | Sopore | Srinagar Jharkhand: (2) Deoghar | Ranchi Karnataka: (6) Attibele | Dharwad | Gulbarga | Hubli | Mangalore | Tumkur Kerala: (3) Kakkanad | Kozhikode | Thiruvananthapuram Madhya Pradesh: (5) Bhopal | Gwalior | Indore | Sagar | Vidisha Maharashtra: (7) Aurangabad | Bhiwandi | Dhawalgaon | Nagpur | Nashik | Sangli | Wardha Manipur: (1) Imphal Meghalaya: (1) Shillong Nagaland: (1) Kohima Odisha: (6) Balasore | Bhubaneswar | Chandrasekharpur | Cuttack | Jaleswar | Puri Puducherry U.T.: (1) Puducherry Punjab: (3) Amritsar | Mohali | Pathankot Rajasthan: (2) Jaipur | Udaipur Tamil Nadu: (15) Auroville | Chengalpattu | Coimbatore | Hosur | Kotagiri | Kottakuppam | Madurai | Mayiladuthurai | Namakkal | Rajapalayam | Tiruchirappalli | Tirunelveli | Tiruppattur | Tiruppur | Vellore Telangana: (2) Karimnagar | Nizamabad Tripura: (1) Agartala Uttar Pradesh: (7) Baitalpur | Bareilly | Kanpur | Lakhimpur | Lucknow | Unnao | Varanasi Uttarakhand: (1) Dehradun West Bengal: (2) Ranaghat | Siliguri

special incentives upto Rs. 1 lakh per seat in the form of Viability Gap Funding (VGF).

The Government has initiated North East BPO Promotion Scheme (NEBPS), to incentivize BPO/ ITES Operations in North East Region (NER) for creation of employment opportunities for the youth and growth of IT-ITES industry. The NEBPS aims to incentivize establishment of 5000 BPO/ ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF).

The objective of both the schemes is creation of employment opportunities for the youth, by promoting the IT/ITES industry, particularly by setting up the BPO/ITES operations and promotion of investment in IT/ITES sector in order to expand the base of IT industry and secure a balanced regional growth.

Both these schemes seek to incentivise setting up 53,000 seats of BPOs across India with budgetary support of Rs 543 crore. Around 48,000 seats are allocated to 184 companies, resulting in setting up of 268 units distributed across 125 locations of 26 States & UTs.

The India BPO promotion schemes and North-East BPO Promotion Scheme have the potential to generate around 1.5 lakh employment opportunities by setting up the BPO/ITeS operations in smaller towns and cities.

#### **Transformative Impact**

The BPO Promotion schemes help in spreading of outreach of thr industry to smaller towns of the country. These have promoted BPO industry



in small towns like Chittoor, Guntur, Tirupati, Muzaffarpur, Patna, Raipur, Srinagar, Jammu, Sopore, Budgam, Mangalore, Sagar, Aurangabad, Bhiwandi, Nagpur, Sangli, Nasik, Cuttack, Jaleshwar, Coimbatore, Madurai, Vellore, Karimnagar, Lucknow, Varanasi, Guwahati, Majuli, Imphal, Kohima and are providing employment to youth near their homes, thus saving them from migration to other cities.

The schemes provide special incentives toward employment of women and specially-abled persons, encourages local entrepreneurs and provides opportunities to work in various regional and foreign languages.



## 3.2.2 Export Promotion Schemes

#### **Overview**

For the promotion of Software exports from the country, Software Technology Parks of India(STPI) was set-up in 1991 as an Autonomous Society under MeitY. STPI acts as single-window in providing services to the software exporters. The STP scheme allows software companies to set up operations in convenient and inexpensive locations and plan their investment and growth driven by business needs.

There are many benefits under STP schemes, like, Customs Duty Exemption in full on imports Central Excise Duty Exemption in full on indigenous procurement, 100% FDI is permitted through automatic route, Sales in the DTA up to 50% of the FOB value of exports are permissible etc.

Special Economic Zones (SEZs), set-up to enable hassle-free manufacturing and trading for export purposes and EHTP units, are the major contributors to exports. 100% Income Tax exemption on export profits is available to SEZ units for 5 years, 50% for next 5 years and 50% of ploughed back profits for 5 years thereafter.

**The Electronics Hardware Technology Park (EHTP) Scheme** is an export oriented scheme for undertaking manufacturing of electronic goods.

#### Merchandise Exports from India Scheme (MEIS)

benefits are available for export of electronic goods under the Foreign Trade Policy. The other schemes for export promotion are Export Promotion Capital Goods (EPCG) Scheme, Duty Exemption and Remission Schemes, Duty Free Import Authorization (DFIA) Scheme, Deemed Exports, etc.

STPI has set-up a total of 58 STPI operational centres/sub-centres across the country, out of which, 50 centres are in Tier II and Tier III cities. The Indian IT/ITeS industry revenue (including Hardware) was USD 132 billion and USD 143 billion in FY 2014-15 and FY 2015-16 respectively. It crossed USD 150 billion in FY 2016-17 (reached USD 154 billion). It is estimated to reach USD 167 Billion in FY 2017-18, with export of software and services to reach USD 126 billion. It is the largest export sector for the country comprising 24% of total exports. Further, the software and services

exports are projected to grow at 7% to 9 % and reach nearly USD 135 – 137 billion in the FY 2018-19. Share in total services export is estimated at >45% and the industry's contribution relative to India's Gross Domestic Product (GDP) is about 7.9%. The internet industry in India is expected to double and reach US\$ 250 billion by 2020, growing to 7.5 percent of GDP.

Indian e-commerce industry's revenue is estimated at USD 38.5 billion for FY 2017-18, at a growth rate of 17%, with eTailing (Online sale of product merchandise) sector contributing USD 16.6 billion, eTravel (Online travel and holiday bookings) sector contributing to USD 20.8 billion and other internetbased services such as, matrimony, classifieds etc., contributing to USD 1.1 billion.

#### **Transformative Impact**

The exports made by STP units have grown over the years. STPI has played a key role in promotion of IT-ITeS industry across the country and dispersal of IT industries to Tier-II/III cities for a balanced regional growth and taking initiatives to promote startup ecosystem for product & IPR creation.

## 3.3 Innovation and Startups

## 3.3.1 Medical Electronics Incubator at IIT, Patna

#### **Overview**

MeitY has approved a project for setting up of an Incubation Centre in the area of ESDM with focus on Medical Electronics at IIT Patna. This incubation centre is being set up in an area of 3000 sq metres constructed space with the state-of-the-art facilities designated for ESDM incubation. The total project duration to set-up the Incubation Centre is 5 years. The primary objective of this project is to promote innovation and entrepreneurship with the aim to identify, nurture and translate technological ideas and innovation in the broad area of ESDM sector with a focus Medical Electronics.

A total Grant-in-aid of Rs 6.85 crore from MeitY has been released to IIT, Patna for the project. 13 Startups are onboard; out of which, one has joined as a pre-incubate. Four startups shortlisted from the last Project Evaluation Team (PET) meeting will join the incubator shortly. The scope for catering startups has widened as the incubator would support startups in all the domains of ESDM.

## 3.3.2 Setting up of Incubation Centre in Delhi-NCR

#### **Overview**

Electropreneur Park has been set-up in collaboration with Software Technology Parks of India (STPI), India Electronics & Semiconductor Association (IESA) and Delhi University (DU) with the state-of-the-art facilities at South Campus, Delhi University. The Electropreneur Park has been established in area of over 10,000 sq. ft. constructed space with state-of-the-art facilities, including laboratories (RF and Power Labs) at South Campus, Delhi University to promote ESDM innovation, R&D and create Indian IPs. The total project duration to set up the Electropreneur Park is 5 years. The project will support 50 start-ups over a period of 5 years.

The Electropreneur Park has supported 26 startups to avail the incubation facilities at the park; out of these, 10 are onboard, 8 startups have graduated and 6 currently at revenue stage. As an outcome, 14 new products and 12 working prototypes have been developed, 18 Patents filed, 20 crore VC/ Grants/CSR received by the onboard startups and employment for 196 persons have been generated by the startups.

## 3.3.3 Electronics Incubator by IIITM-Kerala and KSUM at Cochin, Kerala

#### **Overview**

With an aim to nurture new enterprises focussed on Consumer Electronics based manufacturing, Ministry of Electronics and Information Technology (MeitY) has approved the project for setting up of Consumer Electronics Incubator at Cochin, Kerala, by Indian Institute of Information Technology and Management Kerala (IIITM-K) and M/s Kerala Start-up Mission (KSUM). This incubator will incubate 40 startups over a period of four years. The project aims to provide entrepreneurs access to infrastructure that facilitates manufacturing of electronic hardware in a cost-effective and a sophisticated manner; mitigate the risk that startups face, while manufacturing electronics hardware by providing mentorship; bridge the time delay taken to absorb new technologies; promote regional growth; and encourage initiatives to promote startup ecosystem for product and IPR creation.

62 Startups have been onboard in the Electronics Incubator and Infrastructure set up has been completed. Testing and Measurement, IOT, Robotics Lab and Prototyping room for SMT Assembly Line has been completed too. As an outcome, several products/working prototypes have been developed, 22 Patents have been filed, 17 companies have got their first order and Rs 10 crore funding for VC/Grants/CSR has been provided to onboard startups.



## 3.3.4 Technology Development for Indian Languages (TDIL)

#### **Overview**

Technology Development for Indian Languages (TDIL) programme initiated by MeitY has the objective of research and development of Language Computing Technologies for 22 constitutionally recognised Indian Languages and Development / Evolution of Standards in Multilingual Computing, besides playing a catalytic role in promotion and proliferation of Indian Language technologies for digital inclusion and bridging the digital divide.

Following TDIL offerings have been made available for public use:

- Text to Speech System (TTS): Text to Speech has been developed for 13 Indian Languages namely Hindi, Bengali, Marathi, Tamil, Telugu, Malayalam, Gujarati, Odia, Assamese, Manipuri, Kannada, Bodo and Rajasthani.
- Language CD in 22 Indian Languages: Free language CDs containing various software tools like Bharteeya Libre Office, Open Type Fonts, Keyboard Drivers, Firefox Web Browser, e-mailing client etc., for public use for all 22 recognsed languages.
  - Language CD Downloaded: 1.45 crore
  - Language CD shipment: Nearly 12.98 lakh
- Optical Character Recognition (OCR) Software: The system has been developed for Bangla, Devanagari, Gurumukhi, Kannada, Malayalam, Tamil and Telugu.
- 600 Tamil books converted to Braille books using Tamil OCR by Worthtrust, Chennai (www. kannadapustaka.org)
- Web OCR and Desktop OCR (e-Aksharayan) is available for public usage on www.tdil-dc.in.

Indian Language Technology Proliferation & Deployment portal (http://tdil-dc.in) is a central repository portal of Indian language tools, linguistic resources, standards and outcomes of various projects being supported under TDIL/ MeitY, Government of India. 485 Total resources are available and total 1 lakh downloads of resources by researchers and citizens.

#### **Transformational Impact**

Integration of TTS in mobile devices has enabled large section of the society, particularly in the rural areas to have voice based information



access in Indian languages. Availability of advance technologies like OCRs for Indian languages is expected to help in digitisation activities of printed Indian language documents. The localised content creation tools in the form of language CDs are being used by various different PSUs, Banks, educational institutions and schools etc., for their day-to-day working. Professionals are using these for book writing and web content creation. Further, sharing of linguistic resources, such as, text and speech corpus free of cost to Indian language technology researchers is creating interest in researchers within the area. Thus, it is helping keep the Indian language technology alive, current and at the same time, creating capable human resources in the domain.

## 3.3.5 Centres of Excellence (CoEs)

#### **Overview**

A proposal to set-up a Centre of Excellence (CoE) for Internet of Things (IoT) at Bengaluru, executed jointly by ERNET India and NASSCOM in PPP mode, was approved in June 2015. The vision of the CoE is to enable India as the innovation hub in the emerging technology of Internet of Things through democratisation of Innovation, Standardization, Realisation of prototype, products before deployment of the IoT devices in the public domain/infrastructure and support. The Government initiatives on IoT solutions for specific India needs in the areas like water, energy, agriculture, health, security and privacy of data. This centre was launched by Prime Minister of India on July 1, 2015, while inaugurating Digital India Week.

The objectives of the Centre of Excellence are as follows:

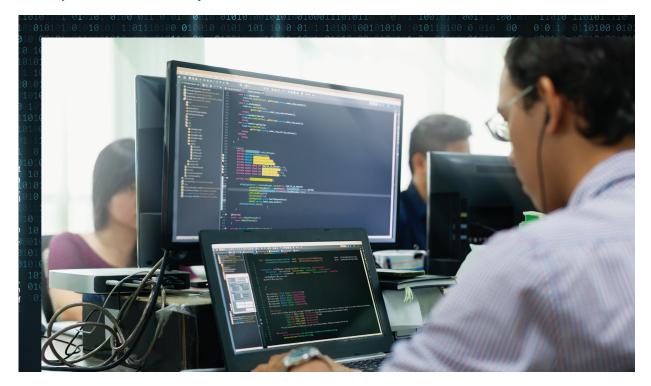
- To create innovative applications and domain capability across verticals for country's needs, such as, Smart City, Smart Health, Smart Manufacturing and Smart Agriculture etc.
- To build industry capable talent, startup community and entrepreneurial ecosystem for IoT.
- To provide an ecosystem for innovation to thrive and embrace entrepreneurship.
- To energise research mind-set and reduce costs in research and development by providing neutral and interoperable, multi-technology stack laboratory facilities.
- To reduce import dependency on IoT components and promote indigenization.
- To position India as a provider of end-to-end solution in engineering space.
- To provide environment for product creation, testing and also for validation & incubation.

47 Start-ups have been incubated, connected with 500+ startups Pan-India and 17 startups have graduated. 55 IP's have been applied and 8 IPs have been received. The initiative has partners signed up: Strategic-14, Co-create-4, Innovation-3, Infrastructure-4, Association partner-1. It has organised/participated in 21 Thought leadership events PAN India and focusses on Industry4.0, Automotive/Transportation, Healthcare, Energy, Agriculture, Smart Cities. 43 IoT researcher have been incubated and has participated with the industry for IoT standards and policies formation. MeitY has taken further steps and decided to add three more CoEs in various States across the country, viz. Gurugram (Haryana), Gandhi Nagar (Gujarat) and Visakhapatnam (Andhra Pradesh). Operations of CoE, Gurugram started from June, 2018 and it got officially inaugurated on October 5, 2018. Its focus areas are Industry 4.0, Automotive/ Transportation, Healthcare, Agriculture. It is also engaged by Internet Corporation for Assigned Names and Numbers (ICANN) to drive the IPv6 research with IIT, Hyderabad. In this short span of few months of operations, 7 startups have been incubated at this centre.

#### **Transformative Impact**

These programmes have assisted in adoption of innovative solutions, job creation in technology sectors and intellectual property development. It has led to products that can be used in ecosystem of Smart Hospitals, Smart Factories, and Smart Farming etc.

The CoE initiative has successfully engaged with different stakeholders keeping in mind their unique requirements. It has enabled a robust collaboration between the Government and enterprise users with innovators for solving real world challenges using 'Digital Technologies of Tomorrow', guided by CoE team. It has accelerate innovation through technology, mentorship, education, networking and research activities.





## 4.1 Development of Medical Devices

The healthcare world is undergoing great changes with the advent of emerging technologies aimed at transforming healthcare. The Government intends to ensure that its contribution towards change is in the positive direction, such that the indigenous healthcare technologies developed in India may not only result in affordable healthcare accessible to all but can also be leveraged by other nations world over.

Healthcare services are essential for all and have to be universal for everyone. In fact, to democratise healthcare delivery across the country and to empower individuals and local communities, MeitY has undertaken concerted and focused efforts under Digital India programme for design and development of various medical devices within the country.

Centre for Excellence in Research and Development of Nanoelectronic Theranostic Devices established with the support from MeitY in the Centre for Nanotechnology at Indian Institute of Technology Guwahati, has developed technologies to diagnose multiple biomarkers to analyse blood, urine, breath and hand tremor for early detection of a number of diseases, such as, Chronic-Obstructive-Pulmonary-Diseases (COPD), Asthma, Pancreatitis, Diabetic-Nephropathy, Parkinson's and Jaundice.

## 4.2 A Multi-Diagnostic Kit for the blood and urine sample analysis

#### **Overview**

The multi-diagnostic kit can presently detect

biomarkers, such as, amylase, lipase, albumin and creatinine in the blood and urine samples. The portable, low-cost, ultra-fast and specific sensors that have been developed are capable of Point-Of-Care-Testing (POCT) of the biomarkers suitable for the early detection of various diseases in the primary healthcare eco-system. The kit is expected to monitor the functioning of pancreas, liver, kidney, and thyroid for the early detection of the diseases. The multi-diagnostic box is also expected to have features like online data storage, wireless data transfer and artificial intelligence based data analytics for remote guidance to patients after detection.

The prototype has now been commercialised by a startup company, Primary Health Tech Private Limited for the POCT of 20 biomarkers, which may also include glucose, T3, T4, TSH, bilirubin, and hemoglobin, among others.



Figure 1: The design of the Multi-Diagnostic Kit

## 4.3 Point-of-Care-Testing Device for Lung Condition Monitoring

#### **Overview**

The lung-monitoring device is expected to detect the breathing frequency, peak flow rate of breathing, lung volume, forces expiratory volumes,

and forced vital capacity, which are the prime parameters for COPD and asthma detection. The low-cost, portable and ultra-fast kit is capable of POC early detection of various lung ailments, suitable for the primary healthcare eco-system of the country.

The prototype has now been commercialised by a startup company, Primary HealthTech Private Limited, which is also expected to have features like online data storage, wireless data transfer, and artificial intelligence based data analytics for remote guidance to the patients after detection.



The Design of the Lung Monitoring Device.

## 4.4

## Point-of-Care-Testing Device for Parkinson's Patients

#### **Overview**

The hand-tremor detector is expected to detect the tremor of limbs of a Parkinson's patient for the early detection of such a dreaded disease. The low-cost, portable and ultra-fast POCT device is capable of analysing and differentiating regular, rest, and diseased tremors, suitable for the primary healthcare eco-system of the country.

The prototype has now been commercialised by a startup company, Primary HealthTech Private Limited. This device is also expected to have features like online data storage, wireless data transfer, and artificial intelligence based data analytics for remote guidance to the patients after detection.



The Design of the Hand-Tremor Monitoring Device.

## 4.5 Design and Development of 1.5 Tesla Magnetic Resonance Imaging (MRI) Systems

#### **Overview**

The objectives of the IMRI project is to design develop and test an indigenous 1.5 Tesla MRI System for medical imaging. Under the project, some indigenous components have been developed like coils, amplifiers etc., that are high cost component and are also proprietary to various multinational companies.

The integration of indigenously developed coils and Recon software with the commercial magnet has been completed. Images of the fruit (biological) tissue and dead frog have been obtained from commercial scanners (magnet). Further, indigenous software developed for MRI is integrated and project is in process of making ready entire Transmit-Receive chain for MRI.

## 4.6 High Energy 30 MeV Linear Accelerator (LINAC)

The aim of the project is to design and develop 30MeV electron linear accelerator with 5-10kW beam power. The proposed LINAC will generate Molybdenum (Mo-99), which will be used to elute radio isotope Technetium (Tc-99m). The novel Tc-99m radio labelled analogues generated will also be clinically assessed. Various sub system have been designed, fabricated and are being tested.



## 4.7 Personal Health Record Management System (PHRMS)

#### **Overview**

It is an Aadhar enabled, cloud based application which has been designed after taking inputs from industry experts, medical practitioners and researchers in the health informatics domain. It can store Personal Health record of an individual. Users can store reports, diagnostics, which are accessible by individual/doctor for online consultation and prescription.

The system has been deployed at NHP (National Health Portal) and integrated with e-Sushrut Hospital Management system of Government of Telangana.

## 4.8 National Mission on Power Electronics Technology

#### **Overview**

The mission aims to develop Power Electronics

based technology and systems. After development, the technology for Vehicle Control Unit (VCU) has been transferred to four industries, namely, M/s Crompton Greaves Limited, M/s BHEL-Bangalore, M/s AAL Noida and M/s ABB-Bangalore. The technology has been commercialised and more than 200 units of VCU have been manufactured and are being used in old and new locomotive by Indian Railways. The developed technology is suitable to old as well as to new locomotives.

#### **4.9**

## Micro-Grid for Village Application (NaMPET-II Condition Monitoring Project)

#### **Overview**

A microgrid of 25KW capable of grid connected/ standalone operation with indigenous Power Conditioning Unit (PCU) for Solar PV plant and intelligent load management system has been developed and deployed at a tribal village in Marayoor near Munnar, Idukki District of Kerala. Villagers have been benefitted by the deployment. The deployed technology is an outcome of NaMPET-II project.



## **4.10**

## Development of Single phase and Three phase Smart Energy Meters for Indian Power Networks

#### **Overview**

Technology for Single phase and three phase Smart Energy Meters has been developed. The technology for Single Phase Smart Meter has been transferred to four industries namely, M/s ITI-Palakkad, M/s Powertec Energy Limited-New Delhi, M/s Mosar Technologies-Thiruvananthapuram and M/s United Electrical Industries Ltd.-Kollam. The cost of the product is going to be more or less same as that of conventional energy meter.

## 4.11

## Development and Field Testing of Panic Switch Based Safety Device for Cars to provide Women's Safety

#### **Overview**

The design and development of panic switch with facilities like tamper proof operation, driver authentication systems, Audio/video recording, Shout facility, AIS 140 ITS standard-based design has been completed. This is a safety switch for passengers (women) travelling through public transport, like, cabs, taxis and buses etc. The developed system has been extensively field tested on Delhi roads in real life situations. System performance has been satisfactory. The developed technology is being transferred to the companies for commercialisation.

## 4.12 Open Source Computer Aided Design (CAD) Tools for Weaving of Banarasi Sarees

#### **Overview**

"DigiBunai", an open source Computer Aided Design (CAD) tool has been developed, demonstrated and deployed at five locations at Weaver Service centre/Common Facilitation Centres, Varanasi for design and weaving of Banarasi Sarees. Two user workshops were conducted for awareness creation. About 100 weavers/ designers/ students have been trained on this CAD tool. This project has been completed successfully. The capabilities of this tool are being enhanced for design/weaving of other garments, better user interface, along with multi-layered cloth, extra warp, electronic jacquard support and other weaving techniques.

### **4.13**

## Development of Intelligent Transportation Systems (ITS) for Pedestrian Safety Enhancement and Emergency Vehicle Priority at Signalized Traffic Junctions

#### **Overview**

technology The development, laboratory testing, prototype development of Pedestrian Safety Enhancement Controller (PeSCo) and Emergency Vehicle Priority system (EmSerV) have been completed and these were field tested on road junctions in Trivandrum. The technology on implementation may provide safer road crossing to Divyangans and will provide highest priority to the emergency service vehicles, like, Ambulance, Fire services vehicles and Police etc. The technology is being transferred to companies for commercialisation. The project has been completed.

## 4.14 Smart Warehouses Technology

The technology development and deployment have been completed for safe storage of rice grains. The development includes sub-systems like Conveyorized System with Online identification of bags, moisture Measurement, Thermal disinfection, Fumigation, measurement of concentration of gases etc. Entire system and sub-systems have been developed, commissioned and are being tried as a pilot project in a godown of Food Corporation of India (FCI) at Raipur. This has shown benefits like safe storage of food grains etc., for longer periods.

#### 4.15 Electronic Waste (e-Waste) Recycling

#### **Overview**

e-Waste has various components like, PCB, plastic, metal etc. PCB is the most valuable part in e-waste and requires high-end technology to process in an environment-friendly manner. MeitY has developed a cost-effective processing technology to process Printed Circuit Boards (PCBs) and recover precious metals.

A demonstration plant has been set-up at Bengaluru with participation from State Government of Karnataka, which is beneficial for organised and unorganised sector to process PCBs in safe, environmentally sound methods. The demonstration plant has established the technology for processing 1000 kg of PCB/shift (equivalent to 35 MT of e-waste), and so far, has processed 50 MT of PCB from 750 MT of e-waste. The present process, with 95% yield, could recover 150gm gold, 600-700gm silver, 70-80gm of palladium and 200kg of copper from 1 Metric Ton of computer mother board. The technologies are now being extended to recycling industry through technology transfer process for initiating PCB recycling in India, earlier PCBs were being exported to developed countries.



#### 4.16 e-Waste Management

#### **Overview**

A major concern of e-waste management in India is the lack of awareness amongst various stakeholders about the hazards associated to the end-of-life products. In this direction, MeitY has been implementing an "Awareness Programme on Environmental Hazards of Electronic waste" since March 2015, under the aegis of STPI, New Delhi to create awareness among the public about the hazards of e-waste recycling by the unorganised sector and to educate them about alternate methods of disposing their e-waste.

The programme has created training tools, content materials, films, printed materials, videos and jingles etc., for every strata of the society, which are freely available on the dedicated website (www. greene.gov.in). Further, social media platforms (Twitter handle and Facebook page) and mobile application has also been created to provide online status of the activities and showcase the activities/ workshops/ carnivals etc., conducted. Under the programme, around 600 workshops and activities have been organised in various cities and nearly 2.50 lakh participants have participated from school, colleges, RWA, manufacturer, informal operators etc., and 5,783 Government officials have participated too. Mass awareness amongst youth of the country has also been created through cinema halls and nearly, 21.7 crore audiences have been covered in 2,813 cinema halls.



#### 4.17 National Supercomputing Mission (NSM)

#### **Overview**

National Supercomputing Mission (NSM) has been initiated with an outlay of Rs. 4500 crore for 7 years, which will enable India to leapfrog to the league of world class computing power nations. The activities include creation of state-of-the-art High performance computing (HPC) facilities and infrastructure of varying capacities (Entry level systems, Mid range systems and High-end systems) atacademic/R&D institutions, Development of HPC Applications of national priority for major Science and Engineering domains, Promote R&D in HPC leading to next generation Exa-scale computing readiness and Human Resource Development to handle and spearhead HPC activities in the country. Implementation of the mission would provide significant qualitative and quantitative improvement in R&D in Science, Technology and Engineering disciplines.

Under build approach in Phase-1, three systems are planned to be installed by C-DAC by April 2019 at the locations. i.e., are IIT Kharagpur: 1.3 PF, IIT Varanasi: 650 TF; IISER Pune: 650 TF. The first Supercomputing facility is scheduled to be inaugurated at IIT, BHU in February , 2019.

#### **Transformative Impact**

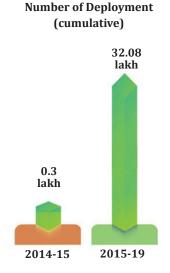
It is creating HPC infrastructure in the country to enhance the national capability in solving grand challenge problems, developing HPC Applications in various domains for national need and Promoting Research & Development and Capacity Building in the area of HPC.

#### 4.18 Free & Open Source Software (FOSS)

#### **Overview**

The Make in India programme is designed to leverage our own workforce and skill sets to generate maximum value. As such, it is important that MSMEs and startups are given the opportunity to compete in areas such as e-governance. Towards this, the Government had, in March 2015, issued a gazette notification mandating a shift to Free and Open Source Software (FOSS) for all the Government Departments.

MeitY has been promoting and fostering the adoption of FOSS. This includes development of indigenous Operating System distribution BOSS Linux, a Debian variant with 22 Indian languages support and its wide deployment in various organisations. It has various inherent advantages, such as, increasing interoperability, developing local capacity/ industry, reducing costs, conserving foreign exchange, achieving vendor independence, enabling localisation and reducing piracy/ copyright infringements. BOSS Enterprise System, Desktop, Server and educational variant EduBOSS are released under GPL license and are available for free downloads from http://bosslinux.in. Pan-India Support centres have been established for hand-holding support to users. The OpenStack based indigenous cloud Meghdhoot is another widely used Enterprise stack. The National Resource Centre for Free and Open Source Software (NRCFOSS) is at CDAC, Chennai.



#### **Transformative Impact**

- Specific niche segments like free laptop schemes and Departments of Tamil Nadu Government, certain sections of Gujarat government etc., have taken lead in promoting FOSS, which has lead to substantial savings in licence fees.
- Collaborations with private industry for expanding FOSS footprint.
- Comprehensive integration of security and assurance solutions in strategic sector.

# **5. SECURE CYBERSPACE**

Millions of people in the country (both in rural and urban areas) rely on the services and information available in cyber space. Increasingly, the work of the government, business and national infrastructure is becoming highly dependent on cyberspace. As the quantity and value of electronic information has increased, so have the business models and efforts of criminals and other adversaries, who have embraced cyberspace as a more convenient and profitable way of carrying out their activities anonymously. Hence, security of cyberspace has become an important part of the national agenda.

The National Cyber Security Policy, 2013 is aimed at building a secure and resilient cyberspace for citizens, businesses and the Government, by way of actions to protect information and information infrastructure in cyberspace, build capabilities to prevent and respond to cyber threats, reduce vulnerabilities and minimise damage from cyber incidents through a combination of institutional structures, people, processes, technology and cooperation.

A number of initiatives have been taken towards securing cyberspace. These include Indian Computer Emergency Response Team (CERT-In) to serve as national agency for 24x7 Cyber Security Incident Response, where all organisations have been mandated to report cyber security incidents to Indian Computer Emergency Response Team expeditiously; enactment of Information Technology Act, 2000, which provides legal provisions for dealing with various types of cyber crimes, cyber security, protection of sensitive personal data, etc.; Cyber Crisis Management Plan for countering cyber attacks and cyber terrorism for implementation by all Ministries/ Departments of Central Government, State Governments and their organisations and critical sectors; National Critical Information Infrastructure Protection Centre (NCIIPC) to serve as national agency to enhance the protection and resilience of the nation's critical information infrastructure by operating 24x7; cyber security R&D and capacity building in Cyber Security. These initiatives have focused on issues, such as, cyber security threat perceptions, threats to critical information infrastructure and national security, protection of critical information infrastructure, adoption of relevant security technologies, enabling legal processes, mechanisms for security compliance and enforcement, information security awareness, and training and research.

#### 5.1 National Cyber Coordination Centre (NCCC)

#### **Overview**

Continuously evolving cyber threat landscape and its impact on the well-being of information technology, economy, and cyber security necessitates the need for near real time situational awareness and rapid response to cyber security incidents. Realising the need, the Government has taken steps to set up National Cyber Coordination Centre (NCCC) to generate macroscopic views of the cyber security breaches and cyber security threats in the country. The centre will scan the cyberspace in the country at meta data level and will generate near real time situational awareness. NCCC is a multi-stakeholder body and is being implemented by Indian Computer Emergency Response Team (CERT-In) at Ministry of Electronics and Information Technology (MeitY). The centre will facilitate various organisations and entities in the country to mitigate cyber attacks and cyber incidents on a near real time basis.

Phase 1 of NCCC has been operationalised in July 2017 and planning for the final version of the project is in progress.

#### **Transformative Impact**

Country level correlated analysis enables early and near real-time detection of cyber threats and attacks so that proactive actionable information can be provided to stakeholder agencies for taking further actions as per their mandate. Various



participating organisations can initiate measures, which are both tactical and operational in nature to ensure effective threat management and responsive actions at their respective level, thereby enhancing resilience through proactive risk management approach.

### 5.2 Cyber Crisis Management Plan

#### **Overview**

The Government has formulated a Cyber Crisis Management Plan (CCMP) for countering cyber attacks and cyber terrorism for implementation by all Ministries/Departments of the Central Government, the State Governments/UTs and their organisational units in critical sectors, such as, Finance, Defence, Power, Telecom, Transport, Energy, Space, IT / ITeS, etc. In addition, several guideline documents and templates have been published to assist development and implementation of sectoral Crisis Management Plans. Cyber Crisis Management Plan (CCMP) for countering Cyber-Attacks and Cyber Terrorism is updated periodically to take into account changing scenario of cyber threat landscape.

CERT-In provides support to the Central Government Ministries/Departments and State Governments in preparing their CCMP document. CERT-In has conducted six workshops, since April 2018, to appraise various organisations under the Central Ministries/States/UTs about the CCMP implementation and all necessary assistance is being provided to them with regard to implementation of CCMP. 67 CCMP enabling workshops have been conducted and 12 States/UTs have been enabled to develop the CCMP and interaction is in process with 13 other States/UTs.



#### **Transformative Impact**

These CCMP workshops conducted by CERT-In are designed to focus on three key learning objectives (i) understand (ii) evaluate and (iii) implement. Continuous interaction of these entities with CERT-In has further helped refine CCMP plans developed by Ministries/Departments of the Central Government, the State Governments/UTs. CCMP workshops have assisted entities in moving towards higher levels of cyber security maturity and better preparedness to handle cyber crisis.

#### 5.3 Cyber Surakshit Bharat

#### **Overview**

With increasing use of digital media, possibility of cyber crime have also increased. To address the emerging challenges of cyber security, MeitY implemented a broader outreach programme, "Cyber Surakshit Bharat" in collaboration with leading IT industry and related Government organisations to educate and enable the CISO's, and broader IT community within the Government to address and mitigate the emerging challenges and create awareness among end users. This includes series of regional workshops, intensive trainings for designated CISOs and the officers responsible to observe cyber security in their respective Government organisation on three principles of Awareness, Education and Enablement.

Out of a target of 1,200 CISOs and other IT officials, 345 officials have been trained in 9 batches of training conducted in six cities, namely, Delhi, Mumbai, Kolkata, Chennai, Bengaluru and Hyderabad.

### 5.4 Cyber Swachhta Kendra(CSK)

#### **Overview**

The Cyber Swachhta Kendra is operated by the Indian Computer Emergency Response Team (CERT-In) as a part of the Government of India's Digital India initiative under the Ministry of Electronics and Information Technology (MeitY). The Cyber Swachhta Kendra (CSK) was launched on February 21, 2017.

Cyber Swachhta Kendra is a citizen-centric service provided by CERT-In, which extends vision of Swachh Bharat to cyberspace. By providing free tools and security best practices for citizens, Cyber Swachhta Kendra (CSK) helps users to securely carry out digital payments, secure their personal computers, broadband routers, mobile phones etc., thereby enhancing citizens trust in ICT while ensuring a cleaner and safer Digital India.

This centre operates in close coordination and collaboration with Internet Service Providers (ISPs), Product/Antivirus companies and academia thereby facilitating a smooth and productive interaction in terms of guidance, communication and persuasion between the Government and the general public.

Through 123 ISPs, CSK covers a 90% subscriber base. The Centre provides free bot removal tool, various security tools, security best practices, and information to users to secure their systems/ devices, while creating cyber security awareness amongst them. Over 8.32 lakh (as on January 6, 2019) citizens have benefited from this service by downloading free tools, along with remedial measures to clean infections on daily basis with the help of 123 Internet Service Providers. Three security tools available free of cost for users are namely, M-Kavach, which is a comprehensive mobile device security solution for Android devices and protecting users data and information; USB Pratirodh, which securely stores data on USB devices and allows authenticated users to access the data and restricts unauthorised access; and AppSamvid, which allows only approved applications

to run on a user's computer, thus avoiding malicious applications.

#### **Transformative Impact**

**Cyber Swachhta Kendra(CSK)** is a one-of-its-kind initiatives not just in the country but also across the world. The goal of CSK is to create a secure cyber space by detecting botnet infections in India and to notify, enable cleaning and securing systems of end users to prevent further infections.

Cyber Swachhta Kendra was awarded as one of the 51 "Gems of Digital India 2018" in June 2018.

Cyber Swachhta Kendra has also received the "Gold Award" for cost-effective "Cyber Security Model" and "Order-of-Merit" award by SKOCH in the month of December 2018.

As a by-product of this initiative, CSK is also providing free of cost services to 78 organisations from multiple critical infrastructure sectors, such as, Banking and Financial Services, Transport, Power, Government, Insurance, and Datacentre. Normally, organisations would need to pay a large fee for receiving such cyber threat intelligence but this centre provides necessary information, free of cost.

The centre is in continuous contact with designated Chief Information Security Officer (CISO) of the respective organisations for sharing automated reports on a daily basis, comprising of information about systems infected with malware/botnet and



systems running with vulnerable services within their organisational network. For example, in the banking sector the malware/botnet infection reduced by 89.07% and the vulnerable services reduced by 92.32% over a period of 12 months.

#### 5.5 Development of Indigenous Cyber Security Solutions

#### 5.5.1 Social Media Analytics (AASMA++) Tool

The tool collects data from social media like Facebook, Twitter, Instagram, YouTube etc., and analyses data to generate statistical data. The above tool has been deployed in various locations at several Law Enforcing Agencies (LEAs).

This tool has been deployed in 47 locations at LEAs and is in the process of deployment in 35 locations.

#### 5.5.2 Early Warning Framework (EWF)

Early Warning Framework (EWF) tool developed for Big-data Security Analytics on DNS (Domain Name System), BGP (Border Gateway Protocol), Netflow and Security Events. It detects Botnets, APT, Ransomware and other malware threats using Machine Learning and Threat Intelligence. It also detects Prefix and Route hijacking.

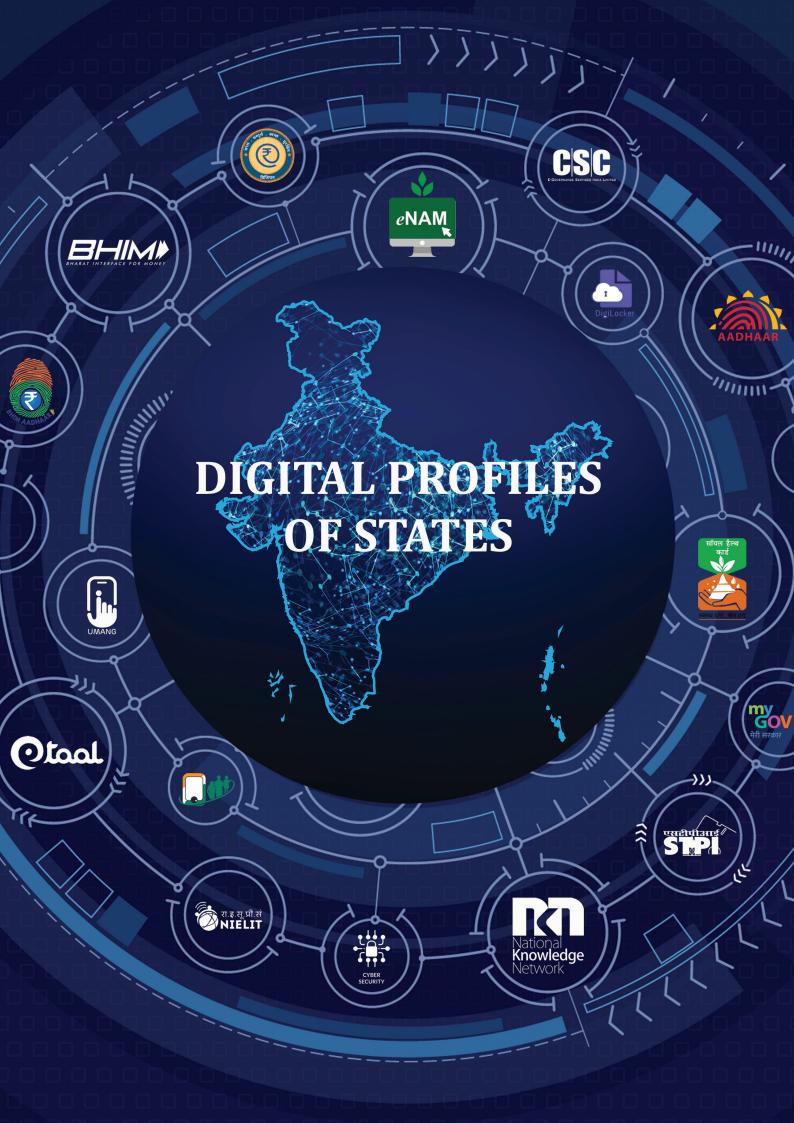
The tool has been successfully deployed at CERT-In; MTNL, Delhi and Mumbai; BSNL, Bangalore; and Reliance, Mumbai.

#### 5.5.3 m-Kavach - Mobile Device Security Solution for Android phones

m-Kavach addresses various threats related to mobile phones, such as, misuse of resources like WiFi, Bluetooth, Camera and Mobile Data by preventing unauthorised access to these resources and protects against JavaScript Malware. These users can restrict the access to critical applications like mobile wallets, social media apps etc., and can also block unwanted calls and SMS. It also helps users in tracking SIM changes on the device in case of device loss/theft and provides an option to remotely wipe Contacts/Call-Logs and Factory Reset the device.

m-Kavach is published in Google Play Store for free download for users in India. Over 3.47 lakh android mobile users have downloaded M-Kavach from Google Play Store in order to secure their mobile devices. m-Kavach has an average user rating of 4.3.

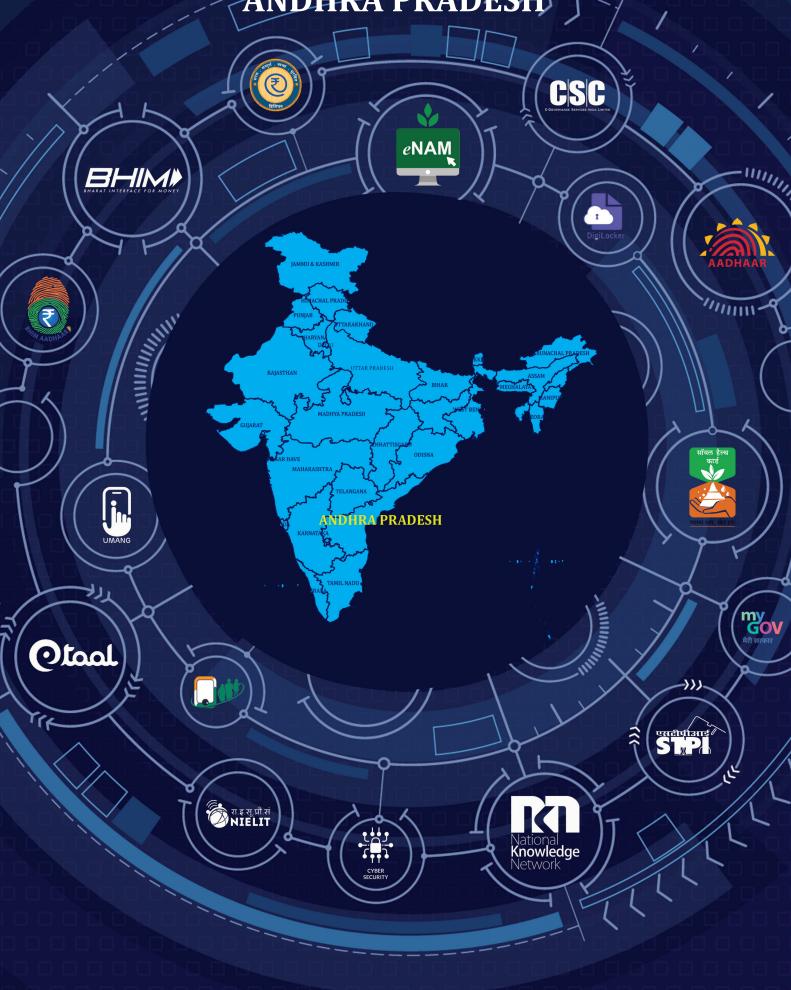




C There is no doubt that Digital is going to be the growth engine of our economy. The power of Digital lies in its ability to enable inclusive growth, thus leading transformation of an unprecedented scale.

Shri Ravi Shankar Prasad Minister of Electronics & IT and Law & Justice, Government of India

# Digital Profile of ANDHRA PRADESH



# Digital Profile of ANDHRA PRADESH

# **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 528 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 489 lakh
- % of Saturation, 2018 (LIVE): 92.5%
- 0-5 years (LIVE): 27.98 lakh (74.2% Aadhaar Saturation)
- 5-18 years (LIVE): 1.02 crore (89.2% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 32 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 12 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Andhra Pradesh SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 23 Districts Head Quarters (DHQ) and 1,086 Blocks Head Quarter (BHQ).
- Andhra Pradesh SWAN utilises more than 70% bandwidth of its link capacity.

#### 2.1 Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- 8,164 CSCs are functional; out of these, 5,258 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 3,310.

#### (ii) e-District

• 50 e-District services have been launched in 22 Districts.

#### (iii) DigiLocker

- More than 3.32 lakh Aadhaar enabled registrations have taken place.
- Mee Seva and Board of Secondary Education, Andhra Pradesh are integrated with

DigiLocker.

# (iv) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available.
- 8 Services of Annapurna Krishi Prasara Seva (AKPS)/m4agri have been onboarded on UMANG platform.

#### (v) Jeevan Pramaan:

• During the last cycle of Jeevan Pramaan, 19,722 Digital Life Certificates (DLCs) have been generated and 5,866 DLCs have been successfully verified.

#### (vi) Soil Health Card (SHC)

• 1.13 Crore Soil Health Cards have been issued.

Samples Collected					
Cycle 1	13,48,382				
Cycle 2	12,66,473				
Samples Tested					
Cycle 1	13,48,382				
Cycle 2	13,33,829				
SHCs	Dispatched				
Cycle 1	74,55,204				
Cycle 2	38,97,342				

#### (vii) eHospital

- Rolled out in one hospital Government General Hospital, Nellore.
- Modules Implemented: Registration and IPD.
- Total transactions carried out, since inception is 5.91 lakh.

#### (viii) e-Transactionsunder eTaal 2.0 Project

- 454 e-Services have been integrated.
- Around 463.6 crore e-transactions have been recorded, electronically by various

e-Governance applications.

#### (ix) National Scholarship Portal (NSP):

- Around 3.08 lakh students were registered during 2017-18; out of these, 2.32 lakh applications have been successfully verified.
- Rs 59.25 crore has been disbursed during the year 2017-18.
- (x) eSign
- Nearly, 33.35 lakh eSigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 253 Departments/services have been integrated for Push SMS.
- Over 183 crore SMSes have been sent by the Departments in Andhra Pradesh using this platform.
- 17 Mobile applications pertaining to the Departments of Andhra Pradesh have been downloaded more than 52,000 times.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

#### (i) Skill Development in ESDM for Digital India

- Total Target: 7,500 Candidates
- State Implementing Agency: Andhra Pradesh State Skill Development Corporation (APSSDC).
- 7,405 Candidates have been enrolled and trained; out of these, 4,771 have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- Andhra University has been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI).
- Outlay for 5 years: Rs 65.30 lakh
- Funds released: Rs 41.05 lakh
- 1,083 Candidates have been trained/ under-going training in various formal/ non-formal courses and 90 Government officials have been trained in short term programmes of 2/3/5 days duration in the

area of Information Security. Besides this, 41 awareness workshops on Information Security have been organised covering 7,960 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

• The Implementing Agency for the scheme is CSC e-Governance Services India Limited. The indicative target for the State of Andhra Pradesh is 20.28 lakh persons. Out of these, 4.69 lakh candidates have been trained and 2.07 lakh candidates have been certified.

#### (iv) Visvesvaraya PhD Scheme for Electronics & IT

- 10 Full-time and 20 part-time PhD seats have been allocated to one institute Andhra University.
- 10 Full-time and 20 part-time PhD candidates have been enrolled.

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 80 crore digital payment transactions for 2017-18 and 140 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April1, 2017 till December 31, 2018 is as follows:

MODES	Volume (in lakh)
BHIM	7726
USSD	1.78
RuPay Card on PoS	314

(Source: Digipay dashboard)

### 3. Digital Entrepreneurship and Industry

#### **3.1 Promotion of Electronics Manufacturing**

- (i) Electronic Manufacturing Cluster (EMC)
- Greenfield EMC at Village-Cherivi, Satyavedu

Mandal, Chittor District.

- Implementing agency: M/s Sri City Privatet Limited.
- Area: 94 acres
- Project Cost: Rs 56.75 crore
- Project is in implementation phase.
- The Government grant-in-aid of Rs 5.47 crore has been released.
- 2 Units have booked their land with EMC.
- Infrastructure development is in progress.
- Greenfield EMC at Vikruthamala Village, Yerpedu Mandal, Chittor District.
  - Implementing agency: M/s Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC).
  - Area: 501.4 acres
  - Project cost: Rs 339.80 crore
  - Project is in implementation phase.
  - The first instalment of the Government grant-in-aid of Rs 22.28 crore has been released.
  - 10 Units have booked its land; out of these, 3 units have started their commercial production.
  - Infrastructure development is in progress.
- Greenfield EMC at Renigunta and Yerpdeu

Mandal, Chittor District, Tirupati.

- Implementing agency: M/s Sri Venkateswara Mobile and electronics manufacturing hub Private Limited.
- Area: 113.27 acres
- Project cost: Rs104.41crore
- Project is in implementation phase.
- 5 Units have booked its land; out of these, 1 unit has started commercial production.
- Infrastructure development is in its nascent phase.
- (iv) Modified Special Incentive Package Scheme (M-SIPS)
- A total of 27 applications with investment worth Rs 9,223 crore have been received. Out of these 27 applications, 4 applications with proposed investment worth Rs 932 crore have been approved.

#### 3.1.2 Promotion of IT/ IT enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 31 successful bidders to set up 40 BPO/ ITES operations for 11,925 seats. Out of these, 8,465 seats have been operational. The details of the units are as mentioned in the table below:

Sl. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Omega Healthcare Management Services Private Limited	Bhimavaram	200	Operational	251
2	String Information Services Private Limited	Chittoor	100	Operational	217
3	Venusgeo Solutions Private Limited	Chittoor	100	Not Started	NA
4	Karvy Data Management Services Limited	Guntupalli	300	Operational	498
5	Karvy Data Management Services Limited	Guntupalli	450	Operational	1197
6	Phycare Services (India) Private Limited	Guntur	300	Operational	395
7	SteinMetz Integrated Learning Solutions Private Limited	Guntur	100	Not Started	NA
8	Synchroserve Global Solution Private Limited	Guntur	100	Operational	10
9	Sahithi Systems Private Limited	Kandukur	200	Not Started	NA
10	Chandusoft Technologies Private Limited	Mangalagiri	100	Operational	25

11	KJ Systems (India) Private Limited	Mangalagiri	210	Not Started	NA
12	Pragna Digital Solutions Private Limited	Rajahmundry	100	Not Started	NA
13	AGS Health Private Limited	Tirupati	200	Operational	121
14	AGS Health Private Limited	Tirupati	100	Operational	238
15	Rapid Care Transcription Private Limited	Tirupati	100	Operational	40
16	Venusgeo Solutions Private Limited	Tirupati	100	Operational	66
17	Headrun Technologies Private Limited	Vijayawada	100	Not Started	NA
18	Talwar Mobiles Private Limited	Vijayawada	100	Not Started	NA
19	Abhiram Multi Products Private Limited	Visakhapatnam	100	Operational	39
20	ACN Healthcare RCM Services Private Limited	Visakhapatnam	500	Operational	426
21	Avani Tech Solutions Private Limited	Visakhapatnam	102	Not Started	NA
22	Cerium Systems Private Limited	Visakhapatnam	100	Operational	51
23	Chandusoft Technologies Private Limited	Visakhapatnam	105	Operational	32
24	Chandusoft Technologies Private Limited	Visakhapatnam	100	Operational	98
25	Conduent Business Services India LLP	Visakhapatnam	1500	Operational	1421
26	Digipub Apex Covantage Ap Private Limited	Visakhapatnam	100	Operational	141
27	Fluentgrid Limited	Visakhapatnam	500	Operational	79
28	IDA Automation Private Limited	Visakhapatnam	100	Not Started	NA
29	Inspiredge IT Solutions Private Limited	Visakhapatnam	200	Operational	17
30	Inspiredge IT Solutions Private Limited	Visakhapatnam	100	Operational	144
31	Maple Software Private Limited	Visakhapatnam	200	Operational	20
32	Maple Software Private Limited	Visakhapatnam	200	Operational	85
33	Miracle Software System India Pvt. Ltd	Visakhapatnam	600	Operational	83
34	Omics International Private Limited	Visakhapatnam	1998	Not Started	NA
35	SreeTammina Software Solutions Private Limited	Visakhapatnam	100	Operational	103
36	The Federal Bank Limited	Visakhapatnam	250	Not Started	NA



37	Trigyn Technologies Limited	Visakhapatnam	200	Not Started	NA
38	WNS Business Consulting Services Private Limited	Visakhapatnam	510	Operational	491
39	Miracle Software System India Private Limited	Vizianagaram	600	Operational	16
40	Miracle Software System India Privat Limited	Vizianagaram	800	Operational	22
Total			11,925		6,326

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in Rs crore
2013-14	348.77
2014-15	379.54
2015-16	477.90
2016-17	526.69
2017-18	702.29

#### (iii) Centres and Incubation Space

• **Existing Centres**: There are four STPI (Software Technology Parks of India) operational centres at Kakinada, Tirupati, Vijayawada and Vizag.

#### 3.1.3 Innovation and Startups

- (i) National Centre of Excellence in Technology for Internal Security (NCETIS)
- Implementing Agency: IIT-Bombay
- Project Cost: Rs 83.89 crore
- Project is in implementation phase.
- The Government Grant-in-aid of Rs 24.07 crore has been released.
- 19 Projects in the field of internal security have been undertaken.
- 3 Tranfer of Technologies (ToTs) have been executed:
  - Video analytics software transferred to M/s aiSight Video Analytics Private Limited for taking the product to the

market.

- u. The Handheld Explosive Detector was transferred to BigTech Labs, Bangalore.
- un. Unmanned Portable Remotely Operated Vehicle (ROV) transferred to JanYu Technologies for production.
- Number of Patent/IPR filed: 4

# 4. Research and Development

#### (i) SAMEER

- Setting up Electromagnetic Environmental Effects Lab at Vizag.
- Project Cost: Rs 80.02 crore
- Area: Visakhapatnam
- Implementing Agency: SAMEER
- Date of commencement: March, 2015.
- Expected date of completion: March, 2019.
- Civil work has been completed and some facilities are installed.

# **5. ERNET India**

#### (i) Smart Virtual Classroom

• 258 Schools and 4 District Institutes for Education and Training (DIETs) have been covered under the project.

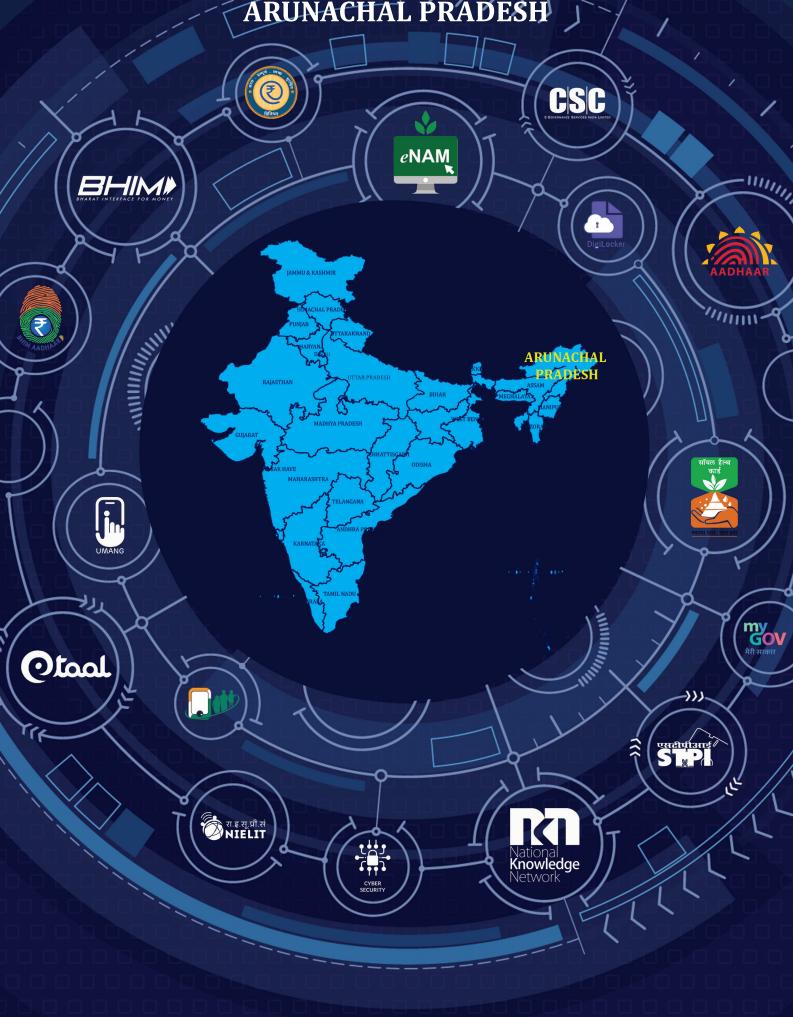
#### (ii) eduroam services

• 2 Institutes of Andhra Pradesh have eduroam connectivity.

# 6. Cyber Security

- Number of cyber incident (s)reported: 2,839
- Number of alert(s)/ advisories issued: 1,150

# Digital Profile of ARUNACHAL PRADESH



# Digital Profile of ARUNACHAL PRADESH

# **I. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 15 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 12 lakh
- % of Saturation, 2018 (LIVE): 80.3%
- 0-5 years (LIVE): 72,000 (45.7% Aadhaar Saturation)
- 5-18 years (LIVE): 3.55 lakh (71.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

• 3 Links to Institutions under NKN have been commissioned and made operational.

#### (iii) State Wide Area Network (SWAN)

- Arunachal Pradesh SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 16 Districts Head Quarters (DHQ) and 160 Blocks Head Quarters (BHQ).
- Arunachal Pradesh SWAN is utilising more than 50% bandwidth of its link capacity.

#### 2.1 Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- A total of 184 CSCs are functional; out of these, 159 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 43

#### (ii) e-District

• 6 e-District services have been launched in 22 Districts.

#### (iii) DigiLocker

- More than 2,760 Aadhaar enabled registrations have taken place.
- (iv) UMANG (Unified Mobile App for New-Age Governance)

• 189 Services of 49 applications of the Central Government Departments are available.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 1,164 Digital Life Certificates (DLCs) have been generated and 783 DLCs have been successfully verified.

#### (vi) Soil Health Card (SHC)

• 74.55 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	13,48,382		
Cycle 2	12,66,473		
Samples Tested			
Cycle 1	13,48,382		
Cycle 2	13,33,829		
SHCs Dispatched			
<b>Cycle 1</b> 74,55,204			

#### (vii) eHospital

- Rolled out in one hospital in Arunachal Pradesh -Community Health Centre, Ita Fort.
- Modules Implemented: Registration.
- Total number of transactions carried out, since inception is more than 4,775.

#### (viii) e-Transactions under eTaal 2.0 Project

- 74 e-Services have been integrated.
- Around 26 lakh e-transactions have been recorded, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP):

- Around 4,000 students have been registered during 2017-18.
- Rs 54 lakh has been disbursed during the year 2017-18.

#### (x) eSign

- Nearly, 1.85 lakh eSigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 4 Departments/services have been integrated for Push SMS.
- More than 2.57 lakh SMSes have been sent by the Departments using this platform.
- 3 Mobile applications pertaining to the Departments of Arunachal Pradesh have been downloaded more than 2,935 times.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 Candidates
- State Implementing Agency: State Council for IT and e-Governance (SCITeG), DIT, Government of Arunachal Pradesh, Itanagar.
- 663 Candidates have been enrolled and trained; out of these, 532 have been certified.

#### (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

• The implementing agency for the scheme is CSC e-Governance Services India Limited. The indicative target is 77,000 persons. Out of these, 1,714 candidates have been trained and from these, 394 candidates have been certified.

#### (iii) Visvesvaraya PhD Scheme for Electronics & IT

- 11 Full-time and 8 part-time PhD seats have been allocated to 2 institutes - National Institute of Technology (NIT), Arunachal Pradesh, and North Eastern Regional Institute of Science and Technology (NERIST), Arunachal Pradesh.
- 11 Full-time and 6 part-time PhD candidates have been enrolled.
- (iv) Special Manpower Development Programme for Chips to System Design

#### (SMDP-C2SD)

- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. NIT, Arunachal Pradesh has been included in the programme as Participating Institution (PI) in the cluster of IIT, Guwahati. The following activities have been carried out under the programme at NIT, Arunachal Pradesh:
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Arunachal Pradesh.
- 112 Persons have been trained at B. Tech, M.Tech and PhD. levels at NIT, Arunachal Pradesh in the area of VLSI design/ System design in the first two years of the programme.
- A total of Rs 36.20 lakh has been released to NIT, Arunachal Pradesh.

#### (v) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Itanagar centre focusses on creating skilled manpower in the area of Electronics, Computer Science and Information Technology and related disciplines. The institute offers training programmes to improve employment opportunities and facilitate Digital Literacy. The centre has two extension centres at Pasighat and Tezu.
- Area of excellence: Digitally Literacy Courses; Tally ERP; and MAT LAB.
- **Courses offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 4,344
  - (a) Formal Courses: 11
  - (b) Non-Formal Courses (own NIELIT centres): 1,979
  - (c) Skill Development in ESDM: 651
  - (d) Digital Literacy courses: 1,703
- Number of Schedule Caste (SC) candidate(s)-Trained: 51
  - (a) Formal courses: 1
  - (b) Non-Formal courses (own NIELIT centres): 16
  - (c) Skill Development in ESDM: NIL
  - (d) Digital Literacy courses: 34
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 2,928

- (a) Formal courses: 10
- (b) Non-Formal courses (own NIELIT centres): 1,161
- (c) Skill Development in ESDM: 144
- (d) Digital Literacy courses: 1,613
- Number of women candidate(s) Trained: 2,283
  - (a) Formal Courses: 2

- (i) North East BPO Promotion Scheme (NEBPS)
- NEBPS aims to incentivise establishment of 5000 BPO/ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore upto September 31, 2019. The details are as mentioned in the table below:

S.no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Access Edutech Pvt Ltd	Itanagar	50	Not Started	NA
2	B4B IT Solutions Pvt. Ltd.	Itanagar	50	Not Started	NA
	Total		100		0

- (b) Non-Formal Courses (own NIELIT centres): 1,024
- (c) Skill Development in ESDM: 280
- (d) Digital Literacy Courses: 977

#### 2.2 Promotion of Digital Payments

- To achieve a total target of 2,500 crore digital payment transactions in FY 2017-18 as announced in the Union Budget, MeitY has assigned a target of 2.8 crore digital payment transactions for 2017-18 and 2 crore digital payment transactions for 2018-19.
- Digital Payment Transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April1, 2017 till December 31, 2018 is as follows:

MODES	Volume (in thousands)
BHIM	1130.4
USSD	3.28
RuPay Card on PoS	168.72

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

3.1 Promotion of IT/ IT Enabled services

#### (ii) Centres and Incubation Space

• **Proposed/upcoming centre**: There is one STPI (Software Technology Park of India) centre coming-up at Itanagar.

### 4. Research and Development

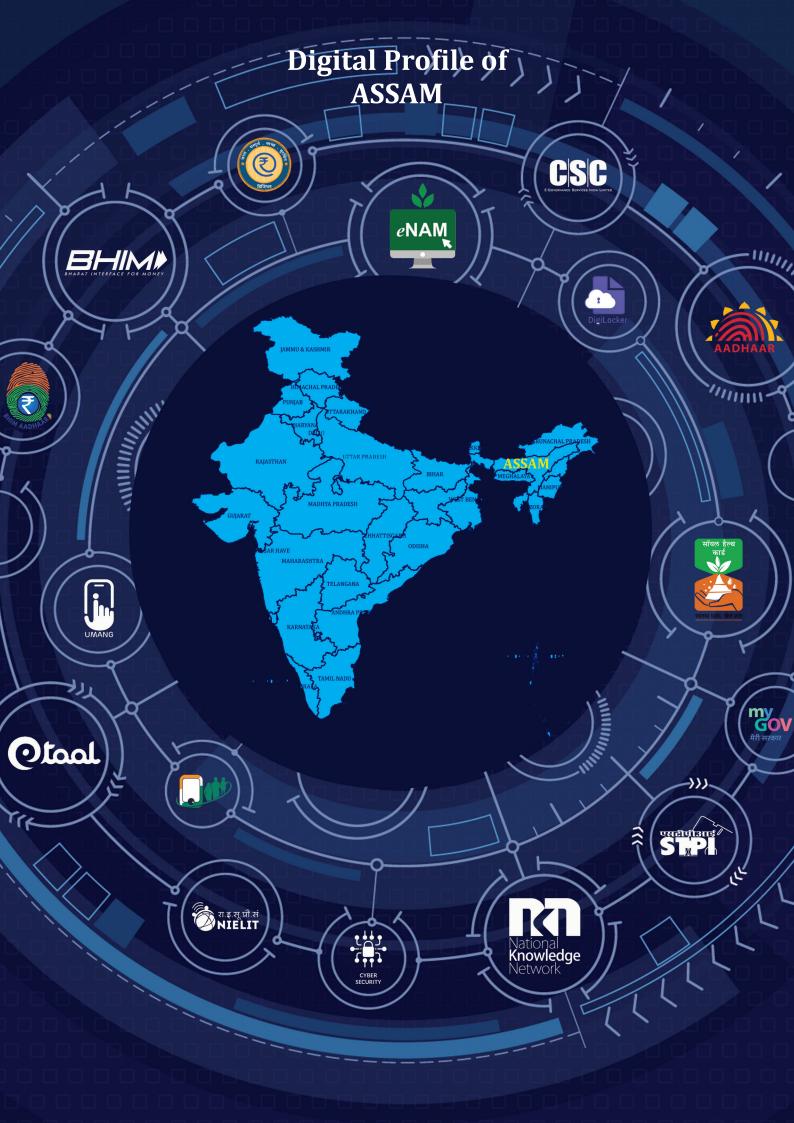
- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project, titled, 'Cognitive Radio: Mobile Broadband Service Support over Cognitive Radio Networks' has been initiated under the area ITRA-Mobile. NERIST-Itanagar is the Participating Institute (PI) in this project.
- A multi-institutional R&D project titled 'M2M: Improved Water Use efficiency and Agricultural Productivity through Experimental Sensor' has been initiated under the area ITRA-Water. NERIST-Itanagar is the Participating Institute (PI) in this project.

# **5. ERNET India**

- (i) Very Small Aperture Terminal (VSAT) Network
- VSAT has been set up and is operational at 13 sites.

# 6. Cyber Security

- Number of cyber incident (s) reported: 31
- Number of alert(s)/advisories issued: 1,150



# Digital Profile of ASSAM

# **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 345 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 42 lakh
- % of Saturation, 2018 (LIVE): 12.2%
- 0-5 years (LIVE): 1,000 (0.3% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 49 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 18 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Assam SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 26 Districts Head Quarters (DHQ) and 260 Blocks Head Quarters (BHQ).
- Assam SWAN is utilising more than 95% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 5,220 CSCs are functional; out of these, 5,249 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 626

#### (ii) e-District

• 46 e-District services have been launched in all 33 Districts.

#### (iii) DigiLocker

- More than 22,800 Aadhaar enabled registrations have taken place.
- eDistrict Assam and Board of Secondary Education, Assam are integrated with DigiLocker.

# (vi) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 17 Services of Assam are onboarded.

#### (v) Soil Health Card

• 13.09 lakh Soil Health Cards have been issued.

Samples Collected					
Cycle 1	<b>Cycle 1</b> 2,78,707				
Cycle 2	1,04,378				
Samples Tested					
Cycle 1	2,78,707				
<b>Cycle 2</b> 9,068					
SHCs Dispatched					
<b>Cycle 1</b> 13,00,901					

#### (vi) eHospital

- Rolled out in 2 hospitals LGB Regional Institute of Mental Health, Silchar and Medical College Hospital.
- Modules Implemented: Registration and IPD.
- Total number of transactions carried out, since inception is 8.62 lakh.

#### (vii) e-Transactions under eTaal 2.0 Project:

- 134 e-Services have been integrated.
- Around 8.62 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP)

- Around 5.08 lakh students are registered in Assam during 2017-18; out of these, 4.30 lakh applications have been successfully verified.
- Over 148.43 crore has been disbursed during the year 2017-18.

#### (ix) eSign

- Nearly, 75,000 eSigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 4 Departments/services have been integrated for Push SMS.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
  - Total Target: 15,000 Candidates.
- State Implementing Agency: Assam Electronics Development Corporation, AMTRON.
- 4,681 Candidates have been enrolled and trained; out of these, 2,299 candidates have been certified.
- (ii) Electronics and ICT Academy at IIT, Guwahati
- Academy has been set up for faculty development of engineering/ other streams and is catering to assigned States of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim.
- Out of the outlay of Rs 25 crore; an amount of Rs 9.25 crore has already been released to IIT, Guwahati for implementation of the scheme. IIT, Guwahati would be imparting training to 16,000 faculties in a period of 4 years (@4000 faculty/ year).
- IIT, Guwahati has already conducted 100 Faculty Development Programmes imparting training to 3,866 beneficiaries.

#### (iii) Information Security Education and Awareness (ISEA) project phase II

- IIT, Guwahati and Tezpur University have been selected for the implementation of ISEA project phase II in the capacity of Information Security Research and Development Centre (ISRDC) and Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 423.32 lakh
- Funds released: Rs 172.95 lakh

- 632 Candidates have been trained/ under-going training in various formal/ non-formal courses and 66 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 10 awareness workshops on Information Security have been organised covering 598 participants.
- (iv) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited. The indicative target is 19.29 lakh persons. Out of these, 7.03 lakh candidates have been trained and from this 1.85 lakh candidates have been certified.
- (v) Visvesvaraya PhD Scheme for Electronics & IT
- 44 Full-time and 22 part-time PhD seats have been allocated to 4 institutes - Gauhati University; Indian Institute of Technology, Guwahati; National Institute of Technology, Silchar; and Tezpur University.
- 42 Full-time and 9 part-time PhD candidates have been enrolled.
- (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From Assam State, IIT, Guwahati as Resource Centre and NIT, Silchar as Participating Institution (PI) have been included in the programme. Following activities have been carried out under the programme at these institutions:
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Guwahati and NIT, Silchar.
- 821 Persons have been trained at B. Tech, M.Tech and PhD. levels at IIT, Guwahati and NIT, Silchar in the area of VLSI design/ System design in the first three years of the programme.
- Projects for development of working prototypes of System/System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.
- A total of Rs 111.97 lakh has been released

including Rs 62.33 lakh to IIT, Guwahati and Rs 49.64 lakh to NIT, Silchar.

#### (vii) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Guwahati with 6 extension centres in Assam located at Khanapara (Guwahati), Tezpur, Silchar, Jorhat, Kokrajhar and Dibrugarh have been providing various training programmes of NIELIT and have been working in line with 'Digital India' and 'Skill India' programmes of the Government by providing skilling courses in ESDM (Electronics System Design and Manufacturing) sector.
- Area of Excellence: IT enabled Services (Business Process Outsourcing), Bioinformatics, Digital Literacy and IECT.
- Courses Offered: Long Term courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 28,781

(a) Formal Courses: NIL
(b) Non-Formal Courses (own NIELIT centres): 23,444
(c) Skill Development in ESDM: 3,429
(d) Digital Literacy courses: 1,908

- Number of Schedule Caste (SC) candidate(s) - Trained: 5,276
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 4,851(c) Skill Development in ESDM: 210
  - (d)Digital Literacy courses: 215
- Number of Schedule Tribe (ST) candidate(s) - Trained: 11,815 (a) Formal courses: NIL (b) Non-Formal courses (own NIELIT centres):
  - (b)Non-Formal courses (own NIELIT centres): 11,191 (c) Skill Development in ESDM: 163
  - (d) Digital Literacy courses: 461
- Number of women candidate(s) Trained: 10,973
  - (a) Formal course: NIL
  - (b) Non-Formal courses (own NIELIT centres): 8,921

(c) Skill Development in ESDM: 1,361 (d) Digital Literacy courses: 691

#### **1.2 Promotion of Digital Payments**

- MeitY has assigned a target of 52 crore digital payment transactions for 2017-18 and 50 crore digital payment transactions for 2018-19.
- Digital Payment Transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS since April1, 2017 till December 31, 2018 are as follows:

MODES	Volume (in thousands)
BHIM	20496.01
USSD	27.76
RuPay Card on PoS	31837.04

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Bongora, Palasbari Circle, Kamrup District (R), Assam.
  - Implementing Agency: M/s Assam Electronics Development Corporation Limited (AMTRON)
  - Area: 100 acres
  - Project cost: Rs 119.85 crore
  - Project is in implementation phase.
  - The Government Grant-in-aid of Rs 10 crore has been released.
  - 6 Units have booked their land.
  - Infrastructure development is in progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
  - A total of 7 applications with an investment worth Rs 719 crore have been received.

# 3.2 Promotion of IT/ IT Enabled services

- (i) North East BPO Promotion Scheme (NEBPS)
  - NEBPS aims to incentivise establishment of 5000 BPO/ITES seats, with financial support

of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore up to February 31, 2019. The details are as mentioned below:

S. no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	D.T. Infocomm Private Limited	Barpeta	50	Not Started	NA
2	Anjaybee Infotech Private Limited	Diphu	50	Not Started	NA
3	Cogtest Services Private Limited	Guwahati	50	Not Started	NA
4	Madhav Mukund Trading Co. Private Limited	Guwahati	60	Not Started	NA
5	Pecon Software Limited	Guwahati	350	Not Started	NA
6	Senrysa Technologies Private Limited	Guwahati	50	Not Started	NA
7	Tatwa Technologies Limited	Guwahati	50	Not Started	NA
8	Tatwa Technologies Limited	Guwahati	150	Operational	95
9	Thredz Information Technology Private Limited	Guwahati	50	Operational	73
10	Aduro Trading & Associates Private Limited	Jorhat	50	Not Started	NA
11	Madhav Mukund Trading Co. Private Limited	Kaliabor	50	Not Started	NA
12	Anjaybee Infotech Private Limited	Kokra- jhar	50	Not Started	NA
13	Anjaybee Infotech Private Limited	Majuli	50	Operational	6
14	Anjaybee Infotech Private Limited	Nagaon	50	Not Started	NA
15	Anjaybee Infotech Private Limited	Silchar	50	Not Started	NA
	Total		1160		174

#### (ii) IT/ITeS

- IT exports during last five years through STPI (Software Technology Parks of India) units are as follows:
- Date of commencement: March, 2015.
- Expected date of completion: March, 2019.
- Centre is partially functioning with lab space provided by IIT, Guwahati. Major facilities

S.no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Access Edutech Private Limited	Itanagar	50	Not Started	NA
2	B4B IT Solutions Private. Limited	Itanagar	50	Not Started	NA
	Total		100		0

#### (iii) Centres and Incubation Space

• **Existing centres**: There is one STPI centre at Guwahati

## 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'e-Varaha: Information System for Safe Pork Production in North Eastern India' has been initiated under the thrust area ITRA-Ag&Food. IIT, Guwahati; Tezpur University, and ICAR-National Research Centre on Pig, Guwahati, are the Participating Institutes (PI) in this project.
- Another multi-institutional R&D project titled 'ImagelDGP: Image based Systems for Identification of Individuals, Breeds and Diseases of Pigs and Goats' has also been initiated under ITRA-Ag&Food. NRCP, Guwahati; IIT, Guwahati; and Assam University; are the Participating Institutes (PI) in this project.

#### (ii) SAMEER

- High Power Microwave Tubes and Components Centre at II, Guwahati.
  - Project cost: Rs 24.88 crore
  - Area: Guwahati
  - Implementing Agency: SAMEER

like furnace has been established.

- (iii) Design, Development and installation of Stratosphere Troposphere (ST) RADAR at Gauhati University.
- Project cost: Rs 22.42 crore.
- Area: Guwahati
- Implementing Agency: SAMEER
- Date of Commencement: November, 2010.
- Expected date of completion: October, 2018.
- Installed and commissioned at site, Test & Evaluation (T&E) are in progress.
- System will be handed over to Gauhati University after T&E.

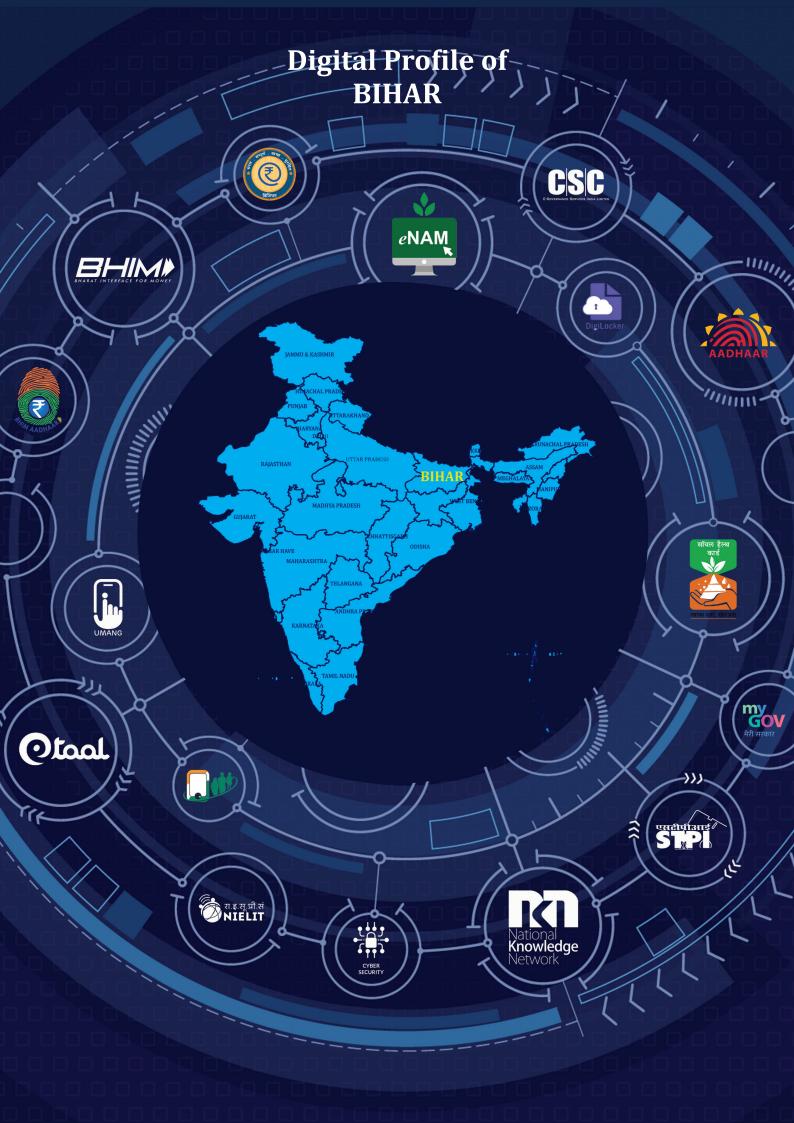
# **5. ERNET India**

#### (i) eduroam Services

- 6 Institutes of Assam have eduroam connectivity.
- (i) Very Small Aperture Terrminal (VSAT) Network
- VSAT has been set up and is operational at 18 sites.

### **6. CYBER SECURITY**

- (i) Number of cyber incident(s) reported: 212
- (ii) Number of alert (s)/ advisories issued: 1,150



# Digital Profile of BIHAR

# **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total population (Projected 2018): 11.94 crore
- Numbers of Aadhaar assigned (2018 Live)-10.10 crore
- Saturation(Live): 84.6%
- 0-5 years (LIVE): 67.44 lakhs (45.9% Aadhaar Saturation)
- 5-18 years (LIVE): 3.16 crores (78.8% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 34 Institutes and the Central and the State Universities are currently connected to NKN.
- NKN links have also been extended to 37 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Bihar SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 37 Districts Head Quarters (DHQ) and 485 Blocks Head Quarters (BHQ).
- Bihar SWAN has been utilising more than 70% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 28,195 CSCs are functional; out of these, 18,246 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 3,446

#### (ii) e-District

• 50 e-District services have been launched in all 38 Districts.

#### (iii) DigiLocker

- More than 2.79 lakh Aadhaar enabled registrations have taken place.
- Bihar School Examination Board and State

Board of Technical Education, Bihar are integrated with DigiLocker.

# (iv) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Bihar can access the Central Government services available on UMANG platform.

#### (v) Jeevan Pramaan

• In the current cycle of Jeevan Pramaan, 16,200 DLCs have been generated; out of these, 7,822 DLCs are successfully processed.

#### (vi) Soil Health Card

• 64.69 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	13,08,778			
<b>Cycle 2</b> 12,66,473				
Samples Tested				
Cycle 1	13,08,778			
Cycle 2	5,87,001			
SHCs Dispatched				
<b>Cycle 1</b> 64,69,650				

#### (vii) eHospital

• The application is to be started at Indira Gandhi Institute of Medical Sciences (IGIMS) Patna. The training on software has been completed on November 9, 2018.

#### (viii) e-Transactionsunder eTaal 2.0 Project

- A total of 121 e-Services have been integrated.
- Around 24.89 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP)

- Around 3.07 lakh applications have been received and 2.47 lakh applications have been successfully verified.
- More than 100 crore has been disbursed using the portal.

#### (x) eSign

- Nearly, 37.49 lakh eSigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 96 Departments/services have been integrated for Push SMS.
- More than 84 crore SMSes have been sent by the Departments in Bihar using this platform.
- 10 Mobile applications pertaining to the Departments of Bihar have been downloaded more than 11,620 times.

### 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates.
- State Implementing Agency: Bihar Knowledge Society (BKS), Patna.
- 15,090 Candidates have been enrolled and trained; out of these, 9,393 have been certified.

#### (ii) Electronics and ICT Academy at NIT Patna

- Academy has been set up for faculty development of engineering/other streams and is catering to assigned States of Bihar, Jharkhand, Odisha and West Bengal.
- Out of the outlay of Rs 25 crore, an amount of Rs 9.25 crore has already been released to NIT, Patna for implementation of the scheme. NIT, Patna will be imparting training to 16,000 faculties in a period of 4 years (@4000 faculty/ year).
- NIT, Patna has already conducted 35 Faculty Development Programmes imparting training to 1,280 beneficiaries.

#### (iii) Information Security Education and Awareness (ISEA) Project Phase II

- NIT, Patna has been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI). In addition, NIELIT, Patna centre has been included as a Co-Participating Institute with NIELIT, Gorakhpur centre under the project.
- Outlay for 5 years: Rs 65.30 lakh.
- Funds released: Rs 39.47 lakh.
- 2,747 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 7 awareness workshops on information security have been organised covering 852 participants.

#### (iv) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- The indicative target is 66.30 lakh persons. Out of these, 12.23 lakh candidates have been trained and from these 6.93 lakh candidates have been certified.
- (v) Visvesvaraya PhD Scheme for Electronics & IT
- 50 Full-time and 27 part-time PhD seats have been allocated to 2 institutes - National Institute of Technology, Patna and Indian Institute of Technology, Patna.
- 45 Full-time and 5 part-time PhD candidates have been enrolled.

#### (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Bihar, IIT, Patna as Resource Centre and NIT, Patna as Participating Institution have been included in the programme. Following activities have been carried out under the programme at IIT, Patna and NIT, Patna:
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Patna and NIT, Patna.
- 241 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Patna and NIT, Patna in the area of VLSI design/ System design in the first two years of the programme.

- Projects for development of working prototypes of System/ System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.
- A total of Rs 66.48 lakh have been released, including Rs 30.28 lakh to IIT, Patna and Rs 36.20 lakh to NIT, Patna.

#### (vii) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Patna aims to undertake a pro-active role for promotion of NIELIT activities in the region. The centre has been promoting knowledge and skill development in Information, Electronics and Communications Technology (IECT) at various levels in order to meet the requirements of the industry and create an overall development of the region. The centre is also engaged in capacity building training programmes for the State Government of Bihar.
- Area of Excellence: Capacity building in IT and Electronics.
- **Courses Offered:** Long Term Courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 63,882
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 22,073
  - (c) Skill Development in ESDM: 13,326
  - (d) Digital Literacy courses: 28,483
- Number of Schedule Caste (SC) candidate(s)
   Trained: 5,690
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 2,275
  - (c) Skill Development in ESDM: 1,296
  - (d) Digital Literacy courses: 2,119

# Number of Schedule Tribe (ST) candidate(s) Trained: 855

- (a) Formal courses: NIL
- (b) Non-Formal courses (own NIELIT centres): 438
- (c) Skill Development in ESDM: 67
- (d) Digital Literacy courses: 350



# • Number of women candidate(s) - Trained: 13,409

- (a) Formal courses: NIL
- (b) Non-Formal courses (own NIELIT centres): 4,538
- (c) Skill Development in ESDM: 3,458
- (d) Digital Literacy courses: 5,413

#### 2. Promotion of Digital Payments

- MeitY has assigned a target of 148 crore digital payment transactions for 2017-18 and 120 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April, 2017 till December31, 2018 are as follows:

MODES	Volume ( in lakh)
BHIM	1095
USSD	2.7
RuPay Card on PoS	196

(Source: Digipay dashboard)



# 3. Digital Entrepreneurship and Industry

# 3.1 Promotion of IT/ IT Enabled services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 12 successful bidders to set up 12 BPO/ ITES operation for 2,310 seats. Out of these seats, 2,210 seats have been operational. The details of the units are as mentioned in the table below:

S.No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Maurya Heights Buildcon Private Limited	Gaya	100	Operational	60
2	Vision India Services Private Limited	Muzaffarpur	100	Operational	159
3	Datatek Software Solution Private Limited	Patna	100	Operational	153
4	Dynode Software Technology Private Limited	Patna	100	Not Started	NA
5	Krishangi Construction Private Limited	Patna	100	Operational	30

6	Maestros Technical Services Private Limited	Patna	100	Operational	132
7	Route Connect Private Limited	Patna	300	Operational	452
8	Shakti Infotech Private Limited	Patna	100	Operational	111
9	Sunny Star Hotels Private Limited	Patna	100	Operational	85
10	Tata Consultancy Services Limited	Patna	1000	Operational	15
11	Tatwa Technologies Limited	Patna	110	Operational	13
12	Touchstone Private Limited	Patna	100	Operational	149
	Total		2,310		1,359

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crores
2013-14	9.70
2014-15	10.63
2015-16	7.25
2016-17	4.65
2017-18	0.03

#### (iii) Centres and Incubation Space

- **Existing centres**: STPI (Software Technology Park of India) centre is operational at Patna.
- **Proposed/upcoming centres**: Two more centres have been approved by the Governing Council of STPI at Darbhanga and Bhagalpur.

# 4. Research and Development

(i) Setting up of Incubation Centre in the area of ESDM with focus on Medical Electronics at IIT, Patna. The incubation facility developed through MeitY and the State Government partnership aims to incubate 50 startups over a period of 5 years. The primary objective of this is to promote innovation and entrepreneurship to identify, nurture and translate technological ideas and innovation in the broad area of ESDM sector with a focus in Medical Electronics. This incubation centre is being set up in an area of 3000 sq metres constructed space with the state-of-the-art facilities designated for ESDM incubation. The proposed centre aims to incubate 50 startups over a period of 5 years to give impetus to entrepreneurship amongst interested students, faculty and external innovators. 13 Startups have joined the Incubation Centre. The scope for catering to startups have widened as the incubator would support startups in all domains of ESDM sector.

# **5. ERNET India**

#### (i) eduroam Services

• 5 Institutes have been facilitating eduroam connectivity.

# **6. CYBER SECURITY**

- Number of cyber incident (s)reported: 1,188
- Number of alert(s)/advisories issued: 1,150



# Digital Profile of CHHATTISGARH

# I. Digital Access

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 2.85 crore
  Numbers of Aadhaar assigned (2018 LIVE):
- 2.68 crore
- % of saturation 2018 (LIVE): 94.2%
- 0-5 years (LIVE): 18.46 lakh (65 % Aadhaar Saturation)
- 5-18 years (LIVE): 68.57 lakh (84.8% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 23 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 18 NIC Districts.

#### (ii) State Wide Area Network (SWAN)

- The CGSWAN established a secured intranet connecting one State Head Quarter (SHQ) with 17 Districts Head Quarters (DHQ) and 133 Blocks Head Quarters (BHQ).
- CGSWAN has been utilising more than 70% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 14,114 CSCs are functional; out of these, 10,401 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs) (VLEs): 2,836

#### (ii) e-District

• 126 eDistrict services have been launched in all 27 Districts.

#### (iii) DigiLocker

- More than 1.26 lakh Aadhaar enabled registrations have taken place.
- Chhattisgarh Board of Secondary Education and Chhattisgarh eDistrict are integrated

with DigiLocker.

- (iv) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 12 Services are onboarded on UMANG.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 13,427 Digital Life Certificates (DLCs) have been generated and 15,764 DLCs have been successfully verified.

#### (vi) Soil Health Card

• 74.55 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	1348382			
Cycle 2	1266473			
Samples Tested				
Cycle 1	1348382			
Cycle 2	1333829			
SHCs Dispatched				
Cycle 1	7455204			

#### (vii) eHospital

- Rolled out in 20 hospitals in Chhattisgarh, such as, AIIMS, Raipur, District Hospital Baloda Bazar, District Hospital Balod, District Hospital Balrampur, District Hospital Bemetara, District Hospital Bijapur and District Hospital Bilaspur.
- Modules Implemented: Registration and IPD.
- Total transactions, since inception: 16.49 lakh.

#### (viii) e-Transactions

- 184 e-Services have been integrated.
- Around 53.5 crore e-transactions have been performed electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP)

- Around 23,000 students have been registered during 2017-18; out of these, 17,000 applications have been successfully verified.
- Over Rs 7.80 crore has been disbursed during the year 2017-18.

#### (x) eSign

- Nearly, 5.65 lakh eSigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 54 Departments/services have been integrated for Push SMS.
- Over 13 crore SMSes have been sent by the Departments in Chhattisgarh.

• 4 Mobile applications pertaining to the Departments of Chhattisgarh have been downloaded 78,800 times.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates.
- 14,368 Candidates have been enrolled and trained; out of these, 8,401 have been certified.
- (ii) Information Security Education and Awareness (ISEA) project phase II
  - NIT, Raipur, has been selected for the implementation of ISEA project phase II in the capacity of Participating Institute (PI).



- Outlay for 5 years: Rs 65.30 lakh
- Funds released: Rs 36.06 lakh
- 773 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 4 awareness workshops on Information Security have been organised covering 498 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The Government has approved the scheme to make 6 crore persons from rural India digitally literate by March 31, 2019 with a total outlay of Rs 2,351.38 crore.
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- The indicative target is 14.12 lakh persons. Out of these, 9.91 lakh candidates have been trained and from these 5.65 lakh candidates have been certified.

#### (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. NIT, Raipur has been included under the programme as Participating Institution (PI) in the cluster of VNIT, Nagpur. Following activities have been carried out under the programme at this institution:
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at NIT, Raipur.
- 186 Persons have been trained at B. Tech, M. Tech and PhD levels at NIT, Raipur in the area of VLSI design/ System design in the first three years of the programme.
- Projects for development of Board Level Design using the Field Programmable Gate Arrays (FPGAs) are being implemented.
- A total of Rs 36.20 lakh has been released to NIT, Raipur.

#### 2.1 Promotion of Digital Payment

• MeitY has assigned a target of 48 crore digital payment transactions for 2017-18 and 45 crore digital payment transactions for 2018-19.



• Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April1, 2017 till December 31, 2018 are as follows:

MODES	Volume (in thousands)
BHIM	1933.66
USSD	3.13
RuPay Card on PoS	8084.15

(Source: Digipay dashboard)



## 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Village-Tuta, Sector-22, Naya Rajput, Tehsil- Abhanpur, Raipur.
- Implementing Agency: M/s Chhattisgarh State Industrial Development Corporation

Limited (CSIDC).

- Area: 116.48 acres
- Project Cost: Rs 103.88 crore
- Project is in implementation phase.
- Government Grant-in-aid of Rs 21.54 crore has been released.
- 13 Units have booked its land; out of these, 3 units have started its construction activity.
- Infrastructure development is in progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, one application with investment worth Rs 47 crore have been received.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to four successful bidders to set up 4 BPO/ ITES operation for 400 seats in Chhattisgarh. Out of 400 seats, 200 seats are operational. The details of the units are as mentioned in the table below:

#### (i) Information Technology Research Academy (ITRA)

• A multi-institutional R&D project, titled, 'M2M: Improved Water Use efficiency and Agricultural Productivity through Experimental Sensor' has been initiated under the area ITRA-Water. IGKV, Raipur is the Participating Instutite (PI) in the project.

#### (ii) SAMEER

Smart warehouses with Application

Sl. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Cyfuture India Private Limited	Raipur	100	Not Started	NA
2	Ideas Inc Management Private Limited	Raipur	100	Not Started	NA
3	Milestone Soft Tech Private Limited	Raipur	100	Operational	90
4	RDNA Global Solutions Private Limited	Raipur	100	Operational	13
	Total		400		103

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crores
2013-14	2.84
2014-15	4.21
2015-16	6.31
2016-17	7.70
2017-18	8.62

#### (iii) Centres and Incubation Space

• **Existing Centre**: Bhilai

# 4. Research and Development

# of frontier EM and Electronics based Technology.

- Implementing Agency: SAMEER
- Area: Raipur
- Project cost: Rs 4.56 crore
- Date of commencement: April, 2016.
- Expected date of completion: March, 2019.
- The system has been successfully tested at local FCI godown and installation at the actual site is in progress.

# **5. ERNET India**

- (i) eduroam Services
- Three institutes facilitates eduroam connectivity.

### 6. CYBER SECURITY

- Number of cyber incident (s) reported: 564
- Number of alert (s)/ advisories issued: 1,150



# Digital Profile of GOA

# 1. Digital Access

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 15 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 15 lakh
- % of saturation 2018 (LIVE) : 102.5%
- 0-5 years (LIVE): 86,000 (80.4% Aadhaar Saturation)
- 5-18 years (LIVE): 2.84 lakh (95.6 % Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 11 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 1 NIC District.

## 2.2 Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- A total of 85 CSCs are functional; out of these, 37 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 55

#### (ii) e-District

• 65 e-District services have been launched in 2 Districts.

#### (iii) DigiLocker

- More than 9,400 Aadhaar enabled registrations have taken place.
- eDistrict Goa and Water Resources Department, Goa are integrated with DigiLocker.

#### (iv) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 2 Services of Goa have been onboarded on UMANG platform.

(v) Jeevan Pramaan

(vi) Soil Health Card

successfully verified.

Cycle 1	25,000		
Cycle 2	12,000		
Samp	les Tested		
Cycle 1	25,000		
Cycle 2	12,000		
SHCs I	Dispatched		
Cycle 1	25,000		
Cycle 2	12,000		

During the last cycle of Jeevan Pramaan,

5,998 Digital Life Certificates (DLCs) have been generated and 3,196 DLCs have been

37,000 Soil Health Cards have been issued.

Samples Collected



#### (vii) e-Transactions

- 63 e-Services have been integrated.
- Around 118 lakh crore e-transactions have been performed, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP)

- Around 3,000 students are registered during 2017-18; out of these, 2,000 applications have been successfully verified.
- Over Rs 83 lakh has been disbursed during the year 2017-18.

#### (ix) e-Transactions under eTaal 2.0 Project

- A total of 62 e-services have been integrated.
- Around 1.08 crore e-transactions have been recorded, electronically by various e-Governance applications.
- (x) eSign
- Nearly, 2.62 lakh eSigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 12 Departments/services have been integrated for Push SMS.
- Over 1.08 lakh SMSes have been sent by the Departments in Goa using this platform.
- 2 Mobile applications pertaining to the Departments of Goa have been downloaded over 1,240 times.

## II. Digital Empowerment through Digital Inclusion

### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 Candidates.
- State Implementing Agency: Information Technology Corporation of Goa.
- 320 Candidates have been enrolled and trained; out of these, 205 have been certified.
- (ii) Information Security Education and Awareness (ISEA) project phase II
- Goa College of Engineering has been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI).
- Outlay for 5 years: Rs 65.30 lakh
- Funds released: Rs 36.06 lakh
- 275 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 2 awareness workshops on Information Security have been organised covering 173 participants.

# (iii) Visvesvaraya PhD Scheme for Electronics & IT



- 20 Full-time and 7 part-time PhD seats have been allocated to 2 institutes NIT, Goa and Goa University.
- 11 Full-time and 1 part-time PhD candidates have been enrolled.
- (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Goa, NIT, Goa has been included in the programme as Participating Institution (PI). Following activities have been carried out at NIT, Goa under the programme:
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Goa.
- 168 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Goa in the area of VLSI design/System design in the first two years of the programme.
- Projects for development of Board Level Design using the Field Programmable Gate Arrays (FPGAs) are being implemented.
- A total of Rs 40.80 lakh have been released to NIT, Goa.

#### (v) Promotion of Digital Payments

- MeitY has assigned a target of 8.7 crore digital payment transactions for 2017-18 and 12 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, is as follows:

MODES	Volume(in thousands)		
BHIM	3800.96		
USSD	4.89		
RuPay Card on PoS	4067.62		

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Village-Tuem, Taluka-Pernem Goa
  - Implementing Agency: Department of IT, Government of Goa
  - Area: 147.55 acres
  - Project Cost: Rs 161.32 crore
  - Project is in implementation phase.
  - The Government Grant-in-aid amount of Rs 12.43 crore has been released.
  - Infrastructure work is in its nascent progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 10 applications with investment worth Rs 1,581 crore have been received. Out of these 10 applications, 6 applications with proposed investment worth Rs 1,034 crore have been approved.

#### 3.2 Promotion of IT/ IT Enabled Services

#### (i) IT/ITeS

• Software exports made by registered units are as under:

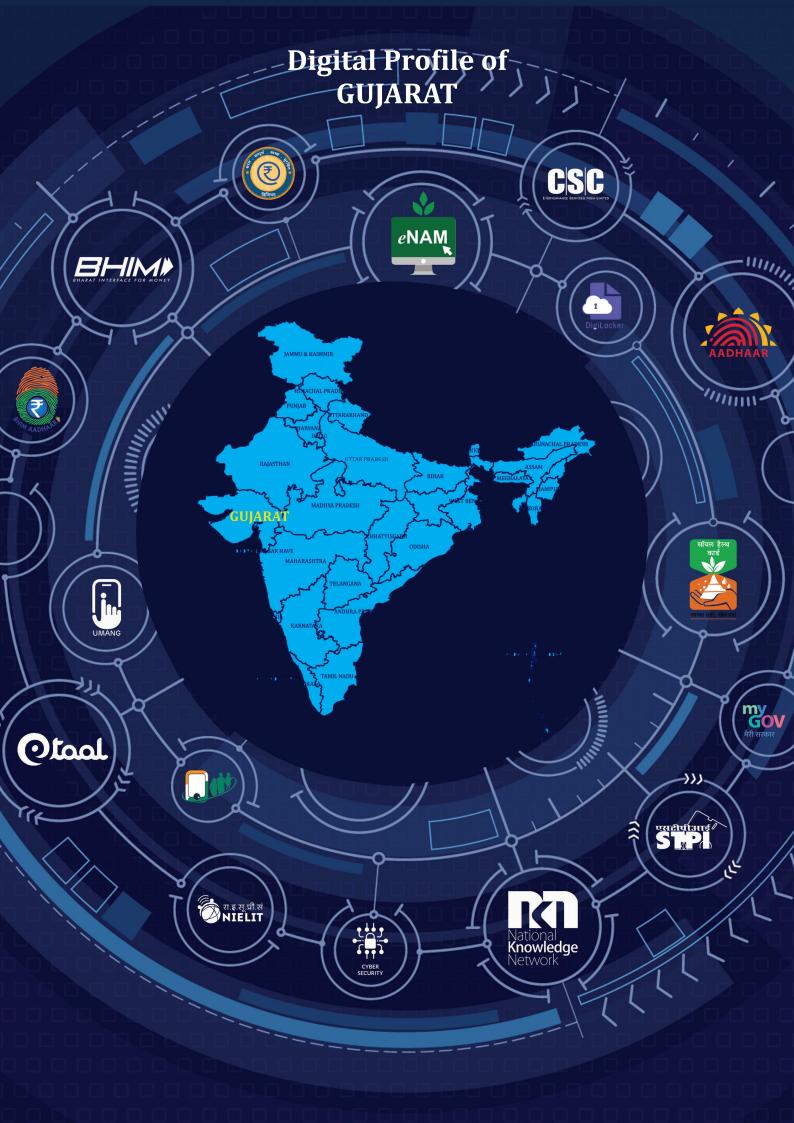
YEAR	Exports in INR crore
2013-14	77.00
2014-15	94.59
2015-16	117.17
2016-17	85.13
2017-18	82.79

#### (ii) Centres and Incubation Space

• Existing centres: There is one STPI centre at Goa.

# 4. CYBER SECURITY

- Number of cyber incident (s) reported: 281
- Number of alert(s)/advisories issued: 1,150



# Digital Profile of GUJARAT

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 6.39 crore
- Numbers of Aadhaar assigned (2018 LIVE): 6.14 crore
- % of saturation 2018 (LIVE): 96.2%
- 0-5 years (LIVE): 37.39 lakh (64.8% Aadhaar Saturation)
- 5-18 years (LIVE): 1.44 crore (87.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 50 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 22 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Gujarat SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 25 Districts Head Quarters (DHQ) and 225 Blocks Head Quarters (BHQ).
- Gujarat SWAN is utilising more than 80% bandwidth of its link capacity.

#### (iv) National Information Infrastructure (NII) pilot project

• A pilot proposal for a period of one year on National Information Infrastructure (NII) for one district each in 7 States, namely Nagaland, Karnataka, Kerala, Gujarat, Uttarakhand, Chandigarh and Puducherry have been implemented successfully, covering 36 blocks, 1,560 Gram Panchayats (GPs) and more than 4,000 Government offices.

## **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

• A total of 8,973 CSCs are functional; out of these, 7,123 CSCs are functional at Gram Panchayat levels.



• Number of women Village Level Entrepreneurs (VLEs): 2,045

#### (ii) e-District

• 202 e-District services have been launched in 33 Districts.

#### (iii) DigiLocker

- More than 4.87 lakh Aadhaar enabled registrations have taken place.
- Gujarat Secondary and Higher Secondary Education Board, and eDistrict Gujarat are integrated with DigiLocker.

#### (iv) UMANG:

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 6 Services of Gujarat have been onboarded on UMANG platform.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 4,065 Digital Life Certificates (DLCs) have been generated and 741 DLCs have been successfully verified.



#### (vi) Soil Health Card

• 94.12 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	15,89,236			
Cycle 2	16,55,130			
Samples Tested				
Cycle 1	15,89,236			
Cycle 2	10,44,088			
SHCs Dispatched				
Cycle 1	51,08,923			
Cycle 2	43,08,304			

#### (vii) eHospital

• In October 2018, Department of Health and Family Welfare, Government of Gujarat, decided to implement ehospital in three health facilities of Mehsana District, Gujarat. It has been decided to implement in One PHC (PHC Kherva), One CHC (CHC-Kahoda) and one Sub-district hospital (SDH-Unjha) of Mehasna District of Gujarat on pilot basis.

#### (viii) e-Transactions:

- 323 e-Services have been integrated
- Around 32,232 lakh crore e-transactions have been performed, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP) :

- Out of 2.35 lakh applications, 2.04 lakh applications have been verified.
- Rs 59.86 crore has been disbursed during the year 2017-18.

#### (x) eSign

- Nearly, 25.32 lakh eSign have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 220 Departments/services have been integrated fo Push SMS.
- Over 19.41 crore SMSes have been sent by the Departments in Gujarat using this platform.
- 6 Mobile applications pertaining to the Departments of Gujarat have been downloaded over 4,880 times.

## 2. Digital Empowerment through Digital Inclusion

### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates
- 13,700 Candidates have been enrolled and trained; out of these, 9,710 have been certified.

#### (ii) Information Security Education and

#### Awareness (ISEA) Project Phase II

- SVNIT, Surat; and Gujarat Technological University, Ahmedabad; have been selected for implementation of ISEA project phase II in the capacity of Resource Centre (RC) and Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 310.34 lakh
- Funds released: Rs 130.70 lakh
- 1,176 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 4 awareness workshops on Information Security have been organised covering 303 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The Government has approved the scheme to make 6 crore persons from rural India digitally literate by March 31, 2019 with a total outlay of Rs 2,351.38 crore.
- The implementing agency for the scheme is CSC e-Governance Services India Limited. The indicative target for Gujarat is 24.97 lakh persons. Out of these, 9.83 lakh candidates have been trained and from these 5.89 lakh candidates have been certified.

#### (iv) Visvesvaraya PhD Scheme for Electronics & IT

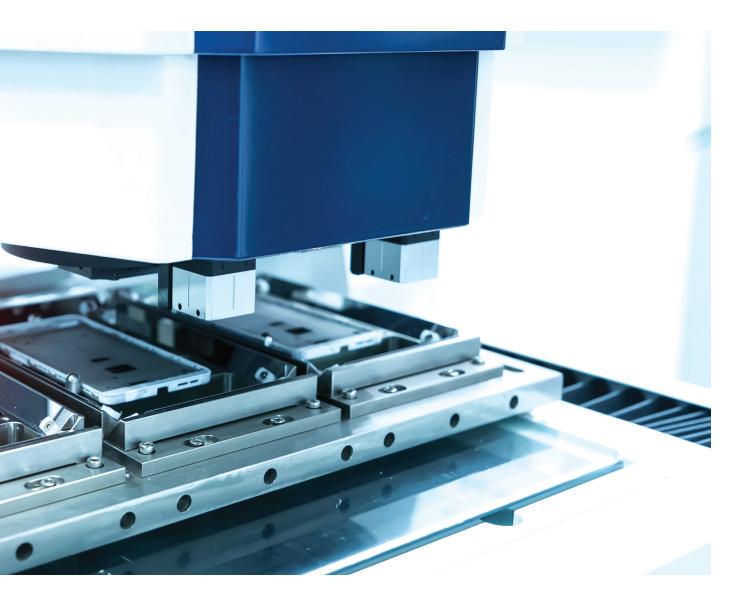
- 26 Full-time and 24 part-time PhD seats have been allocated to 3 institutes -Sardar Vallabhbhai National Institute of Technology, Surat; Nirma University; and IIT, Gandhinagar.
- 20 Full-time and 9 part-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Gujarat, IIT, Gandhinagar and SVNIT, Surat has been included in the programme as Participating Institutions (PI). Following activities have been carried out at IIT, Gandhinagar and SVNIT, Surat under the programme:
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Gandhinagar and SVNIT, Surat.



- 688 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Gandhinagar and SVNIT, Surat in the area of VLSI design/ System design in the first two years of the programme.
- Projects for development of working prototypes of System/ System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.
- A total of Rs 76.60 lakh has been released to Gujarat including Rs 32.95 lakh to IIT, Gandhinagar and Rs 43.64 lakh to SVNIT, Surat.

### 2.2 Promotion of Digital Payments

• MeitY has assigned a target of 168 crore



digital payment transactions for 2017-18 and 150 crore digital payment transactions for 2018-19.

• Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, is as follows:

MODES	Volume (in lakh)
BHIM	1010
USSD	1.43
RuPay Card on PoS	307

# 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Village-Tunda, Taluka-Mundra, District-Kutch.
  - Implementing Agency: M/s Mundra Solar Techno park Private Limited (MSTPL).
  - Area: 631.38 acres
  - Project Cost: Rs 745.14 crore
  - Project is in implementation phase.
  - Government Grant-in-aid of Rs 252.55 crore has been released.
  - 7 Units have booked its land; out of these,

(Source: Digipay dashboard)

3 units have started their commercial production.

- Approximately 75% infrastructure work has been completed and is in progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 27 applications with an investment worth Rs 14,639 crore have been received. Out of these 27 applications, 12 applications with a proposed investment worth Rs 2,050 crore has been approved.

### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 2 successful bidders to set up 2 BPO/ITES operation for 600 seats in Gujarat; out these, 500 seats are operational. The details of the units are as mentioned in table below:

#### (iii) Centres and Incubation Space

- **Existing centres**: STPI centres are operational at Gandhinagar and Surat.
- **Proposed/upcoming centres**: Bhavnagar, Gujarat.

# 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
  - A multi-institutional R&D project titled 'M2M: Improved Water Use efficiency and Agricultural Productivity through Experimental Sensor' has been initiated under the thrust area *ITRA-Water*. IIT Gandhinagar, and AAU Godhra (CAET) are the Participating Institutes (PI) in this project.

Sl. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Net2Source Consulting Limited	Ahmedabad	100	Not Started	NA
2	Regulus Marketing Private Limited	Ahmedabad	500	Operational	268
	Total		600		268

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR Crore
2013-14	77.00
2014-15	94.59
2015-16	117.17
2016-17	85.13
2017-18	82.79

# 5. ERNET India

#### (i) Smart Virtual Classroom

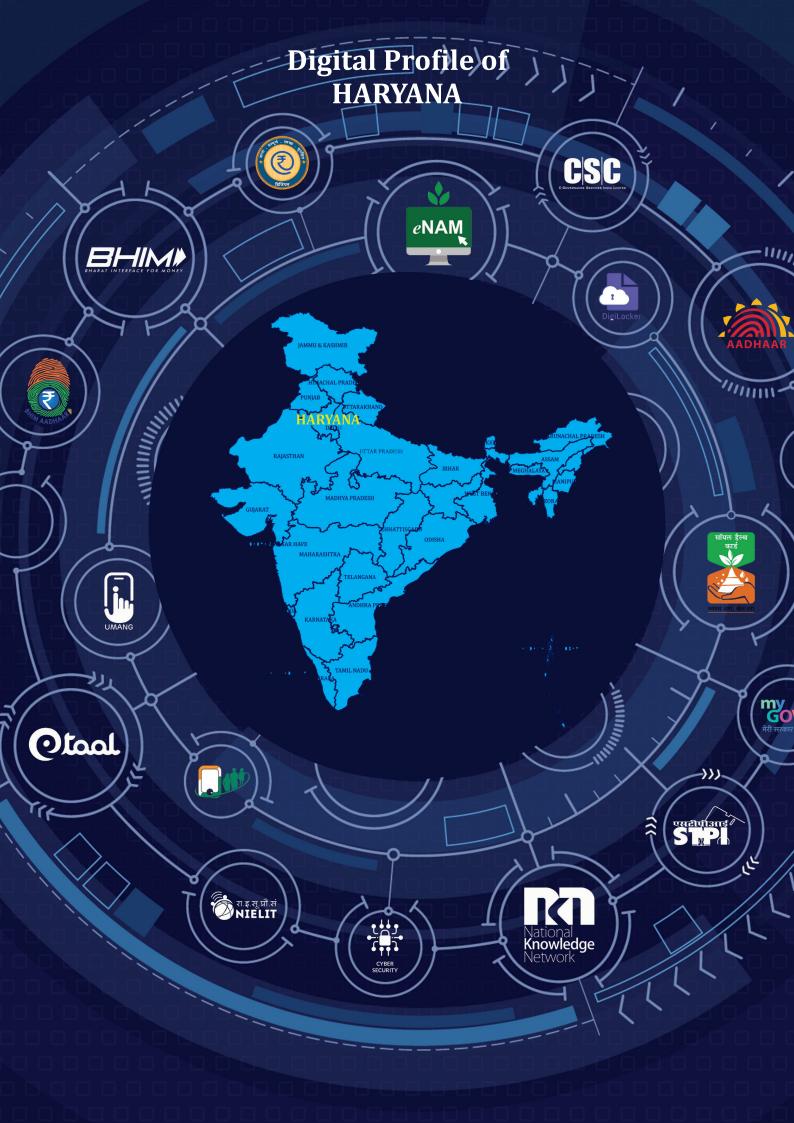
• 699 Schools and 11 Districts Institutes for Education and Training (DIETs) have been covered under the project.

#### (ii) eduroam Services

• 4 Institutes have eduroam connectivity.

## **6. CYBER SECURITY**

- Number of cyber incident (s) reported: 6,009
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of HARYANA

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 2.73 crore
- Numbers of Aadhaar assigned (2018 LIVE): 2.84 crore
- % Saturation, 2018 (LIVE): 104 %
- 0-5 years (LIVE): 25.90 lakh (111.3% Aadhaar saturation)
- 5-18 years (LIVE): 66.78 lakh (106.2% Aadhaar saturation)

#### (ii) National Knowledge Network (NKN)

- 27 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 18 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Haryana SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 22 Districts Head Quarters (DHQ) and 124 Blocks Head Quarters (BHQ).
- Haryana SWAN has been utilising more than 75% bandwidth of its link capacity.

## **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 10,635 CSCs are functional; out of these, 7,036 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 2,120

#### (ii) e-District

• 425 e-District services have been launched in all 22 Districts.

#### (iii) DigiLocker

• More than 3 lakh Aadhaar enabled registrations have taken place.

• eDistrict Haryana, Food and Supplies Department of Haryana and Board of School Education, Haryana are integrated with DigiLocker.

#### (iv) Jeevan Pramaan

- During the last cycle of Jeevan Pramaan, 63,991 Digital Life Certificates (DLCs) have been generated and 56, 286 DLCs have been successfully verified.
- (v) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 21 Services of Haryana Government have been onboarded on UMANG platform.
- 3 Services of VAHAN have been onboarded.



#### (vi) Meghraj

• More than 150 applications are running on 168 virtual servers of Haryana.

#### (vii) Soil Health Card

• 49.32 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	7,88,670			
Cycle 2	12,45,100			
Samples Tested				
Cycle 1	42,27,238			
Cycle 2	5,23,666			
SHCs Dispatched				
Cycle 1	42,27,238			
Cycle 2	7,05,486			

#### (viii) eHospital

- Rolled out in one composite hospital.
- Modules Implemented: Registration, Lab and Inpatient Department (IPD).
- Total number of transactions, since September, 2018: 9,411.

#### (ix) e-Transactions under eTaal 2.0 Project:

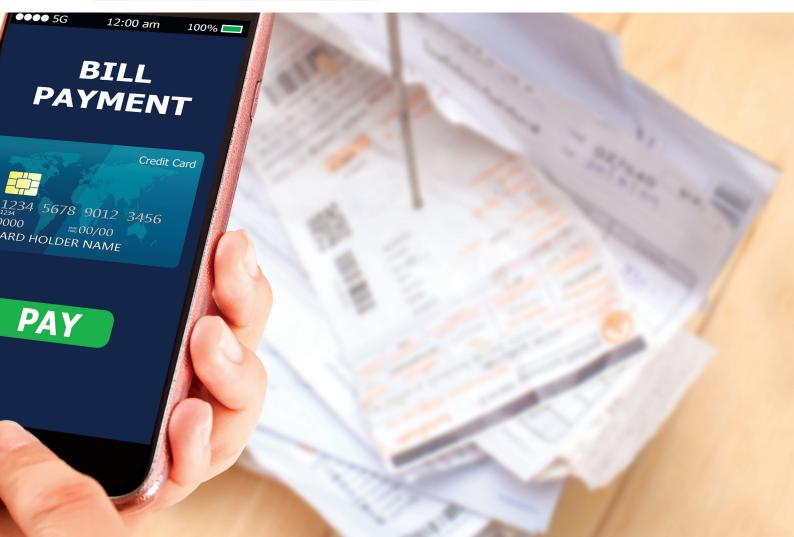
- 173 e-services have been integrated.
- Around 32.29 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (x) National Scholarship Portal (NSP)

- Around 32,000 applications have been registered and out of these, 23,000 applications have been verified.
- Rs 12.96 crore has been disbursed during the year 2017-18.

#### (xi) eSign

• Nearly, 56.92 lakh eSigns have been issued.



- (xii) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
  - 34 Departments/services have been integrated for Push SMS.
  - Over 3.34 crore SMSes have been sent by the Departments in Haryana using this platform.
  - 5 Mobile applications pertaining to the Departments of Haryana have been downloaded more than 8,460 times.

## 2. Digital Empowerment through Digital Inclusion

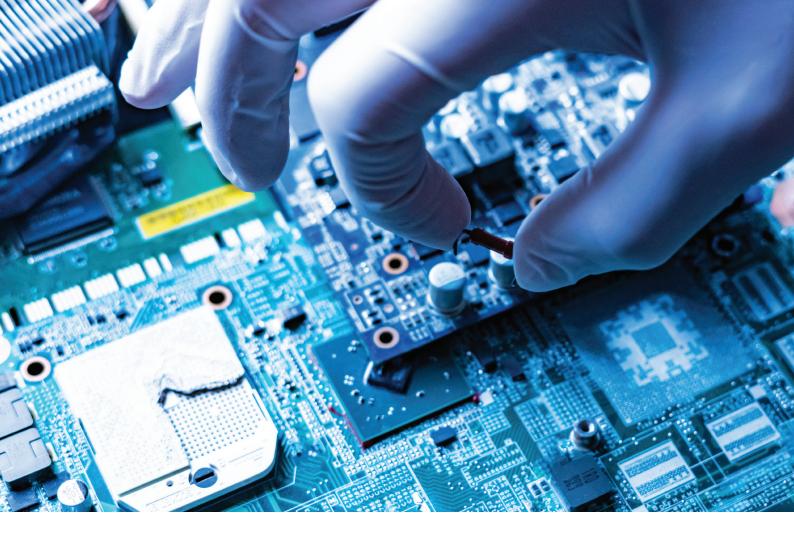
## 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
  - Total Target: 15,000 Candidates.
  - State Implementing Agency: Haryana State Electronics Development Corporation Ltd., Chandigarh.
  - 14,857 Candidates have been enrolled and trained; out of these, 10,832 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
  - ONIT, Kurukshetra has been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI).
  - Outlay for 5 years: Rs 65.30 lakh.
  - Funds released: Rs 36.06 lakh.
  - 1,008 Candidates have been trained/ under-going training in various formal/ non-formal courses and 234 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 7 awareness workshops on Information Security have been organised covering 1,023 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 11.91 lakh persons.

- 9.19 Lakh persons have been trained; out of these, 5.48 lakh persons have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 7 Full-time and 1 part-time PhD seats have been allocated to 1 institute NIT Kurukshetra.
- 7 Full-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Haryana, NIT, Kurukshetra has been included in the programme as Participating Institution (CI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Kurukshetra.
- 282 Persons have been trained at B. Tech, M. Tech and PhD levels at NIT, Kurukshetra in the area of VLSI design/System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Kurukshetra, aims to provide educational and professional services in the areas of Information, Electronics & Communication Technology (IECT) to create awareness among Government Departments and masses by organising workshops and seminars.
- **Courses Offered:** Long Term Courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- A total number of candidate(s) Trained: 23,960
  - (a) Formal courses: 0(?)
  - (b) Non-Formal courses (own NIELIT centres): 356
  - (c) Skill Development in ESDM: 12,300
  - (d) Digital Literacy courses: 11,304
- Number of Schedule Caste (SC) candidate(s) - Trained: 4,337
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT



centres): 93

- (c) Skill Development in ESDM: 2,446
- (d) Digital Literacy courses: 1,798
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 49
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 0
  - (c) Skill Development in ESDM: 13
  - (d) Digital Literacy courses: 36
- Number of women candidate(s) Trained: 7,294
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 106
  - (c) Skill Development in ESDM: 4,195
  - (d) Digital Literacy courses: 2,993

## 2.4 Promotion of Digital Payment

- MeitY has assigned a target of 72 crore digital payment transactions for 2017-18 and 75 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April1, 2017 till December 31,

2018 is as follows:

MODES	Volume(in lakh)
BHIM	1010
USSD	1.43
RuPay Card on PoS	307

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of Electronics Manufacturing

- (i) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 55 applications with investment worth Rs 4,747 crore has been received in Haryana. Out of these 55 applications, 30 applications with proposed investment worth Rs 2,983 crore has been approved.

## 3.2 Promotion of IT/IT enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 3 successful bidders to set up 4 BPO/ITES operation for 300 seats. Out of 300 seats, 100 seats are operational. The details of the units are as mentioned in the table below:

## **3.1 Innovation and Startups**

#### (i) Centres of Excellences (CoEs)

- Centre of Excellence at Gurugram: MeitY has taken further steps after the success of CoE-IoT Bangalore and has decided to add three more CoE's in various States across the country, including one at Gurugram, Haryana.
- Operations of CoE, Gurugram started from

S. no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Haryana State Electronics Development Corporation Limited	Ambala	25	Not Started	NA
2	Haryana Knowledge Corporation Limited	Panchkula	100	Not Started	NA
3	Haryana State Electronics Development Corporation Limited	Panchkula	75	Operational	30
4	Net2Source Consulting Limited	Panchkula	100	Not Started	NA
	Total		300		30

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore		
2013-14	77.00		
2014-15	94.59		
2015-16	117.17		
2016-17	85.13		
2017-18	82.79		

#### (iii) Centres and Incubation Space

- **Existing centres**: There is one STPI centre in Haryana at Gurugram.
- Proposed/upcoming centres: Panchkula

June, 2018. Its focus areas are Industry4.0, Automotive Transportation, Healthcare, and Agriculture. It is also engaged by Internet Corporation for Assigned Names and Numbers (ICANN) to drive the IPv6 research with IIT, Hyderabad. 7 Startups have been incubated at this centre.

# 4. ERNET India

#### (i) Smart Virtual Classroom

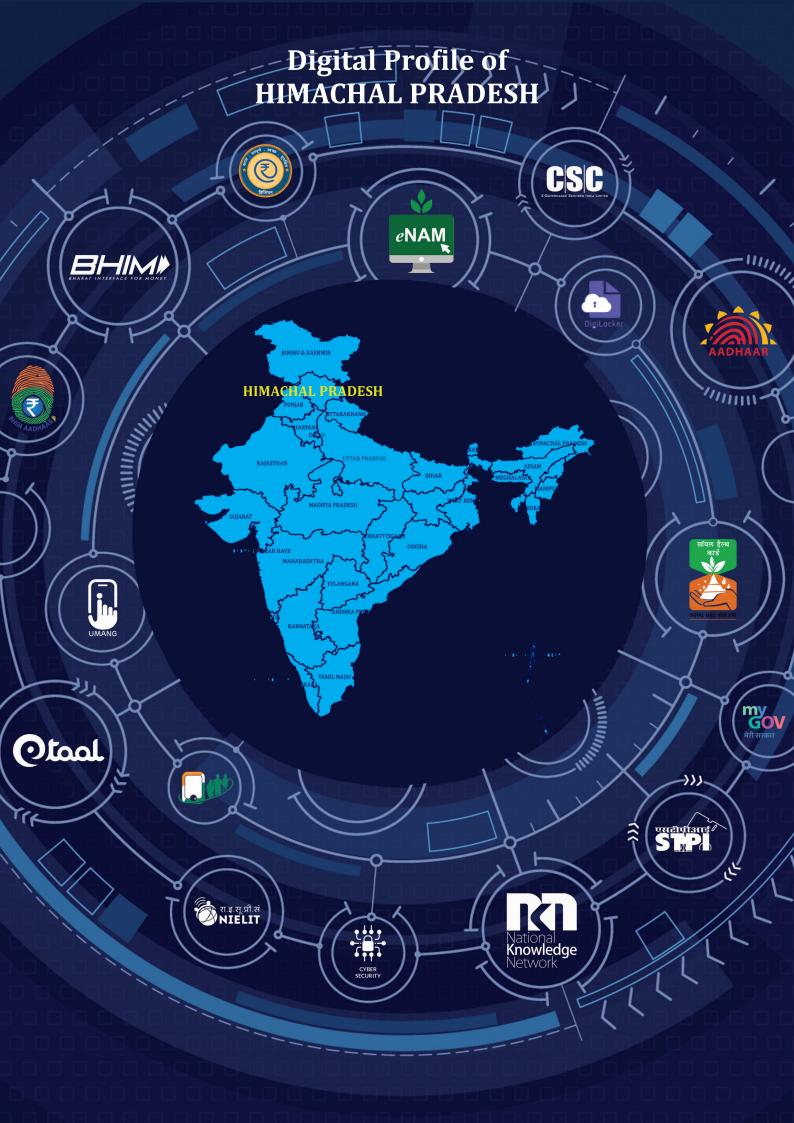
• 287 Schools and 7 District Institutes for Education and Training (DIETs) have been covered under the project.

#### (ii) eduroam services

• 13 Institutes have been facilitated with eduroam connectivity.

# 5. Cyber Security

- Number of cyber incident (s) reported: 2,499
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of HIMACHAL PRADESH

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected, 2018): 73 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 75 lakh
- % Saturation 2018 (LIVE) : 102.7%
- 0-5 years (LIVE): 5.54 lakh (98.6% Aadhaar Saturation)
- 5-18 years (LIVE): 15.41 lakh (101.0% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 19 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 7 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Himachal Pradesh SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 12 Districts Head Quarters (DHQ) and 117 Blocks Head Quarters (BHQ).
- HPSWAN has been utilising more than 85% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 3,651 CSCs are functional; out of these, 2,322 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 809

#### (ii) e-District

• 46 e-District services have been launched in all 12 Districts.

#### (iii) DigiLocker:

- More than 61,430 Aadhaar enabled registrations have taken place.
- eDistrict Himachal Pradesh and Department of Revenue of Himachal Pradesh Government

are integrated with DigiLocker.

#### (iv) Jeevan Pramaan

- During the last cycle of Jeevan Pramaan, more than 50,000 Digital Life Certificates (DLCs) have been successfully generated by the Himachal Pradesh Government.
- (v) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available.
- 15 Services of Himachal Pradesh have been onboarded on UMANG.
- 3 Services of Vahan have been onboarded.

#### (vi) Soil Health Card

• 10.66 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	69,635		
Cycle 2	1,00,000		
Samples Tested			
Cycle 1	69,635		
Cycle 2	1,00,000		
SHCs Dispatched			
Cycle 1	3,85,011		
	6,81,966		

#### (vii) eHospital

- Rolled out in one Government hospital Shri Lal Bahadur Shastri Government Medical College Hospital, Sundernagar and 3 Primary Health Centres - PHC Bir Kangra, PHC Dari Kangra, PHC Kherian Kangra. All the 4 hospitals/ PHCs are operational in the Cloud environment.
- Modules Implemented: OPD, Revisit, Casualty, IPD, Billing, eBloodbank, LIS and Pharmacy.



• Total number of transactions, since inception is more than 62,729.

#### (viii) Transactions under eTaal 2.0 Project

- 170 e-Services have been integrated.
- Around 16 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP)

- Around 7,000 applications are registered; out of these, 5,000 applications have been verified.
- Rs 1.43 crore has been disbursed during the year 2017-18.

#### (x) eSign

- Nearly, 8.10 lakh eSigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 368 Departments/services have been integrated for Push SMS.
- Over 13.36 crore SMSes have been sent by the Departments using this platform.
- 16 Mobile applications pertaining to the Departments of Himachal Pradesh have been downloaded more than 14,698 times.

# 2. Digital Empowerment through Digital Inclusion

## 2.1 Digital Skilling

(i) Skill Development in ESDM for Digital India

- Total Target: 15,000 Candidates.
- State Implementing Agency: Himachal Pradesh Kaushal Vikas Nigam (HPKVM), Shimla.
- 14,188 Candidates have been enrolled and trained; out of these, 11,012 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
  - NIT, Hamirpur has been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI).
- Outlay for 5 years: Rs 148.10 lakh
- Funds released: Rs 36.23 lakh
- 1,260 Candidates have been trained/ under-going training in various formal/ non-formal courses and 285 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 62 awareness workshops on Information Security have been organised covering 14, 953 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 4.44 Lakh persons.
- 1.07 Lakh persons have been trained and out of these, 46,000 persons have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 29 Full-time and 22 part-time PhD seats have been allocated to 2 institutes IIT, Mandi and NIT, Hamirpur.
- 24 Full-time and 1 part-time PhD candidates have been enrolled.

#### (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Himachal Pradesh, IIT, Mandi and NIT, Hamirpur have been included in the programme as Participating Institution.
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Mandi and NIT, Hamirpur.
- 999 Persons have been trained at B. Tech, M. Tech and PhD levels at IIT, Mandi and NIT, Hamirpur in the area of VLSI design/ System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Shimla aims to promote IT services in Himachal Pradesh. NIELIT, Shimla has its presence at Kasumpati (Sub Centre, Shimla) and at Mandi, Dharamshala, Chamba and Nahan in association with Himachal Institute of Public administration. Apart from these associated centres, NIELIT, Shimla is running its course with accredited centres at Una, Bilaspur, Solan, Kullu, Kangra and Hamirpur.
- **Courses Offered:** Long Term (Non-Formal), Short Term courses and Digital Literacy courses.
- Total number of candidate(s)-Trained: 16,945

(a) Formal courses: 559
(b) Non-Formal courses (own NIELIT centres): 2,278
(c) Skill Development in ESDM: 13,147
(d) Digital Literacy courses: 961

- Number of Schedule Caste (SC) candidate(s) Trained: 3,626

   (a) Formal courses: 40
   (b) Non-Formal courses (own NIELIT centres): 1,126
   (c) Skill Development in ESDM: 2,323
   (d) Digital Literacy courses: 137
- Number of Schedule Tribe (ST) candidate(s) - Trained: 508

   (a) Formal courses: 12
   (b) Non-Formal courses (own NIELIT



centres): 104 (c) Skill Development in ESDM: 376 (d) Digital Literacy courses 16

• Number of women candidate(s) - Trained: 8,143

(a) Formal courses: 380
(b) Non-Formal courses (own NIELIT centres): 1,152
(c) Skill Development in ESDM: 6,209
(d) Digital Literacy Courses: 402

### 2.2 Promotion of Digital Payment

• MeitY has assigned a target of 18 crore digital payment transactions for 2017-18 and 22 crore digital payment transactions for 2018-19.



• Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, is as follows:

MODES	Volume(in thousands)
BHIM	12694.18
USSD	29.08
RuPay Card on PoS	4981.21

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

**3.1 Promotion of Electronics** 

## Manufacturing

- (i) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 4 applications with investment worth Rs 236 crore have been received. Out of these 4 applications, 3 applications with a proposed investment worth Rs 118 crore have been approved.

# 3.2 Promotion of IT/ IT Enabled services

#### (i) India BPO Promotion Scheme (IBPS)

In-Principle Approval (IPA) has been issued to 3 successful bidders to set up 3 BPO/ITES operations for 250 seats in Himachal Pradesh and all 250 seats are operational. The details of the units are as mentioned in table below:

S.no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Health Biotech Limited	Baddi	100	Operational	8
2	Rescueres Lifesciences Limited	Baddi	100	Operational	8
3	Enser Communications Private Limited	Shimla	50	Operational	5
TOTAL		250		21	

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore		
2013-14	4.67		
2014-15	8.35		
2015-16	5.16		
2016-17	6.97		
2017-18	7.58		

#### (iii) Centres and Incubation Space

• **Existing centres**: There is one STPI centre at Shimla.

# 4. ERNET India

#### (i) Smart Virtual Classroom

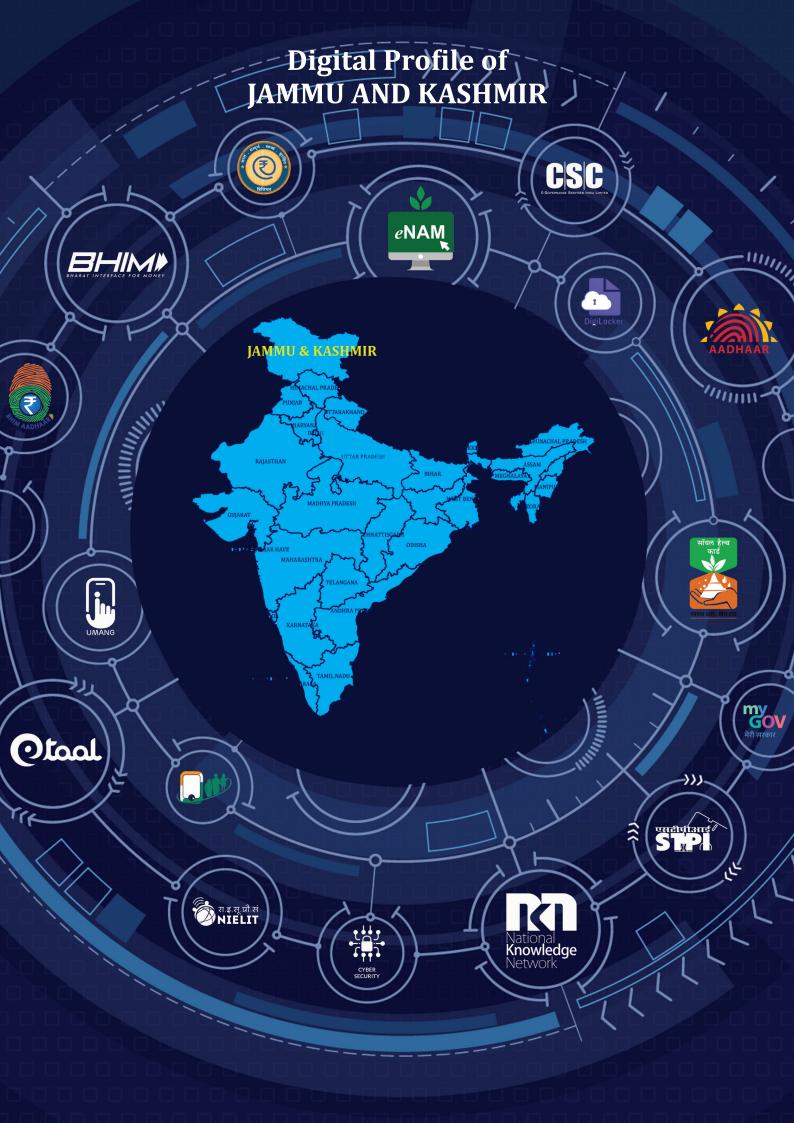
• 280 Schools and 4 District Institutes for Education and Training (DIETs) have been covered under the project.

#### (i) eduroam services

• 2 Institutes are facilitated with eduroam connectivity.

# **5. Cyber Security**

- Number of cyber incident (s) reported: 371
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of JAMMU AND KASHMIR

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 136 lakh
  Numbers of Aadhaar assigned, 2018( LIVE):
- 104 lakh
- % Saturation, 2018 (LIVE): 76.3%
- 0-5 years (LIVE): 4.10 lakh (26.7% Aadhaar Saturation)
- 5-18 years (LIVE): 24.17 lakh (61.6% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 14 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 8 NIC District.

## 2.1 Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- A total of 2, 417 CSCs are functional; out of these, 1696 CSCs are functional at Gram Panchayat levels.
- Number of women Village Level Entrepreneurs (VLEs): 666

#### (ii) DigiLocker

- More than 34,250 Aadhaar enabled registrations have taken place.
- (iii) UMANG (Unified Mobile App for New Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 3 Services of VAHAN have been onboarded.

#### (iv) Jeevan Pramaan

• During the last Cycle, 2,265 Digital Life Certificates (DLCs) have been generated and 1,853 DLCs have been successfully verified.

#### (v) Soil Health Card

• 11.82 Lakh Soil Health Cards have been

Samples Collected					
Cycle 1	<b>Cycle 1</b> 1,60,687				
<b>Cycle 2</b> 1,36,750					
Samples Tested					
<b>Cycle 1</b> 1,60,687					
<b>Cycle 2</b> 1,00,000					
SHCs Dispatched					
<b>Cycle 1</b> 6,92,062					
<b>Cycle 2</b> 4,90,827					



issued.

#### (vi) e-Hospital

- Rolled out in 2 District Hospitals, 4 subdistrict hospitals and 10 Primary Health Centres of Jammu and Kashmir.
- Modules Implemented: Registration, Billing Receipts and Inpatient Department (IPD).
- Around 28 lakh registrations, 1.5 lakh admissions and more than 5 crore billing have been made through this system.

#### (vii) e-Transactions under eTaal 2.0 Project

- Total 101 e-services have been integrated.
- Around 303 lakh e-transactions have been recorded, electronically by various e-Governance applications.

#### (x) National Scholarship Portal (NSP)

- Around 4.10 lakh applications have been registered; out of these, 3.44 lakh applications have been verified.
- A total of Rs 69.52 crore has been disbursed during the year 2017-18.

#### (viii) eSign

- Nearly, 5.26 lakh eSigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
  - 27 Departments/services have been integrated for Push SMS.
  - Over 8.78 lakh SMSes have been sent by the Departments in Jammu and Kashmir using this platform.

## 2. Digital Empowerment through Digital Inclusion

### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates.
- State Implementing Agency: Jammu & Kashmir e-Governance Agency (Ja KeGa), Srinagar.



- 2,135 Candidates have been enrolled and trained; out of these, 1,150 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) project phase II
- NIT, Srinagar and NIELIT, Jammu/ Srinagar (PI/IA) have been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI) and Implementing Agency (IA).
- Outlay for 5 years: Rs 171.45 lakh
- Funds released: Rs 84.29 lakh
- 1,277 Candidates have been trained/ under-going training in various formal/ non-formal courses and 526 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 11 awareness workshops on Information Security have been organised covering 1,087 participants.
- (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 6.58 lakh persons.
- 2.16 Lakh persons have been trained; out of these, 1.26 lakh persons have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 5 Full-time and 4 part-time PhD seats have been allocated to 2 institutes Kashmir University and NIT, Srinagar.
- 5 Full-time and 1 part-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other Engineering colleges. From the State of Jammu & Kashmir, NIT, Srinagar has been included in the programme as Participating Institution (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Srinagar.
- 311 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Srinagar in the

area of VLSI design/System design in the first two years of the programme.

#### (vi) National Institute of Electronics and



#### Information Technology (NIELIT)

- NIELIT, Srinagar/Jammu aims to provide educational and professional services in the areas of Information, Electronics & Communication Technology (IECT) and to create awareness among Government Departments and masses by organising workshops and seminars.
- Area of Excellence: Wireless Sensor Networks; Information Security; Repair & Maintenance of Hospital Equipment; and Office Automation
- **Courses Offered:** Long Term (Formal & Non-Formal), Short Term courses and Digital Literacy courses.
- Total number of candidate(s) Trained: 21,987
  - (a) Formal courses: 540

- (b) Non-Formal courses (own NIELIT centres): 17,999
- (c) Skill Development in ESDM: 567
- (d) Digital Literacy Courses: 2,881



- Number of Schedule Caste (SC) candidate(s) - Trained: 1,007
  - (a) Formal courses: 57
  - (b) Non-Formal courses (own NIELIT centres): 830
  - (c) Skill Development in ESDM: 56
  - (d) Digital Literacy courses: 64
- Number of Schedule Tribes (ST) candidate(s) - Trained: 2,529
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT

centres): 2,403

- (c) Skill Development in ESDM: 35
- (d) Digital Literacy courses: 91
- Number of women candidate(s) Trained: 5,719
  - (a) Formal courses: 168
  - (b) Non-Formal courses (own NIELIT centres): 3,913
  - (c) Skill Development in ESDM: 258
  - (d) Digital Literacy courses: 1,380

## 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 23 crore digital payment transactions for 2017-18 and 20 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since 1st April 2017 till 31st December, 2018 is as follows:

MODES	Volume(in thousands)
BHIM	7,538.49
USSD	9.01
RuPay Card on PoS	1,536.41

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

3.1 Promotion of IT/IT enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 7 successful bidders to set up 9 BPO/ ITES operation for 500 seats in Jammu and Kashmir; out of 500 seats, 350 seats are operational. The details of the units are as mentioned in table below:

Sl. no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Sunshine Autos Private Limited	Bhaderwah	50	Operational	75
2	Unosis IT Solutions Private Limited	Budgam	50	Operational	87

3	Comtech Info Solutions Private Limited	Jammu	50	Operational	55
4	Enser Communications Private Limited	Jammu	100	Not Started	NA
5	Enser Communications Private Limited	Jammu	50	Operational	52
6	ILocus Consulting Private Limited	Sopore	50	Operational	75
7	Comtech Info Solutions Private Limited	Srinagar	50	Not Started	NA
8	Gate Consulting Private Limited	Srinagar	50	Operational	90
9	Ikraft Software Private Limited	Srinagar	50	Operational	75
	TOTAL		500		509

#### (ii) IT/ITeS

• Software exports made by registered units as under:

YEAR	Exports in INR Crore
2013-14	2.18
2014-15	2.45
2015-16	3.35
2016-17	3.58
2017-18	3.92

#### (iii) Centres and Incubation Space

• Existing centres: There are 2 STPI centres at Srinagar and Jammu.

## 3.2 Promotion of Electronics Manufacturing

- (i) Modified Special Incentive Package Scheme (M-SIPS)
- A total of 27 applications with investment worth 9,223 crore have been received in. Out of these 27 applications, 4 applications with proposed investment worth Rs 932 crore have been approved.

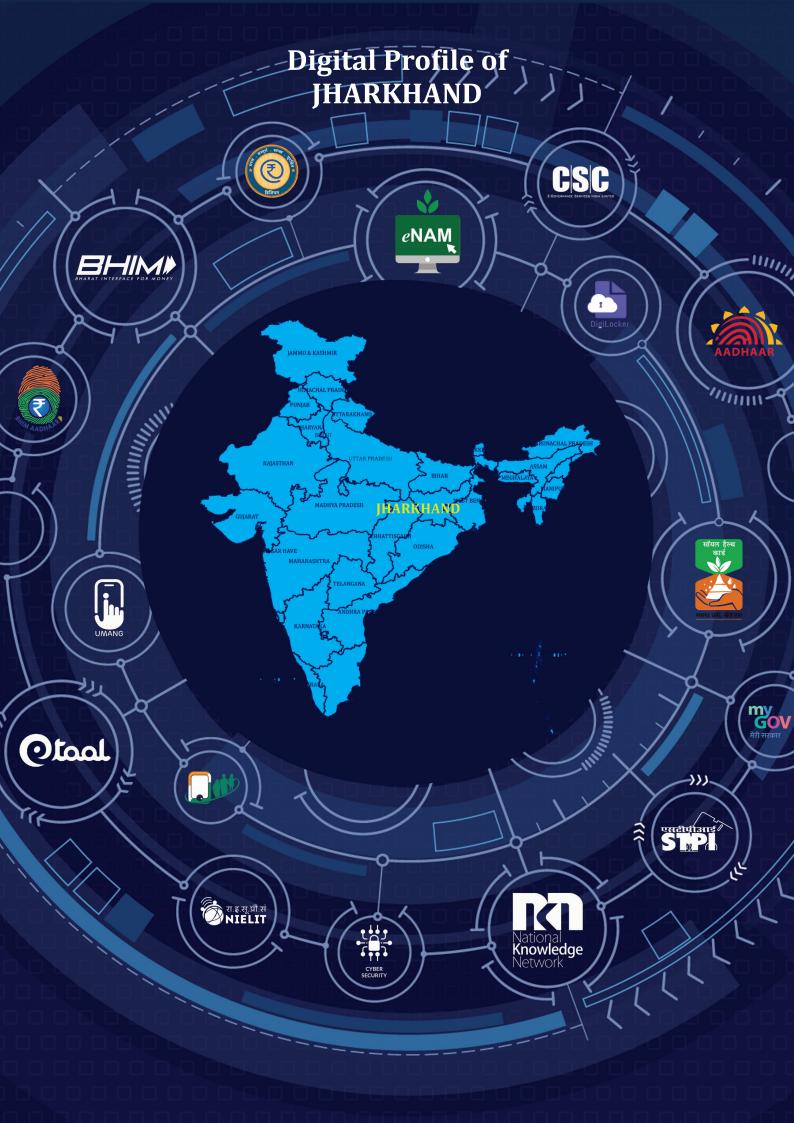
# 4. ERNET India

#### (i) eduroam services

• 1 Institute is facilitated with eduroam connectivity.

# 5. Cyber security

- Number of cyber incident (s) reported: 190
- Number of alert(s)/advisories issued: 1,150



# Digital Profile of JHARKHAND

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018) : 373 lakh
- Numbers of Aadhaar assigned, 2018 (LIVE): 347 lakh
- % Saturation 2018 (LIVE): 93.0%
- 0-5 years (LIVE): 27.96 lakh (67.7% Aadhaar Saturation)
- 5-18 years (LIVE): 99.82 lakh (85.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 18 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 15 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Jharkhand SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 22 Districts Head Quarters (DHQs) and 212 Blocks Head Quarters (BHQs).
- Jharkhand SWAN has been utilising more than 78% bandwidth of its link capacity.

## **1.1 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 13,033 CSCs are functional; out of these, 9, 265 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs (VLEs): 1,708

#### (ii) e-District

• 23 e-District services have been launched in all 8 Districts.

#### (iii) DigiLocker

- More than 1.88 Lakh Aadhaar enabled registrations have taken.
- eDistrict Jharkhand; Revenue; Registration and Land Reforms Department; Jharkhand

Academic Council; School Education Board, Department of Food, Public Distribution & Consumer Affairs (PDS); and Directorate of Provident Fund are integrated with DigiLocker.

# (iv) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 3 Services of VAHAN have been onboarded.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 22,251 Digital Life Certificates (DLCs) have been generated and 5,226 DLCs have been successfully verified.

#### (vi) Soil Health Card

• 8.36 Lakh Soil Health Cards have been issued.

Samples Collected					
<b>Cycle 1</b> 1,15,302					
<b>Cycle 2</b> 73,712					
Samples Tested					
1,15,302					
62,707					
SHCs Dispatched					
6,37,507					
<b>Cycle 2</b> 1,99,054					

#### (vii) eHospital

- Rolled out in two hospitals namely, Central Institute of Psychiatry and Rajendra Institute of Medical Sciences.
- Modules Implemented: Registration and IPD.
- Total number of transactions, since inception is more than 2.32 lakh.

#### (viii) e-Transactions under eTaal 2.0 Project

- Around 1.22 lakh applications have been registered; out of these, 82,000 applications have been successfully verified.
- Over Rs 48.73 crore has been disbursed during the year 2017-18.

(ix) National Scholarship Portal (NSP):

- Around 15,000 applications have been processed using NSP during the year 2017-18.
- Around Rs 3 crore has been disbursed using the portal during the year 2017-18.

#### (ix) eSign

- Nearly, 15.17 lakh esigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 81 Departments/services have been integrated for Push SMS.
- Over 21.49 crore SMSes have been sent by the Departments using this platform.
- 7 Mobile applications pertaining to the Departments of Jharkhand have been downloaded more than 1.56 lakh times.

## 2. Digital Empowerment through Digital Inclusion

## 2.1 Digital Skilling

# (i) Skill Development in ESDM for Digital India

- Total Target: 15,000 Candidates.
- State Implementing Agency: Jharkhand Agency for Promotion of Information Technology (JAP-IT), Ranchi.
- A total of 14,845 candidates have been enrolled and trained; out of these, 10,135 candidates have been certified.
- (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 18.03 Lakh persons.
- A total of 11.35 lakh candidates have been

trained; out of these, 6.15 lakh candidates have been certified.

- (iii) Visvesvaraya PhD Scheme for Electronics & IT
- 5 Full-time and 7 part-time PhD seats have been allocated to one institute - Indian School of Mines, Dhanbad, Jharkhand.
- 3 Full-time and 2 part-time PhD candidates have been enrolled.
- (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Jharkhand, NIT, Jamshedpur has been included in the programme as Participating Institution (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Jamshedpur.
- 328 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Jamshedpur in the area of VLSI design/System design in the first three years of the programme.
- (v) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Ranchi aims to provide educational & professional services in the areas of Information, Electronics & Communication Technology (IECT) and to create awareness among Government Departments and masses by organising workshops and seminars.
- **Courses Offered:** Long Term (Non-Formal) and Digital Literacy courses
- Total number of candidate(s) Trained: 16,767
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 257
  - (c) Skill Development in ESDM: 13,364
  - (d) Digital Literacy courses: 3,146
- Number of Schedule Caste (SC) candidate(s) Trained: 1,307
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 26



- (c) Skill Development in ESDM: 1,053
- (d) Digital Literacy courses: 228
- Number of Schedule Tribes (ST) candidate(s) - Trained: 2,202
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 217
  - (c) Skill Development in ESDM: 1,397
  - (d) Digital Literacy courses: 588
- Number of women candidate(s) Trained: 4,828
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 118
  - (c) Skill Development in ESDM: 3,743
  - (d) Digital Literacy courses: 967

## 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 60 crore digital payment transactions for 2017-18 and 60 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 is as follows:

MODES	Volume (in thousands)
BHIM	47436.87
USSD	97.03
RuPay Card on PoS	7027.6

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of Electronics Manufacturing

- (i) Electronic Manufacturing Cluster (EMC)
- Greenfield EMC at Adityapur, Saraikela, Kharsawan District.
  - Implementing Agency: M/s Jharkhand Industrial Area Development Authority (JIADA).



- Area: 82.49 Acres
- Project Cost: Rs 97.88 crore
- Project is in implementation phase.
- Government Grant-in-aid of Rs 8.30 crore has been released.
- 8 Units have booked their land.
- Infrastructure development is in progress.
- Greenfield EMC at Kakkanad Village, Kanayannur Taluk, Ernakulam District.
  - Implementing Agency: M/s Kerala Industrial Infrastructure Development Corporation (KINFRA).
  - Area: 66.87 acres
  - Project Cost: Rs 140.01crore
  - Project is under implementation.
  - Government Grant-in-aid of Rs 10 crore

has been released.

- 1 Unit has booked their land.
- Infrastructure development is in progress.

## 3.2 Promotion of IT/IT enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 11 successful bidders to set up 13 BPO/ ITES operations for 2,450 seats in Jharkhand. Out of 2,450 seats, 1500 seats have been operational. The details of the units is as mentioned in table on the next page:

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore
2013-14	8.66
2014-15	7.00
2015-16	49.16
2016-17	2.00
2017-18	6.64

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Sri Publications And Stationers Private Limited	Deoghar	50	Not Started	NA
2	Ritika Printech Private Limited	Dhanbad	50	Not Started	NA
3	Shyama Buildcon Private Limited	Hazaribag	100	Not Started	NA
4	Amitabh Constructions Private Limited	Ranchi	350	Not Started	NA
5	Concentrix Daksh Services India Private Limited	Ranchi	500	Operational	96
6	Deccan iServices Private Limited	Ranchi	200	Not Started	NA
7	Kraft Outdoor Media Private Limited	Ranchi	100	Operational	24
8	Mica Educational Company Private Limited	Ranchi	100	Operational	2
9	Nimbus Adcom Private Limited	Ranchi	250	Operational	69
10	Ritika Printech Private Limited	Ranchi	50	Operational	75
11	Route Connect Private Limited	Ranchi	550	Operational	5
12	Sparrow Softech Private Limited	Ranchi	100	Not Started	NA
13	Sri Publications And Stationers Private Limited	Ranchi	50	Operational	62
	Total		2,450		333

#### (iii) Centres and Incubation Space

- **Existing centres:** STPI (Software Technology Parks of India) has one centre at Ranchi.
- **Proposed/upcoming centres:** Jamshedpur, Deoghar, Dhanbad and Bokaro.

# 4. ERNET India

#### (i) eduroam services

• 5 Institutes are facilitating eduroam service.

# 5. Cyber Security

- Number of cyber incident(s) reported: 2,500
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of KARNATAKA

# **1. Digital Access**

## **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 6.61 crore
- Numbers of Aadhaar assigned, 2018 (LIVE): 6.15 crore
- % Saturation 2018 (LIVE): 93.0%
- 0-5 years (LIVE): 33.62 lakh (61.5% Aadhaar Saturation)
- 5-18 years (LIVE): 1.33 crore (85.4% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 110 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 30 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Karnataka SWAN established a secured intranet connecting one State Head Quarters (SHQs) with 27 Districts Head Quarters (DHQs) and 148 Blocks Head Quarters (BHQs).
- Karnataka SWAN has been utilising more than 92% bandwidth of its link capacity.

## **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total 7,363 CSCs are functional; out of these, 3,644 CSCs are functional at Gram Panchayat level.
- Number of women Village Level Entrepreneurs (VLEs): 2,032

#### (ii) e-District

• 65 e-District services have been launched in 30 Districts.

#### (iii) DigiLocker

- More than 4.60 lakh Aadhaar enabled registrations have taken place.
- Karnataka Secondary Education Examination Board, Department of Pre University Education, Revenue Department and Department of Transport of Karnataka are

integrated with DigiLocker.

- (iv) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Karnataka can access the Central Government services available on UMANG.

#### (iv) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 44,604 Digital Life Certificates (DLCs) have been generated; out of these, 28,174 DLCs have been successfully processed.

#### (v) Soil Health Card

• 1.29 crore Soil Health Cards have been issued.

Samples Collected	
Cycle 1	16,65,765
Cycle 2	15,98,908
Samples Tested	
Cycle 1	16,65,765
Cycle 2	14,38,521
SHCs Dispatched	
Cycle 1	78,32,189
Cycle 2	46,48,581

#### (vi) eHospital

- 69 Hospitals have been onboarded in cloud environment.
- Major hospital includes Chigateri District Hospital, Davangere; MIMS Teaching Hospital, Mandya; Bidar Institute of Medical Sciences Teaching Hospital, Bidar; Mcgann District Teaching Hospital, Shivamogga; District Hospital, Chamarajnagara; and District Hospital, Kalaburagi.
- Modules Implemented: OPD, Revisit, Casualty, IPD, Billing, eBloodbank, LIS and Pharmacy.
- Around 1.48 crore e-hospital transactions

have been performed.

## (vii) e-Transactions under eTaal 2.0 Project

- 108 e-Services have been integrated in Puducherry.
- Around 115 lakh e-transactions have been recorded, electronically by various e-Governance applications.

## (viii) National Scholarship Portal (NSP)

- Around 14.58 lakh applications have been received; out of these, 13.10 lakh applications have been successfully verified.
- Around Rs 159.6 crore has been disbursed using the portal during 2017-18.

#### (ix) e-Transactions under eTaal 2.0 Project

- 140 e-Services have been integrated.
- Around 43.65 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (x) eSign

- Nearly, 49.93 lakh esigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 20 Departments/services have been integrated for Push SMS.
- Over 9.02 crore SMSes have been sent by the Departments of Karnataka using this platform.
- 4 Mobile applications pertaining to the Departments of Karnataka have been downloaded more than 22,182 times.

# 2. Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates
- State Implementing Agency: ICT Society
- 6,521 Candidates have been enrolled and trained; out of these, 3,426 candidates have been certified.

- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- IISc, Bangalore; NIT, Surathkal; and C-DAC, Bangalore; have been selected for the implementation of ISEA Project Phase II in the capacity of Information Security Research and Development Centre (ISRDC), Resource Centre (RC) and Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 663.21 lakh
- Funds released: Rs 223.57 lakh
- 1,326 Candidates have been trained/ under-going training in various formal/ non-formal courses and 678 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 140 awareness workshops on Information Security have been organised covering 8,059 participants.

## (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 27.05 Lakh persons
- 3.87 Lakh persons have been trained; out of these, 2.10 lakh persons have been certified.

## (iv) Visvesvaraya PhD Scheme for Electronics & IT

- 99 Full-time and 3 Part-time PhD seats have been allocated to 3 institutes IISc, Bangalore; IIIT, Bangalore; and NIT, Suratkal.
- 88 Full-time PhD candidates have been enrolled.

## (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Karnataka, IISc, Bangalore as Resource Center and NIT, Surathkal as Participating Institution (PI) have been included in the programme.
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IISc, Bangalore and NIT, Surathkal.
- 350 Persons have been trained at B. Tech, M.Tech and PhD levels at IISc, Bangalore and NIT, Surathkal in the area of VLSI design/

System design in the first two years of the programme.

# 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 137 crore digital payment transactions for 2017-18 and 175 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 is as follows:

MODES	Volume(in thousands)
BHIM	274796.78
USSD	144.5
RuPay Card on PoS	86449.91

# 3. Digital Entrepreneurship and Industry

**3.1 Promotion of Electronics** 

# Manufacturing

# (i) Electronic Manufacturing Cluster (EMC)

- Common Facility Centre at Hebbal, Hottagalli, Mysore.
  - Implementing Agency: M/s Mysore ESDM Cluster.
  - Area: 1.50 acres
  - Project Cost: Rs 29.53 crore
  - Project is in implementation phase.
  - Government Grant-in-aid of Rs 4.26 crore have been released.
  - Infrastructure development is in progress.

# (ii) Modified Special Incentive Package Scheme (M-SIPS)

• A total of 49 applications with investment worth Rs 15,776 crore have been received. Out of these, 49 applications, 30 applications are approved with a proposed investment worth Rs 7,416 crore.

# 3.2 Promotion of IT/IT enabled Services

- (i) India BPO Promotion Scheme (IBPS)
- In-Principle Approval (IPA) has been issued to 9 successful bidders to set up 15 BPO/ ITES operations for 2,100 seats in Karnataka. Out of these, 1,100 seats are operational. The details of the units are as mentioned in table below:

S.no.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Redeem Systems Private Limited	Attibele	200	Operational	11
2	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Bijapur	50	Not Started	NA
3	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Chikmagalur	50	Not Started	NA
4	Skycliff IT Private Limited	Dharwad	300	Operational	83
5	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Gulbarga	100	Operational	0

6	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Hospet	50	Not Started	NA
7	NSI Next Wealth IT Services Private Limited	Hubli	100	Operational	75
8	Karvy Data Management Services Limited	Mangalore	100	Operational	176
9	Prasanna Technologies Private Limited	Mangalore	200	Operational	146
10	Karmic Design Private Limited	Manipal	100	Not Started	NA
11	Wipro Limited	Mysore	500	Not Started	NA
12	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Sringeri	50	Not Started	NA
13	Data Collection Infotech (India) Private Limited	Tumkur	100	Operational	43
14	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Tumkur	100	Not Started	NA
15	Mandamus Info Knowledge Consultants (Banglore) Private Limited	Udupi	100	Not Started	NA
	Total		2100		534

## (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore
2013-14	103720.16
2014-15	109798.00
2015-16	125419.00
2016-17	141846.00
2017-18	152280.16

## (iii) Centres and Incubation Space

- Existing Centres: Software Technology Parks of India (STPI) centres are operational at Bengaluru, Mangaluru, Manipal, Mysuru and Hubballi.
- **Proposed/upcoming centres:** Davangere, Karnataka.

# **3.3 Innovation and Startups**

# (i) Centre of Excellence (CoE) - IoT

MeitY, ERNET and NASSCOM has set up a Centre of Excellence (CoE) in IoT to nurture and promote startup culture in India. The CoE shall operate in Public Private Partnership (PPP) mode. NASSCOM-MeitY-ERNET CoE for IoT at Bengaluru was set up in June, 2015, with an objective of enabling India to become a technology hub for emerging technologies. In addition, CoE will support the Government initiatives in social areas, such as, agriculture, healthcare, water, transportation, energy, security and privacy of data. Under COE-IoT Bengaluru, a number of startups have been incubated and are getting uninterrupted access to advanced equipment. The startups have an opportunity to make direct connects with various strategic partners of NASSCOM and get validated by experts of the industry. The following are the highlights of CoE- IoT, Bengaluru:

- 47 Startups have been incubated, connected with over 500 startups Pan-India and 17 startups have been graduated.
- Partners signed up: strategic-14, cocreate-4, innovation-3, infrastructure-4, association partner-1.
- Organised/participated in 21 thought leadership events across India.
- Focussed on Industry 4.0, automotive/ transportation, healthcare, energy, agriculture and smart cities.
- Participation with the industry for IoT standards and policies formation.
- 43 IoT researchers have been incubated.

## (ii) Internet of Things (IoT) management framework for Smart Cities – ERNET joint activities with IISc, Bangalore

- ERNET India is jointly working with IISc, Bangalore to set up an experimental LoRaWAN network. Under this, the plan is to make preliminary development and management tools, which are robust and demonstrate with at least one Smart City application on the test bed. A few smart streetlights deployed in IISc campus are being controlled by emerging Indian Urban Data Exchange (IUDX) stack.
- ERNET will also look to contribute towards IUDX stack through TSDSI/ OneM2M contribution/participation.

# 4. Research and Development

(i) Information Technology Research

#### Academy (ITRA)

- A multi-institutional R&D project titled as 'UrbanFlood : Integrated Urban Flood Management in India (IUFM), Technology-Driven Solutions' has been initiated under the thrust area ITRA-Water. IISc Bangalore is the Participating Institute (PI) in this project.
- Multi-institutional R&D project titled 'e-Varaha : Information System for Safe Pork Production in North Eastern India' has been initiated under the thrust area ITRA-Ag&Food. Veterinary College, Karnataka Veterinary, Animal and Fisheries Sciences University (VCKVAFSU) is the Participating Institute (PI) in this project.

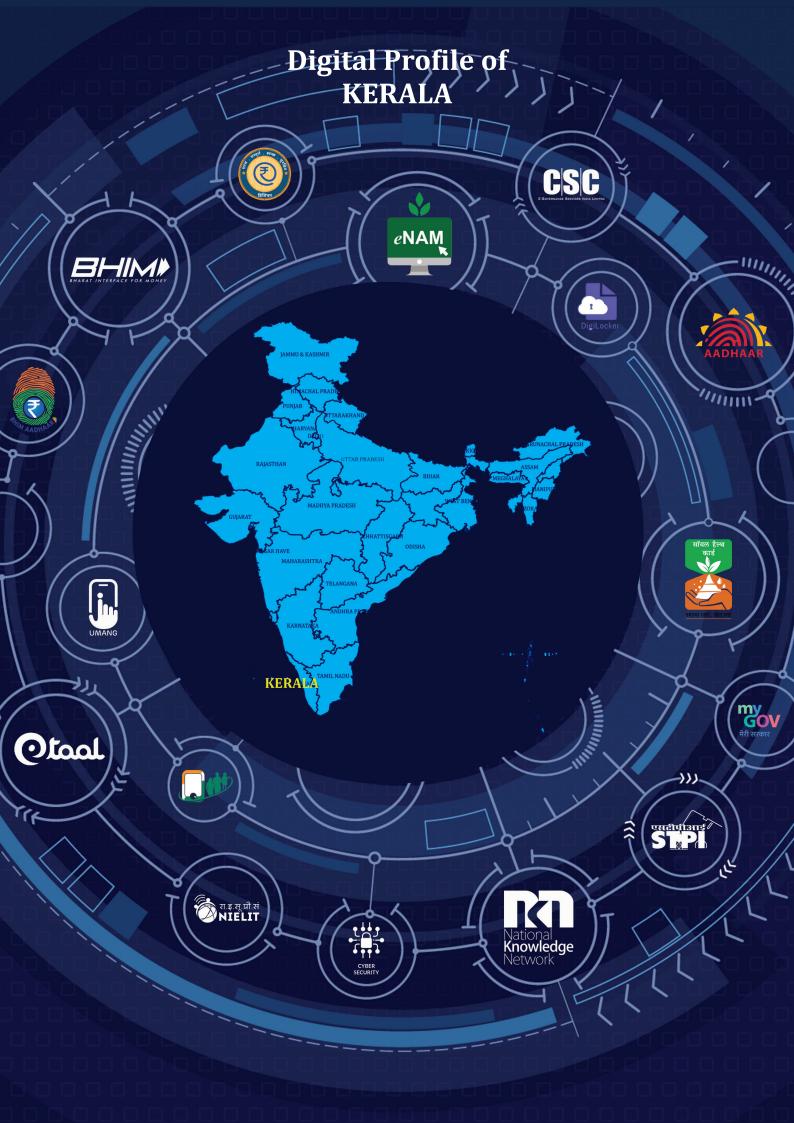
#### (ii) Electronic Waste (eWaste)

- A demonstration plant has been set up at Bengaluru with participation from the State Government of Karnataka, which is beneficial for organised and unorganised sector to process PCBs in safe, environmentally-sound method.
- e-Waste has various components like PCB, plastic and metal etc. The demonstration plant has established a technology for processing 1000 kg of PCB/shift (equivalent to 35 MT of e-waste), and so far, has processed 50 MT of PCB from 750 MT of e-waste. The present process with 95% yield could recover 150gm gold, 600-700gm silver, 70-80gm of palladium and 200kg of copper from 1 Metric Ton of computer mother board. The technologies are now being extended to recycling industry through technology transfer process for initiating PCB recycling in India; earlier PCBs were being exported to developed countries.

# 5. ERNET India

- (i) eduroam services
- 15 Institutes are facilitating eduroam service.

- Number of cyber incident(s) reported: 4,715
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of KERALA

# **1. Digital Access**

# **1.1 Digital Infrastructure**

# (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 353 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 361 lakh
- Saturation % 2018 (LIVE): 102.3%
- 0-5 years (LIVE): 13.97 lakh (53.8% Aadhaar Saturation)
- 5-18 years (LIVE): 67.63 lakh (91.6% Aadhaar Saturation)

## (ii) National Knowledge Network (NKN)

- 83 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have been extended to 18 NIC Districts including one district from Puducherry and four Districts from Tamil Nadu.

# (ii) State Wide Area Network (SWAN)

- The Kerala SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 16 Districts Head Quarters (DHQ) and 152 Blocks Head Quarters (BHQ).
- Kerala SWAN has been utilising more than 70% bandwidth of its link capacity.

# **1.1 Digital Delivery of Services**

# (i) Common Services Centres (CSCs)

- A total, 3,722 CSCs are functional; out of these, 2,081 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 1,863

## (ii) e-District

• 39 e-District services have been launched in all 14 Districts.

# (iii) DigiLocker

- More than 2.88 lakh Aadhaar enabled registrations have taken place.
- eDistrict Kerala is integrated with DigiLocker.

- (iv) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Kerala can access the Central Government services available on UMANG.

## (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 45,087 Digital Life Certificates (DLCs) have been generated and 4,858 DLCs have been successfully verified

# (vi) Meghraj

- Details of Meghraj hosting in Kerala:
  - Production Web Servers: 37
  - Production DB Servers: 14
  - Production AD Servers: 2
  - Other Servers: 6 (Staging, Backup & DSC)
  - GIM Specific Servers: 14

# (vii) Soil Health Card

• 14.37 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	1,27,585			
Cycle 2	80,095			
Samples Tested				
Cycle 1	1,27,585			
Cycle 2	62,638			
SHCs Dispatched				
Cycle 1	7,63,435			
Cycle 2	<b>Cycle 2</b> 6,73,960			

## (viii) eHospital

• 9 Hospitals are onboarded in ehospital including Government Medical College, Kozhikode; Malabar Cancer Centre, Thalassery; and Vaidyarathnam P.S Varier

Ayurveda College Hospital, Kottakka.

- Modules Implemented: Registration, Lab and Inpatient Department (IPD).
- More than 7.7 lakh e-hospital transactions have been performed.

## (ix) National Scholarship Portal (NSP)

- Around 9.88 lakh applications have been registered; out of these, 8.82 lakh applications have been successfully verified.
- Over Rs 160.96 crore has been disbursed during the year 2017-18.

## (x) e-Transactions under eTaal 2.0 Project:

- 219 e-Services have been integrated.
- Around 221 crore e-transactions have been recorded, electronically by various e-Governance applications.

## (xi) eSign

- Nearly 6.19 lakh esigns have been issued.
- (xii) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 122 Departments/services have been integrated for Push SMS.
- Over 72.56 crores SMSes have been sent by the Departments in Kerala using this platform.
- 5 Mobile applications pertaining to the Departments of Kerala have been downloaded more than 4,300 times.

# 2. Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
  - Total Target: 11,250 Candidates.
- 3,992 Candidates have been enrolled and trained; out of these, 2,068 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- IIITM, Kerala, C-DAC, Thiruvananthapuram; and NIELIT, Calicut; have been selected for

implementation of ISEA Project Phase II in the capacity of Participating Institute (PI) and Implementing Agency, respectively.

- Outlay for 5 years: Rs 277.60 lakh
- Funds released: Rs 164.69 lakh
- 1,732 Candidates have been trained/ under-going training in various formal/ non-formal courses and 854 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 28 awareness workshops on Information Security have been organised covering 1,432 participants.

# (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 12.57 Lakh persons.
- 17,000 Candidates have been trained; out of these, 6,364 candidates have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 8 Full-time and 2 part-time PhD seats have been allocated to 2 institutes - Mahatma Gandhi University, Kerala and NIT, Calicut.
- 7 Full-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Jharkhand, NIT, Jamshedpur has been included in the programme as Participating Institution.
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Jamshedpur.
- 328 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Jamshedpur in the area of VLSI design/System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Calicut aims to provide educational and professional services in the areas of Information, Electronics & Communication

Technology (IECT) and to create awareness among the Government Departments and masses by organising workshops and seminars.

- Area of Excellence: Embedded Systems & IoT; VLSI / ASIC Design & Verification; Process Control & Instrumentation; Cloud Computing and Information Security; and Big Data Analytics and Artificial Intelligence.
- **Courses Offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 7,794
  - (a) Formal courses: 267
  - (b) Non-Formal courses (own NIELIT centres): 5,559
  - (c) Skill Development in ESDM: 982
  - (d) Digital Literacy courses: 986
- Number of Schedule Caste (SC) candidate(s) - Trained: 2,080
  - (a) Formal courses: 60
  - (b) Non-Formal courses (own NIELIT centres): 1,849
  - (c) Skill Development in ESDM: 135
  - (d) Digital Literacy courses: 36
- Number of Schedule Tribe (ST) candidate(s) - Trained: 103
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 99
  - (c) Skill Development in ESDM: 3
  - (d) Digital Literacy courses: 1
- Number of women candidate(s) Trained: 2,808
  - (a) Formal courses: 140
  - (b) Non-Formal Courses (own NIELIT centres): 2,006
  - (c) Skill Development in ESDM: 591
  - (d) Digital Literacy Courses: 71

# 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 86 crore digital payment transactions for 2017-18 and 70 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment

modes, namely, BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in lakh)
BHIM	1,296
USSD	1.41
RuPay Card on PoS	767

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

# 3.1 Promotion of Electronics Manufacturing

## (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Kakkanad Village, Kanayannur Taluk, Ernakulam District.
  - Implementing Agency: M/s Kerala Industrial Infrastructure Development Corporation (KINFRA).
  - Area: 66.87 acres
  - Project Cost: Rs 140 crore
  - Project is in implementation phase.
  - First instalment of Government Grant-inaid amounting to Rs 10 crore has been sanctioned.
  - 1 Unit has been allotted land.
  - Infrastructure development is in progress.

# (ii) Modified Special Incentive Package Scheme (M-SIPS)

• Under M-SIPS, a total of 6 applications with investment worth Rs 923 crore have been received. Out of these 6 applications; 5 applications are approved with proposed investment of Rs 913 crore.

# 3.2 Promotion of IT/IT enabled Services

## (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 3 successful bidders to set up 3 BPO/ITES

operations for 400 seats in Kerala. Out of 400 seats, 300 seats have been operational. The details of the units is mentioned in the table, as follows:

mitigate the risk that startups face, while manufacturing electronics hardware by providing mentorship; and bridge the time delay taken to absorb new technologies.

Sn	o. Unit Name	City	Seats Allo- cated	Status	Employment ported	Re-
1	The Federal Bank Ltd.	Kakkanad	200	Operational		16
2	UL Technology Solutions Private Limited	Kozhikode	100	Operational		108
3	Ecesis BPO Services Private Limited	Thiruvananthapuram	100	Not Started		NA
	Total		400			124

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in (Rs) crore
2013-14	2665.12
2014-15	2867.80
2015-16	3008.90
2016-17	3534.50
2017-18	3296.56

## (iii) Centres and Incubation Space

- **Existing centres:** Software Technology Parks of India (STPI) has one centre at Ranchi.
- **Proposed/upcoming centres:** Jamshedpur, Deoghar, Dhanbad and Bokaro.

# 3.3 Innovation and Startups

#### (i) Electronics Incubator at Cochin, Kerala:

• With an aim to nurture new enterprises focused on Consumer Electronics based manufacturing, MeitY approved the project for setting up of Consumer Electronics Incubator at Cochin, Kerala by Indian Institute of Information Technology and Management Kerala (IIITM-K) and M/s Kerala Start-up Mission (KSUM). This Incubator will incubate 40 startups over a period of 4 years. The project aims to provide entrepreneurs access to infrastructure that facilitates manufacture of electronic hardware in a cost-effective and sophisticated manner; Infrastructure set up has been completed.

62 Startups are onboard in the Electronics Incubator. Infrastructure set up, Testing and Measurement, IOT, Robotics Lab and Prototyping Room for SMT Assembly Line have been completed. As an outcome, several products/working prototypes have been developed - 22 Patents filed, 17 companies have got its first order and Rs 10 crore funding for VC/Grants/CSR have been received by the onboard startups.

# 4. Research and Development

- (i) Aerogel and Graphene based Supercapacitors for Energy Storage Applications: Being an emerging area in the field of energy storage, Centre for Materials for Electronics Technology (C-MET), Thrissur has developed complete Indigenous Technology for production of Aerogel (0.47~50F) and Graphene (1-70F) based Supercapacitors and for various electronics and energy storage applications. A pilot-scale demonstration plant of capacity of 3 kg/batch/day for production of Aerogel Supercapacitor has also been set up at C-MET, Thrissur, to facilitate the transfer of technology of developed carbon aerogel supercapacitors.
- (ii) Wearable device for Early Detection of Breast Cancer: Under MeitY initiatives, C-MET, Thrissur and C-DAC, Trivandrum, developed a breast cancer early detection wearable device system to reduce testing cost. The system is utilised for initial screening of breast cancer before referring potential patients for costly mammography. The technology is 100%

indigenous and developed by Indian Women Scientist. The device is portable and can be operated with minimal training, thus enabling mass screening of breast cancer by low skilled health sector workers, such as, Anganwadi workforce in rural and remote areas. This initiative has the potential to reach the unreached through Science and Technology. Clinical trials were conducted for 200 volunteers and 117 patients at Malabar Cancer Centre, Kannur and the results are in line with the standard diagnostic tools, such as, mammogram, ultrasound and CT scan. This innovation was shortlisted as one of the 10 best innovations considered for the Prime Minister's Award for Excellence in Public Administration - 2017 (Innovations Category).

- (iii) Information Technology Research Academy (ITRA)
  - A multi-institutional R&D project, titled, 'Micronet' - Mobile Infrastructure for Coastal Region Offshore Communications & Networks has been initiated under the thrust area

ITRA-Mobile. Amrita Vishwa Vidyapeetham, Kollam; IIST, Trivandrum; and IIITM-KER are the Participating Institutes (PI) in this project.

• Multi-institutional R&D project titled 'UrbanFlood: Integrated Urban Flood Management in India (IUFM): Technology-Driven solutions have also been initiated under the thrust area ITRA-Water. CDAC, Trivandrum, is the Participating Institute (PI) in this project.

# 5. ERNET India

#### (i) Eduroam services

• 4 Institutes are facilitating eduroam connectivity.

- Number of cyber incident(s) reported: 4,347
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of MADHYA PRADESH

# **1. Digital Access**

# **1.1 Digital Infrastructure**

# (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 8.23 crore
- Numbers of Aadhaar assigned, 2018 (LIVE): 7.44 crore
- % Saturation, 2018 (LIVE): 90.4%
- 0-5 years (LIVE): 49.74 lakh (58.7% Aadhaar Saturation)
- 5-18 years (LIVE): 1.99 crore (82.0% Aadhaar Saturation

## (ii) National Knowledge Network (NKN)

- 54 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 39 NIC Districts.

## (iii) State Wide Area Network (SWAN)

- Madhya Pradesh SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 49 Districts Head Quarters (DHQ) and 282 Blocks Head Quarters (BHQ).
- Madhya Pradesh SWAN has been utilising more than 85% bandwidth of its link capacity.

# 2. Digital Delivery of Services

## (i) Common Services Centres (CSCs)

- 20,971 CSCs are functional; out of these, 17,372 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 3,347

# (ii) e-District

• 262 e-District services have been launched in 51 Districts.

# (iii) DigiLocker

• More than 2.36 lakh Aadhaar enabled registrations have taken place.

# (iv) UMANG (Unified Mobile App for New-Age Governance

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 28 Services of Madhya Pradesh have been onboarded on UMANG platform.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, over 40,000 Digital Life Certificates (DLCs) have been generated and 22, 905 DLCs have been successfully verified.

# (vi) Soil Health Card

• 1.47 Crore Soil Health Cards have been issued.

Samples Collected					
Cycle 1	<b>Cycle 1</b> 23,13,977				
Cycle 2	21,83,567				
Samples Tested					
Cycle 1	23,13,977				
Cycle 2	19,34,481				
SHCs Dispatched					
Cycle 1	<b>Cycle 1</b> 88,72,377				
Cycle 2	58,42,981				

## (viii) eHospital

- Rolled out in 71 hospitals, which includes all 51 District Hospitals, AIIMS, Bhopal, 3 Medical colleges, 10 Civil Hospitals & Community Health Centre (CHC) and 6 Gas Rahat Hospitals.
- 65 Hospitals are operational in the Cloud environment.
- Modules Implemented: OPD, Revisit, Casualty, IPD, Billing, eBloodbank (AIIMS only), LIS (LAB) and Pharmacy (in 6 Gas Rahat Hospital and under Testing for Others). Radiology

(RIS) & Clinic Modules have been operational in 6 Gas Rahat Hospitals.

• More than 91.63 lakh ehospital transactions have been recorded.

## (viii) e-Transactions

- 266 e-Services have been integrated.
- Around 1,776 crore e-transactions have been performed, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP)

- Around, 2.2 lakh applications have been received; out of these, 1.79 lakh applications have been successfully verified.
- Around Rs 63 crore has been disbursed.

#### (x) eSign

- Nearly 26.54 lakh esigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 281 Departments/services have been integrated for Push SMS.
- Over 92.14 crore SMSes have been sent by the Departments in the State of Madhya Pradesh using this platform.
- 8 Mobile applications pertaining to the Departments of Madhya Pradesh have been downloaded more than 24,050 times.

# 2. Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- State Implementing Agency: Madhya Pradesh Agency for Promotion of Information Technology (MAPIT).
- 14,980 Candidates have been enrolled and trained; out of these, 11,346 candidates have been certified.
- (ii) Electronics and ICT Academy at IIITDM, Jabalpur

- Under the scheme of financial assistance for Setting up of Electronics and ICT Academies, MeitY has set up one of the Electronics and ICT Academy at Indian Institute of Information Technology Design and Manufacturing (IIITDM) Jabalpur out of 7 such academies set up at premier and leading institutions in the country.
- Academy has been set up for faculty development of engineering/other streams and is catering to assigned States of Madhya Pradesh, Chhattisgarh and Maharashtra.
- Rs 9.25 crore has been released to IIITDM, Jabalpur for the implementation of the scheme. IIITDM, Jabalpur would be imparting training to 16,000 faculties in a period of 4 years.
- IIITDM, Jabalpur has conducted 63 Faculty Development Programmes imparting training to 2, 567 beneficiaries.
- (iii) Information Security Education and Awareness (ISEA) Project Phase II
- Maulana Azad National Institute of Technology, Bhopal (MANIT, Bhopal), Rajiv Gandhi Technological University Bhopal and Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior (ABV IIIT&M Gwalior) have been selected for implementation of ISEA Project Phase II in the capacity of Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 241.90 lakh
- Funds released: Rs 115.81 lakh
- 1,802 Candidates have been trained/ under-going training in various formal/ non-formal courses and 97 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 10 awareness workshops on Information Security have been organised covering 2,629 participants.
- (iv) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
  - The implementing agency for the scheme is CSC e-Governance Services India Limited.
  - Indicative target: 37.84 lakh persons.
  - 11.11 Lakh persons have been trained; out of these, 6.03 lakh persons have been certified.

## (v) Visvesvaraya PhD Scheme for Electronics

## & IT

- 45 Full-time and 32 part-time PhD seats have been allocated to 5 institutes - IIT, Indore; IIIT, Gwalior; Maulana Azad National Institute of Technology, Bhopal; Indian Institute of Information Technology Design and Manufacturing, Jabalpur; and Devi Ahilya Vishwavidyalaya.
- 40 Full-time PhD candidates have been enrolled.

#### (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs andother engineering colleges. From the State of Madhya Pradesh, ABV-IIITM, Gwalior; MANIT, Bhopal; SGSITS, Indore; IIT, Indore; and IIITDM, Jabalpur; have been included in the programme as Participating Institutions (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at ABV-IIITM, Gwalior; MANIT, Bhopal; SGSITS, Indore; IIT, Indore; and IIITDM, Jabalpur.
- 1,806 Persons have been trained at B. Tech, M.Tech and PhD. levels at ABV-IITM, Gwalior, MANIT, Bhopal; SGSITS, Indore; IIT, Indore; and IIITDM Jabalpur in the area of VLSI design/System design in the first two years of the programme.

# 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 129 crore digital payment transactions for 2017-18 and 125 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume (in thousands)
BHIM	125808.11
USSD	200.18
RuPay Card on PoS	18390.98

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

# 3.1 Promotion of Electronics Manufacturing

## (i) Electronic Manufacturing Cluster (EMC)

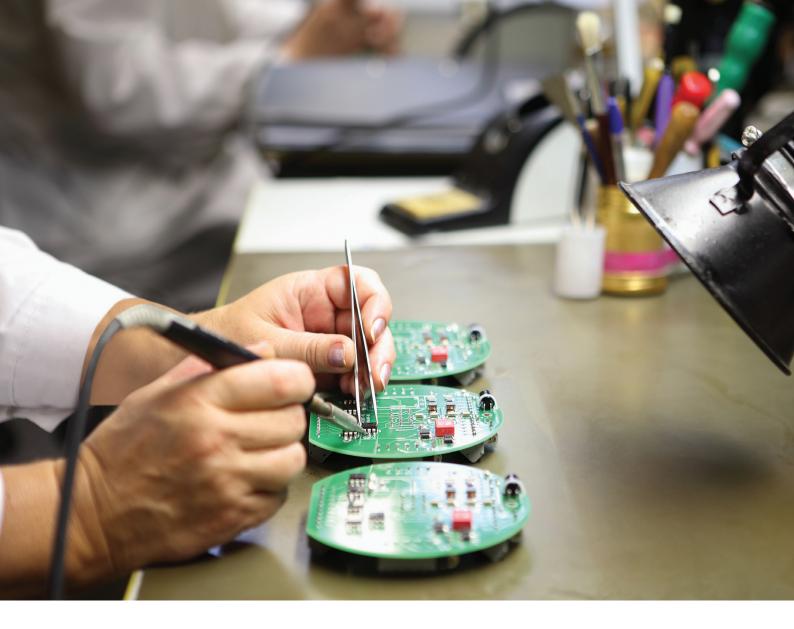
- Greenfield EMC at Badwai, Bhopal
  - Implementing Agency: M/s Madhya Pradesh State Electronics Development Corporation Ltd. (MPSEDC).
  - Area: 50acres
  - Project cost: Rs 47.19 crore.
  - Project is under implementation phase.
  - First and second instalment of the Government Grant-in-aid amounting to Rs 10.43 crore has been released.
  - 12 Units have been allotted land; out of these, 1 unit has started commercial production.
  - Infrastructure development is in progress.

## • Greenfield EMC at Purva, Jabalpur.

- Implementing Agency: M/s Madhya Pradesh State Electronics Development Corporation Ltd.(MPSEDC)
- Area: 40 acres
- Project Cost: Rs 38.57 crore
- Project is under implementation phase.
- First and second instalment of Government Grant-in-aid amounting to Rs 8.88 crore has been released.
- 33 Units have been allotted land; out of these, 4 units have started construction activity.
- Infrastructure development is in progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 8 applications with investment worth Rs 526 crore have been received. Out of these 8 applications, 2 applications are approved with proposed investment worth Rs 95 crore.

# **3.2 Promotion of IT/IT Enabled** Services

# (i) India BPO Promotion Scheme (IBPS)



• In-Principle Approval (IPA) has been issued to 6 successful bidders to set up 6 BPO/ ITES operation for 1,300 seats in Madhya Pradesh. Out of 1,300 seats, 1,200 seats are operational. The details of the units are as mentioned in the table below:

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Cyfuture India Pvt Ltd	Bhopal	200	Operational	18
2	Karvy Data Management Services Limited	Gwalior	700	Operational	688
3	Enoah Isolution India Private Limited	Indore	100	Operational	26
4	Net2Source Consulting Limited	Indore	100	Not Started	NA
5	Jainsys LPO Private Limited	Sagar	100	Operational	111
6	M.S. E-Solution Pvt Ltd	Vidisha	100	Operational	45
Total			1300		888

# (ii) IT/ITeS

•	Software	exports	made	by
	registered	are	as	under:

YEAR	Exports in INR Crores
2013-14	301.99
2014-15	343.38
2015-16	355.00
2016-17	516.18
2017-18	613.82

## (ii) Centres and Incubation Space

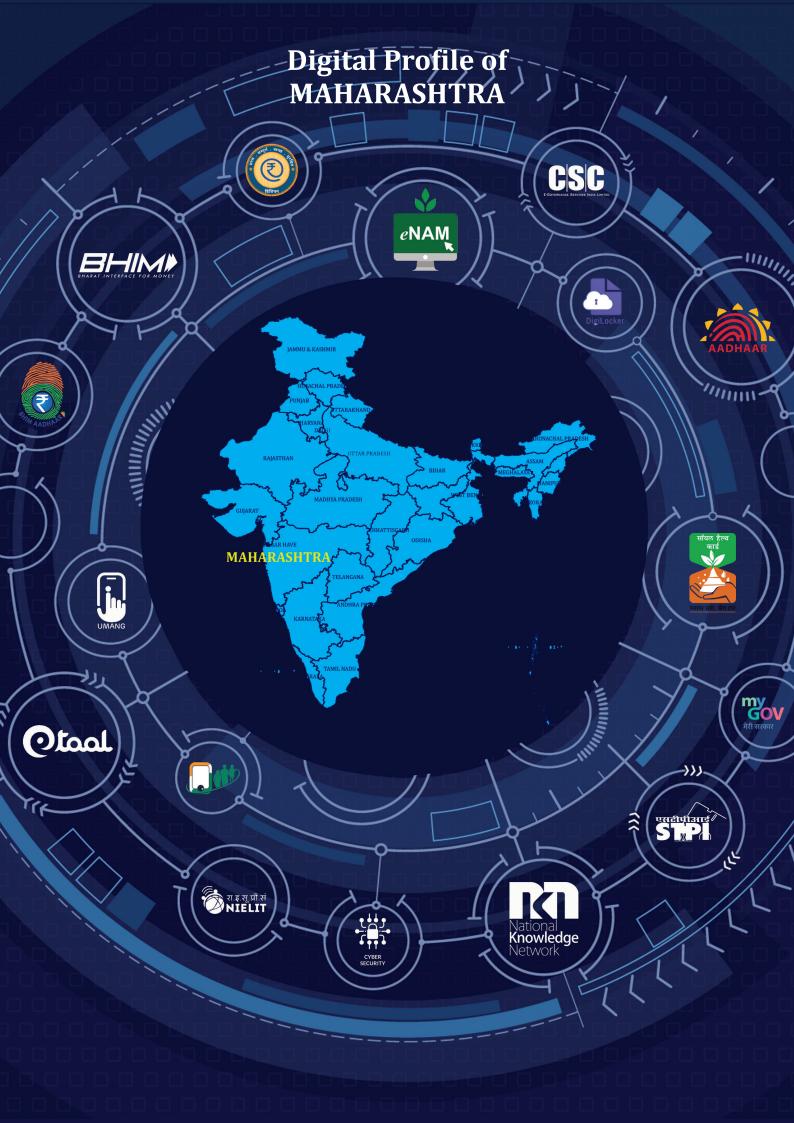
- Existing Centres: There are two STPI centres at Gwalior and Indore.
- Proposed/Upcoming Centres: Bhopal, Chhindwada and Jabalpur.

# 4. ERNET India

#### (i) eduroam service

• 7 Institutes of Madhya Pradesh are facilitating eduroam service.

- Number of cyber incident(s) reported: 2,500
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of MAHARASHTRA

# **1. Digital Access**

# **1.1 Digital Infrastructure**

## (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 12.08 crore
- Numbers of Aadhaar assigned, 2018(LIVE) : 11.30 crore
- % Saturation , 2018 (LIVE) : 93.6%
- 0-5 years (LIVE): 52.37 lakh (52.0% Aadhaar Saturation)
- 5-18 years (LIVE): 2.46 crore (83.9% Aadhaar Saturation)

## (ii) National Knowledge Network (NKN)

- 134 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 36 NIC Districts.

## (iii) State Wide Area Network (SWAN

- Maharashtra SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 35 Districts Head Quarters (DHQ) and 295 Blocks Head Quarters(BHQ).
- Maharashtra SWAN has been utilising more than 75% bandwidth of its link capacity.

# **1.2. Digital Delivery of Services**

## (i) Common Services Centres (CSCs)

- A total 42,715 CSCs are functional; out of these, 26, 673 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 10,726

## (ii) e-District

• 52 e-District services have been launched in 35 Districts.

## (iii) DigiLocker

- More than 9.34 lakh Aadhaar enabled registrations have taken place.
- Maharashtra State Board of Secondary and Higher Secondary Education, Department of Registration & Stamps, Aaple Sarkar and Rahuri Municipal Council of the Maharashtra

State are integrated with DigiLocker.

# (iv) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Maharashtra can access the Central Government services available on UMANG.

#### (v) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 1.37 lakh Digital Life Certificates(DLCs) have been generated and 58,323 DLCs have been successfully verified.

## (vi) Soil Health Card

• 2.07 Crore Soil Health Cards have been issued.

Samples Collected			
Cycle 1	23,47,121		
Cycle 2	28,51,525		
Samples Tested			
Cycle 1	23,47,121		
Cycle 2	25,51,078		
SHCs Dispatched			
Cycle 1	1,29,77,232		
Cycle 2	78,11,466		

## (viii) eHospital

 Rolled out in 10 hospitals in Maharashtra namely, Navi Mumbai Municipal Corporation Hospital, Vashi; Navi Mumbai Municipal Corporation Hospital, Airoli; Navi Mumbai Municipal Corporation Hospital, Nerul; District Civil Hospital Wardha; All India Institute of Physical Medicine and Rehabilitation Mumbai; Cantonment Board Hospital Ahmednagar; Cantonment Board Hospital Nashik; Kamala Nehru Hospital Pune; and Primary Health Centre Khanu Ratnagiri.

- 9 Hospitals are operational in the Cloud environment.
- Modules Implemented: OPD, Revisit, Casualty, IPD, Billing, eBloodbank. Lab Information System, Pharmacy and Pathology.
- More than 19 lakh e-hospital transactions have been performed.

## (viii) e-Transactions under eTaal 2.0 Project

- 222 e-Services have been integrated.
- Around 53.29 crore e-transactions have been recorded, electronically by various e-Governance applications.

## (ix) National Scholarship Portal (NSP)

- Around 10.36 lakh applications have been registered; out of these, 9.29 lakh applications have been successfully verified.
- Over 121 crore has been disbursed.
- Implemented in Department of Minorities, Tribal Welfare, Primary, Secondary & Higher Education and Empowerment.

#### (x) eSign

- Nearly, 103.79 lakh esigns have been issued.
- (xi) Mobile Seva (Nation-wide Mobile Governance initiative of the Government of India)
- 1,406 Departments/services have been integrated for Push SMS.
- Over 71.91 crore SMSes have been sent by the Departments in Maharashtra using this platform.
- 32 Mobile applications pertaining to the Departments of Maharashtra have been downloaded more than 68, 670 times.

# 2. Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates.

- State Implementing Agency: Maharashtra State Skill Development Society (MSSDS), Mumbai.
- 14,621 Candidates have been enrolled and trained; out of these, 9,549 candidates have been certified.

## (ii) Information Security Education and Awareness (ISEA) Project Phase II

- IIT, Bombay and TIFR, Mumbai (jointly); VNIT, Nagpur; College of Engineering, Pune; and NIELIT, Aurangabad; have been selected for implementation of ISEA Project Phase II in the capacity of Information Security Research and Development Centre (ISRDC) and Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 594.77 lakh.
- Funds released: Rs 267.79 lakh.
- 3,114 Candidates have been trained/ under-going training in various formal/ non-formal courses and 358 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 19 awareness workshops on Information Security have been organised covering 983 participants.

# (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 44.33 lakh persons.
- 8.42 Lakh persons have been trained; out of these, 4.64 lakh persons have been certified.

# (iv) Visvesvaraya PhD Scheme for Electronics & IT

83 Full-time and 82 part-time PhD seats have been allocated to 10 institutes - Bharati Vidvapeeth University; Dr. Babasaheb Ambedkar Marathwada University; Indian Institute of Technology, Bombay; Rashtrasant Tukadoji Maharaj, Nagpur University; Shri Guru Gobind Singhji Institute of Engineering and Technology, Maharashtra; Shri Ramdeobaba College of Engineering and Management, Nagpur; Shreemati Nathibai Damodar Thackersey Womens University, Mumbai; Solapur University, Solapur; Visvesvaraya National Institute of Technology, Nagpur, Sant Gadge Baba Amravati University, Amravati; and Indian

Institute of Information Technology, Nagpur.

- 75 Full-time and 15 part-time PhD candidates have been enrolled.
- (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Maharashtra, IIT, Bombay and VNIT, Nagpur has been included under the programme as Resource Centre in the cluster of IIT, Bombay and VNIT, Nagpur.
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at IIT, Bombay and VNIT, Nagpur.
- 1,227 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Bombay and VNIT, Nagpur in the area of VLSI design/ System design in the first two years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
  - NIELIT, Aurangabad aims to train manpower for product design, development, manufacturing maintenance and information technology to maintain close links with industries, R&D Centres and academic institutions. This centre undertakes product development, contract research and consultancy. To transform learners to socially responsible "Competent skilled professional" by creating excellent learning environment to enhance leadership qualities, inculcate professional/ethical attitude, effective team work skills, multidisciplinary approach, engineering expertise, soft skills with excellent human values.
  - Area of Excellence: Cyber Physical Systems and Embedded System & IoT.
  - Courses Offered: Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
  - Total number of candidate(s) Trained: 189,423
    - (a) Formal Courses: 1,286
    - (b) Non-Formal courses (own NIELIT centres):21,421
    - (c) Skill Development in ESDM: 12,516
    - (d) Digital Literacy courses: 154,200

- Number of Schedule Caste (SC) candidate(s)
   Trained: 15,650
  - (a) Formal courses: 357
  - (b) Non-Formal courses (own NIELIT centres): 2,796
  - (c) Skill Development in ESDM: 2,025
  - (d) Digital Literacy courses: 10,472
- Number of Schedule Tribe candidate(s) -Trained: 8,359
  - (a) Formal courses: 54
  - (b) Non-Formal courses (own NIELIT centres): 3,160
  - (c) Skill Development in ESDM: 622
  - (d) Digital Literacy courses 4,523 No. of
- Number Women candidate(s) Trained: 73,638
  - (a) Formal courses: 389
  - (b) Non-Formal courses (own NIELIT centres): 4,286
  - (c) Skill Development in ESDM 4,261
  - (d) Digital Literacy courses: 64,702

# 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 320 crore digital payment transactions for 2017-18 and 300 crore digital payment transactions for 2018-19 to the State of Maharashtra.
- Digital payment transactions for 3 payment modes namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume (in thousands)
BHIM	3672.47 lakh
USSD	3.62 lakh
RuPay Card on PoS	3510.55 lakh

# 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of Electronics Manufacturing
- (i) Electronic Manufacturing Cluster (EMC)
- Common Facility Centre at Shendra

#### Industrial Area, Aurangabad.

- Implementing Agency: M/s Deogiri Electronics Cluster Private Limited.
- Area: 1.98 acres
- Project Cost: Rs 28.57crore.
- Project is under implementation phase.
- Government Grant-in-aid amounting to Rs 3.11 crore has been released.
- Infrastructure development is under progress.
- Common Facility Centre at Pimpri Industrial Area, Pune
  - Implementing Agency: M/s MCCIA Electronic Cluster Foundation.
  - Area: 0.61 acres
  - Project cost: Rs 67 crore.

- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 78 applications with investment worth Rs 17,356 crore have been received and are under consideration in the State of Maharashtra. Out of these 78 applications, 35 applications are approved with proposed investment worth Rs 6,463 crore.

# 3.2 Promotion of IT/IT Enabled Services

## (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA)has been issued to 12 successful bidders to set up 18 BPO/ITES operation for 3,445 seats in Maharashtra. Out of 3,445 seats, 2,630 seats have been operational. The detail of the units are as mentioned in the table below:

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Gebbs Healthcare Solutions Private Limited	Aurangabad	650	Operational	476
2	Gebbs Healthcare Solutions Private Limited	Aurangabad	150	Operational	118
3	Writer Business Services Private Limited	Bhiwandi	100	Operational	115
4	Writer Business Services Private Limited	Bhiwandi	105	Not Started	NA
5	RuralShores Business Services Private Limited	Dhawalgaon	100	Operational	53
6	Ideas To Impacts Innovations Private Limited	Dhule	100	Not Started	NA
7	Intech Online Pvt Ltd	Latur	100	Not Started	NA
8	Lighthouse Info Systems Private Limited	Nagpur	100	Operational	83
9	Xangars Solution private limited	Nagpur	190	Not Started	NA
10	Net2Source Consulting Limited	Nashik	100	Not Started	NA
11	Suma Soft Private Limited	Nashik	110	Operational	122
12	Suma Soft Private Limited	Nashik	100	Operational	121

13	Tata Consultancy Services Limited	Nashik	1000	Operational	7
14	Writer Business Services Private Limited	Nashik	120	Not Started	NA
15	Writer Business Services Private Limited	Nashik	120	Operational	134
16	Enser Communications Private Limited	Sangli	100	Operational	53
17	Enser Communications Private Limited	Sangli	100	Not Started	NA
18	Maharani Paints Private Limited	Wardha	100	Operational	46
	Total		3445		1328

# (ii) IT/ITeS

• Software exports made by registered units are as under.

YEAR	Exports in INR Crores
2013-14	55419.79
2014-15	61314.00
2015-16	64064.00
2016-17	69010.00
2017-18	74580.15

# (iii) Centres and Incubation Space

• Existing Centres: There are 6 STPI centres in Maharashtra at Aurangabad, Kolhapur, Nagpur, Nasik, Mumbai and Pune.

# 4. Research and Development

(i) Li-ion Battery fabrication facility: A fullfledged Li-ion battery fabrication and testing facility for the fabrication of Coin/button (2032 type) and Pouch/rectangular type cells has been set up at Centre for Materials for Electronics Technology(C-MET), Pune. An indigenous process technology for development of anode and cathode materials



has been developed by C-MET Pune. So, far 100-120 Coin/button types of cells and 75-100 pouch/rectangular cells fabricated using in-house developed active materials (cathode and anode) with the Battery/Cell capacity of 100-120 mAh/gm. The indigenous developed materials and cells are comparable with the commercially available materials and cells. Third party testing/evaluation of the fabricated cells have been carried out at BEL Pune for temperature dependent measurements. The Cells are working at temperature -10 to 600C.

#### (ii) Indigenous Magnetic Resonance Imaging

- Implementing Agency: SAMEER.
- Area: Mumbai.
- Project Cost: Rs 38.50 crore.
- Date of commencement: March, 2015.
- Expected date of completion: September, 2019.

- System integration is under progress and SAMEER is the nodal agency for implementation.
- (iii) High Energy Linear Accelerator for medical application
  - Implementing Agency: SAMEER.
- Area: Mumbai.
- Project cost: Rs 80.78 crore.
- Date of Commencement: March, 2015.
- Expected date of completion: December, 2019.
- Phase 1 design has been completed.

#### (iv) Indigenous Magnetic Resonance Imaging

- Implementing Agency: SAMEER.
- Area: Amravati.
- Project Cost: Rs 12.10 crore.
- Installation and commissioned Patient treatment has commenced after AERB approval.



- (v) Design and development of NavIC receiver
- Implementing Agency: SAMEER.
- Area: Mumbai
- Project cost: Rs 9.8 crore.
- Desktop design completed and ASIC design is under progress.

#### (vi) Dual Photon Energy multiple Electron Energy integrated Oncology system

- Implementing Agency: SAMEER.
- Area: Mumbai.
- Project Cost: 15.62 crore.
- Date of commencement: July, 2008.
- Expected date of completion: Financially closed.
- Transfer of Technology (TOT) is under process.

#### (vii) Information Technology Research Academy (ITRA)

- A multi-institutional R&D project titled 'GridSense: Information and Communications Technologies in Water and Pest/Disease Management for Yield Improvement in Horticulture (Citrus)' has been initiated under the thrust area ITRA-Water. IIT, Bombay and Dr. Panajbrao Deshmukh Krishi Vidyapeeth, Akola are the Participating Institutes (PI) in this project.
- A multi-institutional R&D project titled 'CARTS: Communication Assisted Road Transportation Systems' has been initiated under the thrust area ITRA-Mobile. IIT, Bombay is the Participating Institute (PI) in this project.

# **5. ERNET India**

## (i) eduroam services

• 12 Institutes of Maharashtra are facilitating eduroam services.

#### (ii) Wi-Fi Enabled Campus

- ERNET India has setup Wi-Fi enabled campus Network under Digital India programme at Savitribai Phule Pune University (SPPU), Pune, Maharashtra.
- The Wi-Fi Network is installed and operational. The augmentation of Wi-Fi enabled campus network at SPPU improves the Wi-Fi coverage in the campus and facilitates connecting the leftover building to the campus network. The existing dark zone in the Wi-Fi coverage and new buildings, which were not connected or were not Wi-Fi enabled areas have been installed with Wi-Fi facility and integrated with the existing Campus network. Wi-Fi facility is being used by more than 7,711 users of the University for e-Journals and other informative websites etc.

- Number of cyber incident(s) reported: 15,509
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of MANIPUR

# **1. Digital Access**

# **1.1 Digital Infrastructure**

# (i) Digital Identity: Aadhaar

- Total Population, 2018 (Projected): 30 lakh
- Numbers of Aadhaar assigned, 2018(LIVE): 24 lakh
- % Saturation 2018 (LIVE) : 81.9%
- 0-5 years (LIVE): 1.56 lakh (55.1% Aadhaar Saturation)
- 5-18 years (LIVE): 6.05 lakh (84.0% Aadhaar Saturation)

## (ii) National Knowledge Network (NKN)

• 11 Links to Institutions under NKN have been commissioned and have been made operational.

## (iii) State Wide Area Network (SWAN)

- Manipur SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 7 Districts Head Quarters (DHQ) and 19 Blocks Head Quarters (BHQ).
- Manipur SWAN has been utilising more than 85% bandwidth of its link capacity.

# **1.2 Digital Delivery of Services**

# (i) Common Services Centres (CSCs)

- 707 CSCs are functional; out of these, 366 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 96

# (ii) e-District

• 35 e-District services have been launched in all 16 Districts.

## (iii) DigiLocker

- More than 8,800 Aadhaar enabled registrations have taken place.
- (iv) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.

• 1 Service of Manipur is onboarded on UMANG platform.

## (v) e-Transactions under eTaal 2.0 project

- 103 e-Services have been integrated.
- Around 67 lakh e-transactions have been recorded, electronically by various e-Governance.

# (vi) National Scholarship Portal (NSP)

- Around 25,000 applications have been received; out of these, 16, 000 have been successfully verified.
- Around Rs 8.53 crore has been disbursed in using NSP portal.

# (vii) Soil Health Card

• 1.9 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	20,713		
Cycle 2	9,195		
Samples Tested			
Cycle 1	20,13		
Cycle 2	8,694		
SHCs Dispatched			
Cycle 1	1,14,522		
Cycle 2	15,000		

# (viii)e-Hospital

- e-Hospital has been implemented in Regional Institute of Medical Sciences, Manipur. The same is running on cloud network.
- Modules Implemented: OPD and IPD Registration.
- More than 5.9 lakh transactions have been recorded.

# (x) eSign

• Nearly, 1.11 lakh esigns have been issued.

(xi) Mobile	Seva	(nation-wide	Mobile
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# Governance initiative of the Government of India)

- 6 Departments/services have been integrated for Push SMS.
- Over 20.32 lakh SMSes have been sent by the Departments in the State of Manipur using this platform.
- 5 Mobile applications pertaining to the Departments of Manipur have been downloaded 4,300 times.

# 2. Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 Candidates.
- 732 Candidates have been enrolled and trained; out of these, 377 candidates have been certified.
- (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 1.37 lakh persons.
- 7, 420 Candidates have been trained; out of which 2,317 candidates have been certified.
- (iii) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Manipur, NIT, Manipur has been included under the programme as Participating Institution in the cluster of IIT, Guwahati.
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at NIT, Manipur.
- 124 Persons have been trained at B. Tech, M. Tech and PhD levels at NIT, Manipur in the area of VLSI design/ System design in the first two year of the programme.

# (iv) National Institute of Electronics and

## Information Technology (NIELIT)

- NIELIT, Imphal with two extension centres in Churachandpur District and Senapati District offers various short and long term computer courses for all categories of students and professionals, and specialises in development of skill in the fields of Electronics & Communication Engineering and Information Technology through various long-term and short-term courses.
- Area of Excellence: IT Security and Cyber Forensic; Electronics Repair & Maintenance; Multimedia & Animation; LED Light Repair Suryamitra; DAS Set Top Box Installer and Servicing; Solar LED Products Design and Manufacturing Installation; Repair and Maintenance of Electronic Home Appliances; and Mobile Phones.
- **Courses Offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s)- Trained: 25,967
  - (a) Formal Courses: 1,861
  - (b) Non-Formal Courses (own NIELIT centres): 7,529
  - (c) Skill Development in ESDM: 638
  - (d) Digital Literacy Courses: 15,939
- Number of Schedule Caste (SC) candidate(s)
   Trained: 2,655
  - (a) Formal Courses: 370
  - (b) Non-Formal Courses (own NIELIT centres): 801
  - (c) Skill Development in ESDM: 29
  - (d) Digital Literacy Courses: 1,455
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 15,715
  - (a) Formal Courses: 551
  - (b) Non-Formal Courses (own NIELIT centres): 4,388
  - (c) Skill Development in ESDM: 47
  - (d) Digital Literacy Courses: 10,729
- Number of Women candidate(s) Trained: 11,437
  - (a) Formal Courses: 511
  - (b) Non-Formal Courses (own NIELIT centres): 2,917
  - (c) Skill Development in ESDM: 243
  - (d) Digital Literacy Courses: 7,766

## (v) Promotion of Digital Payment

- MeitY has assigned a target of 4.7 crore digital payment transactions for 2017-18 and 4 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April1, 2017 till December 31, 2018 is as follows:

MODES	Volume(in thousands)
BHIM	1731.4
USSD	2.14
RuPay Card on PoS	239.52

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of IT/IT enabled Services
- (i) North East BPO Promotion Scheme (NEBPS)
- NEBPS aims to incentivize establishment of 5,000 BPO/ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore (Rupees fifty crore only) up to December 31,2019. The details of the units registered are as mentioned in the table below:

#### (ii) Centres and Incubation Space

• Existing Centres: There is one STPI centre at Imphal.

# 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'e-Varaha: Information System for Safe Pork Production in the North Eastern India has been initiated under the thrust area ITRA-Ag&Food. Manipur University, Imphal is the Participating Institute (PI) in this project.

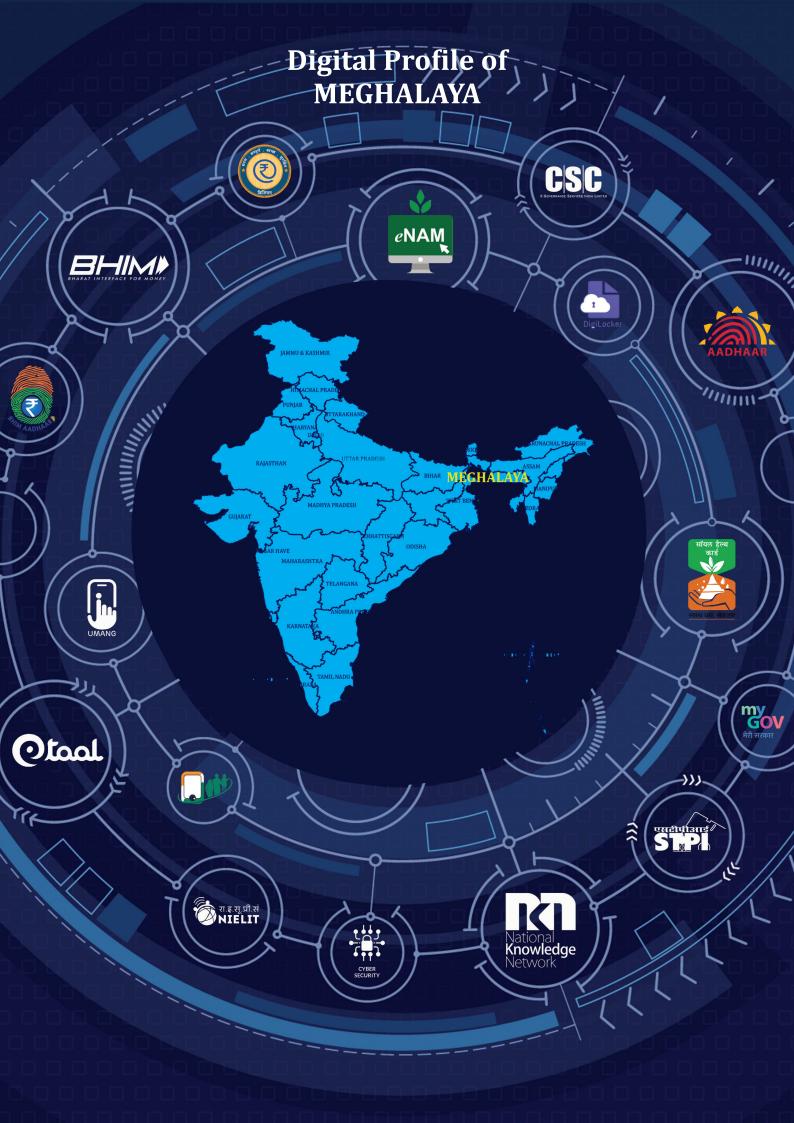
# 5. ERNET India

#### (i) eduroam services

- 2 Institutes of Manipur have been facilitating eduroam service.
- (ii) Very Small Aperture Terminal (VSAT Network)
- VSAT has been set up and made operational at 8 sites.

- Number of cyber incident (s) reported: 49
- Number of alert (s)/advisories issued: 1,150

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Asian Bulls Construction and Developers Limited	Imphal	100	Not Started	NA
2	CubeTen Technologies Pvt. Ltd.	Imphal	50	Operational	42
3	R.K. Marvin Communication Private Limited	Imphal	100	Operational	15
4	UNI Trans Solution Pvt. Ltd.	Imphal	100	Operational	25
	Total		350		82



# Digital Profile of **MEGHALAYA**

# **1. Digital Access**

# **1.1 Digital Infrastructure**

# (i) Digital Identity: Aadhaar

- Total Population (Projected 2018) : 32 lakh
- Numbers of Aadhaar assigned, 2018 (LIVE): 9 lakh
- % Saturation 2018 (LIVE) : 28.2%
- 0-5 years (LIVE): 2,000 (0.5% Aadhaar Saturation)
- 5-18 years (LIVE): 1.85 lakh (17.1% Aadhaar Saturation)

## (ii) National Knowledge Network (NKN)

- 13 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 1 NIC District.

# (ii) State Wide Area Network (SWAN)

- Meghalaya SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 7 Districts Head Quarters (DHQ) and 47 Blocks Head Quarters (BHQ).
- Meghalaya SWAN has been utilising more than 70% bandwidth of its link capacity.

# **1.2 Digital Delivery of Services**

## (i) Common Services Centres (CSCs)

- 529 CSCs are functional; out of these, 168 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 137

# (ii) e-District

• 13 e-District services have been launched in 11 Districts.

# (iii) DigiLocker

- More than 1,450 Aadhaar enabled registrations have taken place.
- (iv) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on

UMANG.

• 8 Services of AKPS (Annapurna Krishi Prasara Seva)/m4agri have been onboarded.

# (v) Meghraj

• Applications are running on 87 virtual servers.

# (vi) Soil Health Card

• 3.78 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	39,372		
Cycle 2	34,766		
Samples Tested			
Cycle 1	39,372		
Cycle 2	34,471		
SHCs Dispatched			
Cycle 1	2,09,561		
Cycle 2	1,69,797		

# (vii) eHospital

- Rolled out in 10 hospitals including all District Civil Hospitals, two Maternity Hospitals and North East Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS).
- 3 Hospitals are operational in the Cloud environment.
- Modules Implemented: OPD, Revisit, Casualty, IPD, Billing, LIS, and Pharmacy.
- More than 9.6 lakh ehospital transactions have been recorded.

## (viii) e-Transactions under eTaal 2.0 Project:

- 118 e-Services have been integrated.
- Around 3.12 crore e-transactions have been recorded, electronically by various e-Governance applications.

# (ix) National Scholarship Portal (NSP):

• Around 19,000 applications have been received; out of these, around 15,000

applications have been successfully verified.

- Around Rs 8 crore has been disbursed.
- (x) eSign
- Nearly, 0.68 lakh esigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 5 Departments/services have been integrated for Push SMS.
- Over 2.20 lakh SMSes have been sent by the Departments using this platform.
- 5 Mobile applications pertaining to the Departments of Meghalaya have been downloaded more than 3,500 times.

# 2. Digital Empowerment through Digital Inclusion

# **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 Candidates.
- 73 Candidates have been enrolled and trained; out of these, 45 candidate have been certified.
- (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 1.71 lakh persons.
- 22,000 Persons have been trained; out of which 1,059 candidates have been certified.
- (iii) Visvesvaraya PhD Scheme for Electronics & IT
- 11 Full-time and 3 part-time PhD seats have been allocated to 2 institutes - NIT, Meghalaya and North Eastern Hill University, Shillong.
- 10 Full-time and 1 part-time PhD candidates have been enrolled.
- (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
  - An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs

and other engineering colleges. From the State of Meghalaya, NIT, Meghalaya has been included under the programme as Participating Institution(PI) in the cluster of IIT, Guwahati.

- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT, Meghalaya.
- 230 Persons have been trained at B. Tech, M.Tech and PhD levels at NIT, Meghalaya in the area of VLSI design/ System design in the first three year of the programme.
- (v) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Shillong aims to provide educational and professional services in the areas of Information, and Electronics & Communication Technology (IECT), to create awareness among Government Departments and masses by organising workshops and seminars among Government Departments and masses by organising workshops and seminars.
- Area of Excellence: Medical Electronics.
- **Courses Offered:** Long Term (Non-Formal) and Digital Literacy course.
- Total number of candidate(s) Trained: 3,848
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 3,313
  - (c) Skill Development in ESDM: 73
  - (d) Digital Literacy Courses: 462
- Number of Schedule Caste (SC) candidate(s)
   Trained: 25
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 13
  - (c) Skill Development in ESDM: 0
  - (d) Digital Literacy Courses: 12
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 3,298
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 2,788
  - (c) Skill Development in ESDM: 69
  - (d) Digital Literacy Courses: 441
- Number of Women candidate(s) Trained: 1,919

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 1,630
- (c) Skill Development in ESDM: 11
- (d) Digital Literacy Courses: 278

# 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 6.2 crore digital payment transactions for 2017-18 and 5 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes namely BHIM, USSD, RuPAY Card on PoS, since April1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	1195.31
USSD	2.23
RuPay Card on PoS	915.01

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

# 3.1 Promotion of Electronics Manufacturing

- (i) NorthEastBPOPromotionScheme(NEBPS)
- NEBPS aims to incentivize establishment of 5000 BPO/ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore (Rupees fifty crore only) up to December 31,2019. The detail of the units registered in the State of Meghalaya are as mentioned in the table below:

## (ii) IT/ITeS

• Software exports made by registered units are as follows:

## (iii) Centres and Incubation Space

• Existing Centres: STPI has one centre at Shillong.

# 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi institutional R&D project titled 'e-Varaha: Information System for Safe Pork Production in the North Eastern India has been initiated under the thrust area ITRA-Ag&Food. ICAR Meghalaya, Barapani is the Participating Institute (Participating Institute) in this project.
- Multi-institutional R&D project titled 'ImagelDGP: Image based Systems for Identification of Individuals, Breeds and Diseases of Pigs and Goats' has also been initiated under the area ITRA-Ag&Food. ICAR Meghalaya is the Participating Institute (PI) in this project.

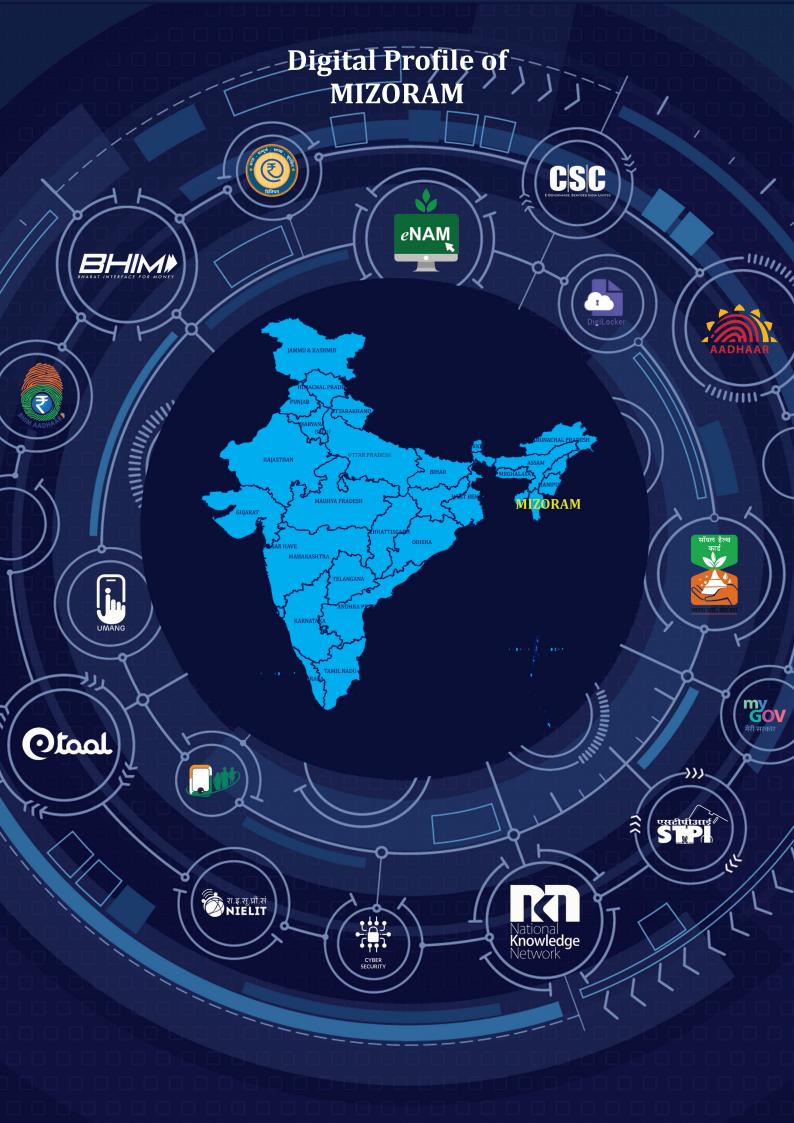
# 5. ERNET India

# (i) VSAT Network:

- VSAT has been set up and made operational at 5 sites.
- (ii) Wi-Fi Enabled Campus Networking at Five Universities
- ERNET India has set up Wi-Fi enabled campus Network under Digital India programme at Meghalaya - North-Eastern Hill University (NEHU), Shillong.

- Number. of cyber incident(s) reported: 2500
- Number of alert (s)/advisories issued: 1,150

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Imerit Technology Services Pvt Ltd	Shillong	50	Operational	71
2	S10 Healthcare Solutions Ltd	Shillong	100	Operational	41
3	Vision India Services Pvt. Ltd.	Shillong	200	Not Started	NA
	Total		350		112



# Digital Profile of **MIZORAM**

# **1. Digital Access**

# **1.1 Digital Infrastructure**

# (i) Digital Identity: Aadhaar

- Total Population (Projected 2018) : 12 lakh
- Numbers of Aadhaar assigned, 2018 (LIVE): 10 lakh
- % Saturation 2018 (LIVE): 88.4%
- 0-5 years (LIVE): 0.6 lakh (45.1% Aadhaar Saturation)
- 5-18 years (LIVE): 2.8 lakh (85.9% Aadhaar Saturation)

# (ii) National Knowledge Network (NKN)

• 6 Links to Institutions under NKN have been commissioned and made operational.

## (ii) State Wide Area Network (SWAN)

- Mizoram SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 08 Districts Head Quarters (DHQ) and 28 Blocks Head Quarters (BHQ).
- Mizoram SWAN has been utilising more than 92% bandwidth of its link capacity.

# **1.2 Digital Delivery of Services**

# (i) Common Services Centres (CSCs)

- 178 CSCs are functional; out of these, 117 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 82

# (ii) e-District

• 13 e-District services have been launched in all 11 Districts.

# (iii) DigiLocker

• More than 1,295 Aadhaar enabled registrations have taken place.

# (iv) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 8 Services of AKPS (Annapurna Krishi Prasara Seva)/m4agri have been onboarded.

# (v) e-Transactions under eTaal 2.0 project

- 104 e-Services have been integrated.
- Around 68 lakh e-transactions have been recorded, electronically by various e-Governance applications.

# (vi) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, more than 27 Digital Life Certificates have been generated.

# (vii) Soil Health Card

• 20,642 Soil Health Cards have been issued

Samples Collected				
Cycle 1	11,986			
Cycle 2	5,886			
Samples Tested				
Cycle 1	11,986			
Cycle 2	7,892			
SHCs Dispatched				
Cycle 1	11,986			
Cycle 2	8,856			

# (viii) National Scholarship Portal (NSP):

- Around 48,000 applications have been registered; out of these, 41,000 applications have been verified.
- Around, Rs 10.79 crore has been disbursed.
- (ix) eSign
- Nearly, 0. 68 lakh esigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
  - About 4 Departments/services have been integrated for Push SMS.
  - Over 46.60 lakh SMSes have been sent by the Departments in the State of Mizoram using this platform.

• 1 Mobile application pertaining to the Departments of Mizoram has been downloaded more than 600 times.

# 2 Digital Empowerment through Digital Inclusion

# 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 candidates.
- 315 Candidates have been enrolled and trained; out of these, 178 candidates have been certified.
- (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 0.38 lakh persons.
- 4,773 Lakh persons have been trained; out of these, 2,330 persons have been certified.
- (v) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Aizawl aims to to provide educational and professional services in the areas of Information, Electronics & Communication Technology (IECT) and to create awareness among Government Departments and masses by organising workshops and seminars.
- Area of Excellence: Imparting training in long term courses like MCA, BCA, DCSE and DETE; Short term courses such as CCC, CCC+, Tally, Android Application Development; Providing infrastructure for online and offline computer based examinations.
- **Courses Offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 22,429
  - (a) Formal Courses: 1,157
  - (b) Non-Formal Courses (own NIELIT centres): 801
  - (c) Skill Development in ESDM: 315
  - (d) Digital Literacy Courses: 20,156
- Number of Schedule Caste (SC) candidate(s)

## - Trained: 111

- (a) Formal Courses: 38
- (b) Non-Formal Courses (Own NIELIT centres): 6
- (c) Skill Development in ESDM: 0
- (d) Digital Literacy Courses: 67
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 22,122
  - (a) Formal Courses: 1,063
  - (b) Non-Formal Courses (own NIELIT centres): 795
  - (c) Skill Development in ESDM: 278
  - (d) Digital Literacy Courses: 19,986
- Number of Women candidate(s) Trained: 10,787
  - (a) Formal Courses: 179
  - (b) Non-Formal Courses (own NIELIT centres): 306
  - (c) Skill Development in ESDM: 110
  - (d) Digital Literacy Courses: 10,192

# 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 2.5 crore digital payment transactions for 2017-18 and 2 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, are as follows:

MODES	Volume (in thousands)
BHIM	472.13
USSD	0.4
RuPay Card on PoS	74.69

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

# **3.1 Promotion of IT/IT enabled** Services

# (i) Centres and Incubation Space

• Existing Centres: There is 1 STPI centre in Mizoram at Aizwal.

# 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'e-Varaha: Information System for Safe Pork Production in North Eastern India has been initiated under the thrust area ITRA-Ag. College of Veterinary Sciences & Animal Husbandry, Central Agricultural University Aizawl, Mizoram is the Participating Institute (PI) in this project.

# 5. ERNET India

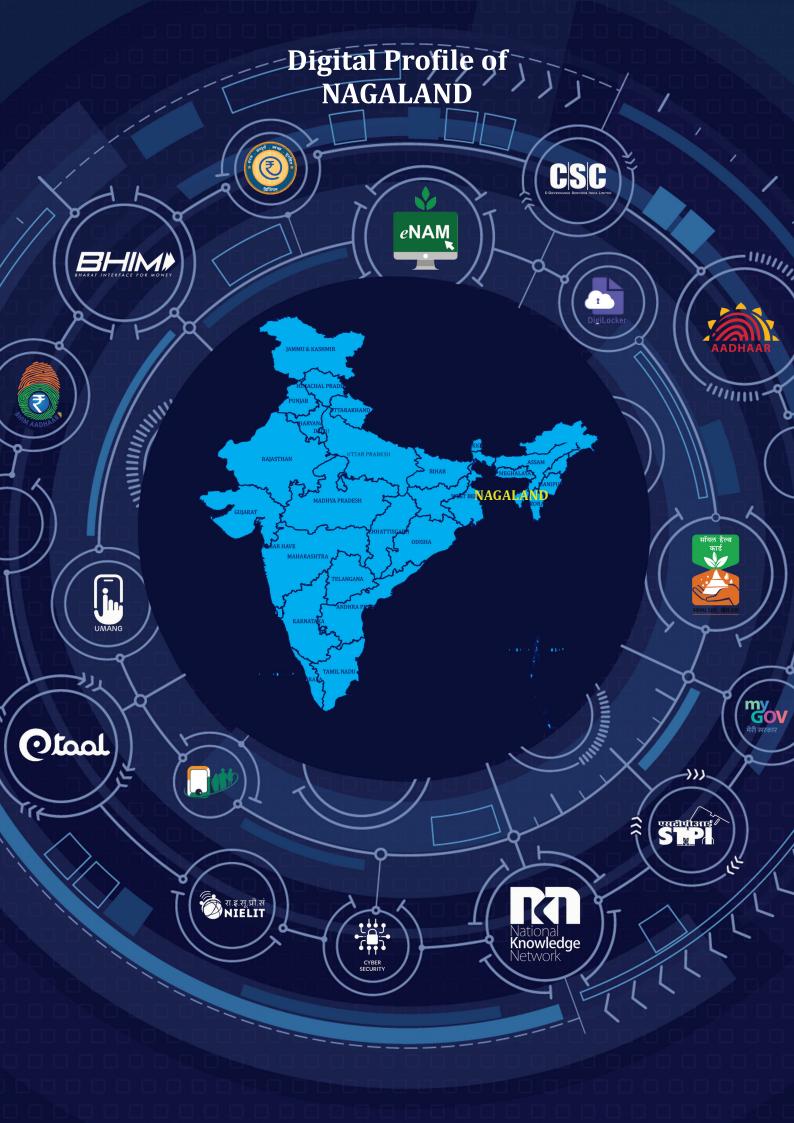
#### (i) VSAT Network:

• VSAT has been set up and is operational at 4 sites.

#### (ii) eduroam service

• 1 Institute of Meghalaya has been facilitating eduroam service.

- Number of cyber incident(s) reported: 11
- Number of alert (s)/advisories issued: 1,150



### Digital Profile of NAGALAND

# **1. Digital Access**

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population, 2018 (Projected): 21.89 lakh
- Numbers of Aadhaar assigned, 2018 (LIVE): 12.6 lakh
- % of saturation ,2018 (LIVE) : 57.6%
- 0-5 years (LIVE): 0.04 lakh (1.7% Aadhaar Saturation)
- 5-18 years (LIVE): 3.15 lakh (45.4% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 8 Links to Institutions under NKN have been commissioned and made operational.
- NKN Links have also been extended to 1 NIC District.

#### (iii) State Wide Area Network (SWAN)

- Nagaland SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 10 Districts Head Quarters (DHQ) and 34 Blocks Head Quarters (BHQ).
- Nagaland SWAN has been utilizing more than 65% bandwidth of its link capacity.

#### (iv) National Information Infrastructure (NII) pilot project

• A pilot proposal for a period of one year on National Information Infrastructure (NII) for one District each in 7 States, namely Nagaland, Karnataka, Kerala, Gujarat, Uttarakhand, Chandigarh and Puducherry has been implemented successfully, covering 36 blocks, 1,560 Gram Panchayats (GPs) and more than 4,000 Government offices.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 216 CSCs are functional; out of these, 199 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 50

#### (ii) e-District

• 30 e-District services have been launched in 11 Districts.

#### (iii) DigiLocker

- More than 1,520 Aadhaar enabled registrations have taken place.
- (iv) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 7 Services of Nagaland are onboarded on UMANG platform.

#### (v) Soil Health Card (SHC)

• 2.21 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	33,423		
Cycle 2	41,123		
Samp	les Tested		
Cycle 1	33,423		
Cycle 2	39,223		
SHCs Dispatched			
Cycle 1	1,84,797		
Cycle 2	36,823		

#### (vi) e-Transactions under eTaal 2.0 Project

- 101 e-Services have been integrated.
- Around 61.9 lakh e-transactions have been recorded, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP):

• Around 44,000 applications have received; out of these, 38,000 have been successfully verified.

• Around Rs 16.24 crore has been disbursed in the State of Nagaland using the NSP portal.

#### (viii) eSign

- Nearly 0.62 lakh esigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 22 Departments/services have been integrated for Push SMS.
- Over 5.94 lakh SMSes have been sent by the Departments in Nagaland using this platform.
- 1 Mobile applications pertaining to the Departments of Nagaland has been downloaded over 775 times.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

#### (i) Skill Development in ESDM for Digital India

- Total Target: 8,000 Candidates.
- 148 Candidates have been enrolled and trained; out of these, 102 candidates have been certified.
- (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 1.01 lakh persons.
- 2,065 Persons have been trained; out of these, 1,082 persons have been certified.
- (iii) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
  - An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs andother engineering colleges. From the State of Nagaland, NIT, Nagaland has been included under the programme as Participating Institution (PI) in the cluster of IIT, Guwahati.
  - State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at NIT, Nagaland.
  - 123 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Nagaland in

the area of VLSI design/ System design in the first three year of the programme.

- Projects for development of Board Level Design using the Field Programmable Gate Arrays (FPGAs) are being implemented.
- (iv) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Kohima with its rural extension centre at Chuchuyimlang in Mokokchung District of Nagaland aims to raise the level of education and IT literacy in and around the district and create equal opportunities to rural youths to participate and contribute to the growth of IT industry in the region.
- Area of Excellence: Cyber Forensics; Cyber Security and Medical Electronics.
- **Courses Offered**: Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 12,887
  - (a) Formal Courses: 234
  - (b) Non-Formal Courses (own NIELIT Centres: 3,342
  - (c) Skill Development in ESDM: 148
  - (d) Digital Literacy Courses: 9,163
- Number of Schedule Caste (SC) candidate(s)
   Trained: 251
  - (a) Formal Courses: 3
  - (b) Non-Formal Courses (own NIELIT centres): 17
  - (c) Skill Development in ESDM: 3
  - (d) Digital Literacy Courses: 228
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 12,368
  - (a) Formal Courses: 227
  - (b) Non-Formal Courses (own NIELIT centres): 3,306
  - (c) Skill Development in ESDM: 100
  - (d) Digital Literacy Courses: 8,735
- Number of Women candidate(s) Trained: 6,078
  - (a) Formal Courses: 33
  - (b) Non-Formal Courses (own NIELIT centres): 1,294
  - (c) Skill Development in ESDM: 70
  - (d) Digital Literacy Courses: 4,681

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 4.7 crore digital payment transactions for 2017-18 and 3 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April1, 2017 till December 31, 2018, are as follows:

MODES	Volume (in thousands)
BHIM	957.64
USSD	1.14
RuPay Card on PoS	84.75

(Source: Digipay dashboard)

#### **3.1 Promotion of Electronics Manufacturing**

# (i) North East BPO Promotion Scheme (NEBPS)

 NEBPS aims to incentivise establishment of 5000 BPO/ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore (Rupees fifty crore only) up to December 31, 2019. The details are as mentioned in table below:

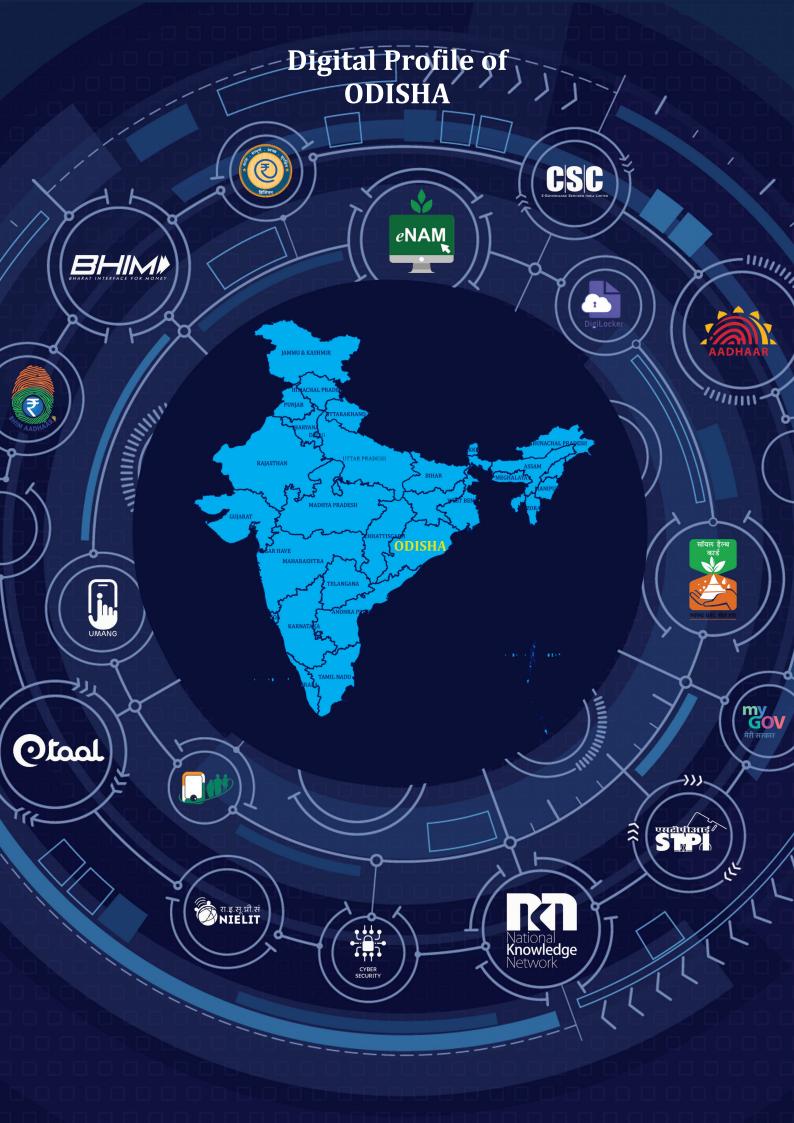
### 4. ERNET India

(i) VSAT Network:

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Clairvoyance Technologies Private Limited	Dimapur	50	Not Started	NA
2	Infinity Infomatic Pvt. Ltd.	Kohima	400	Operational	130
	Total		450		30

### 3. Digital Entrepreneurship and Industry

• VSAT has been set up and made operational at 10 sites.



### Digital Profile of ODISHA

# **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population, 2018 (Projected): 4.54 crore
- Numbers of Aadhaar assigned, 2018 (LIVE): 4.24 crore
- % of saturation, 2018 (LIVE): 93.4%
- 0-5 years (LIVE): 28.84 lakh (72.9% Aadhaar Saturation)
- 5-18 years (LIVE): 95.83 lakh (81.4% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 8 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN Links have also been extended to 1 NIC District.

#### (iii) State Wide Area Network (SWAN)

- Odisha SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 30 Districts Headquarters (DHQ) and 284 Blocks Head Quarters (BHQ).
- Odisha SWAN has been utilizing more than 85% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 12,658 CSCs are functional; out of these, 6,951 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs (VLEs): 2,169

#### (ii) e-District

• 9 e-District services have been launched in all 30 Districts.

#### (iii) DigiLocker

- More than 1.88 lakh Aadhaar enabled registrations have taken place.
- eDistrict Odisha, Revenue Department and

State Council for Technical Education and Vocational Training are integrated with DigiLocker.

# (iv) UMANG (Unified Mobile App for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Odisha can access the Central Government services available on UMANG.

#### (v) Soil Health Card (SHC)

• 33.83 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	6,68,635		
Cycle 2	4,85,064		
Samples Tested			
Cycle 1	668635		
Cycle 2	4,16,345		
SHCs	Dispatched		
Cycle 1	23,74,233		
Cycle 2	10,09,783		

#### (vi) e-Hospital

 e-Hospital has been implemented in 2 hospitals - All India Institute of Medical Sciences, Bhubaneswar; and Swami Vivekananda National Institute of Rehabilitation Training and Research. The same is running on cloud network.

- Modules Implemented: OPD and IPD Registration.
- More than 12.61 lakh ehospitals transactions have been recorded.

#### (vii) e-Transactions under eTaal 2.0 Project

- 149 e-Services have been integrated.
- Around 22.79 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP) :

- Around 68,000 applications have been received; out of these, 39,000 have been successfully verified.
- Around Rs 14 crore has been disbursed in Odisha using the NSP portal.

#### (ix) eSign

- Nearly, 20.81 lakh esigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 37 Departments/Services have been integrated for Push SMS.
- Over 11.37 crore SMSes have been sent by the Departments in Odisha using this platform.
- 5 Mobile applications pertaining to the Departments of Odisha have been downloaded over 2,650 times.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 Candidates.
- State Implementing Agency: Odisha Computer Application Centre (OCAC), Bhubaneshwar.
- 14,814 Candidates have been enrolled and trained; out of these, 10,863 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- NIT, Rourkela and IIIT, Bhubaneswar have

been selected for the implementation of ISEA Project Phase II in the capacity of Resource Centre (RC) and Participating Institute (PI) respectively.

- Outlay for 5 years: Rs 349.44 lakh.
- Funds released: Rs 127.97 lakh.
- 1,888 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 10 awareness workshops on Information Security have been organised covering 1,256 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target : 25.17 lakh persons.
- 10.87 Lakh candidates have been trained; out of these, 6.04 lakh candidates have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 12 Full-time PhD seats have been allocated to 2 institutes NIT, Rourkela and IIT, Bhubaneshwar.
- 10 Full-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Odisha, IIT, Bhubaneswar as Resource Center and NIT, Rourkela has been included in the programme as Participating Institution (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been setup at IIT, Bhubaneswar and NIT, Rourkela.
- 1,236 Persons have been trained at B. Tech, M.Tech and PhD. levels at IIT, Bhubaneswar and NIT, Rourkela in the area of VLSI design/ System design in the first three years of the programme.
- Projects for development of working prototypes of System/ System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.

#### (vi) National Institute of Electronics and

#### Information Technology (NIELIT)

- NIELIT centre at Bhubaneswar is operational from a 5,207 sq ft carpet area at OCAC tower. The centre is in the project mode and is operating under the mentor centre Kolkata.
- Total number of candidate(s) Trained: 13,399
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 177
  - (c) Skill Development in ESDM: 12,031
  - (d) Digital Literacy Courses: 1,191

#### • Number of Schedule Caste (SC) candidate(s) - Trained: 1,592

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 76
- (c) Skill Development in ESDM: 1,459
- (d) Digital Literacy Courses: 57

#### • Number of Schedule Tribe (ST) candidate(s) - Trained: 1,223

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres: 74
- (c) Skill Development in ESDM: 1,090
- (d) Digital Literacy Courses: 59
- Number of Women candidate(s) Trained: 5,319
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 35
  - (c) Skill Development in ESDM: 5,054
  - (d) Digital Literacy Courses: 230

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 73 crore digital payment transactions for 2017-18 and 50 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31,

#### 2018, are as follows:

MODES	Volume(in thousands)
BHIM	129646.07
USSD	141.81
RuPay Card on PoS	76721.66

### 3. Digital Entrepreneurship and Industry

#### **3.1 Promotion of Electronics Manufacturing**

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Infovalley, Bhubaneswar Industrial Area, Khurda District
- Implementing agency: M/ s Odisha Industrial development Corporation (IDCO)
- Area: 203.37 acres
- Project Cost: Rs 200.76 crore
- Project is under implementation phase.
- Government Grant-in-aid amounting to Rs 18.62 crore has been released.
- 4 units have booked their lands. Out of these, 1 unit has started construction activity.
- Infrastructure development is under progress.

#### (ii) MSIPS

• Under M-SIPS, a total of 3 applications with investment worth Rs 189 crore have been received and are under consideration.

#### 3.2 Promotion os IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 18 successful bidders to set up 24 BPO/ ITES operation for 2,782 seats. Out of these, 1,982 seats have been operational. Details of the units are as mentioned in the table below:

S. No.	Unit Name		City	Seats Allocated	Status	Employment Reported
1	Weaverbird Engineering Technology Private Limited	And	Balasore	50	Operational	25
2	Abstech Services Pvt Ltd		Bhubaneswar	100	Not Started	NA

3	Black Knight India Solutions Private Limited	Bhubaneswar	150	Not Started	NA
4	BPO Convergence Private Limited	Bhubaneswar	200	Operational	200
5	BPO Convergence Private Limited	Bhubaneswar	100	Operational	74
6	Hari Telematics Private Limited	Bhubaneswar	100	Operational	57
7	IDS Logic Private Limited	Bhubaneswar	100	Operational	16
8	Live Digital Marketing Solutions Pvt Ltd	Bhubaneswar	100	Not Started	NA
9	Luminous Infoways Private Limited	Bhubaneswar	100	Operational	50
10	Nexgen Renaissance Private Limited	Bhubaneswar	100	Operational	75
11	P and A Advertising Agency Pvt Ltd	Bhubaneswar	117	Operational	12
12	Silicon Techlab Private Limited	Bhubaneswar	100	Operational	157
13	SMA E-expert Pvt. Ltd.	Bhubaneswar	100	Operational	36
14	Soumyasree IT Services Private Limited	Bhubaneswar	200	Operational	133
15	STLZSTONE TECHNOBPO PRIVATE LIMITED	Bhubaneswar	100	Operational	50
16	SuyogComputech Pvt Ltd	Bhubaneswar	51	Operational	54
17	Tatwa BPO Ltd	Bhubaneswar	200	Not Started	NA
18	Weaverbird Engineering And Technology Private Limited	Bhubaneswar	60	Operational	35
19	Black Knight India Solutions Private Limited	Chandrasekharpur	150	Operational	118
20	Tatwa Technologies Limited	Cuttack	150	Operational	2
21	RuralShores Business Services Private Limited	Jaleswar	150	Operational	211
22	SuyogComputech Pvt Ltd	Puri	54	Operational	5
23	Abstech Services Pvt Ltd	Sambalpur	50	Not Started	NA
24	RuralShores Business Services Private Limited	Sambalpur	200	Not Started	NA
	Total		2782		1310

#### (ii) IT/ITeS

• Software exports made by registered units are as mentioned in table on the right :

#### (iii) Centres and Incubation Space

- Existing Centres: STPI has three operational centres at Bhubaneswar, Rourkela and Berhampur.
- Proposed/upcoming centres: Balasore, Sambalpur, Jajpur, Angul and Koraput.

YEAR	Exports in INR crores
2013-14	1919.09
2014-15	1940.00
2015-16	2179.70
2016-17	2493.40
2017-18	2503.88

# 4. Research and Development

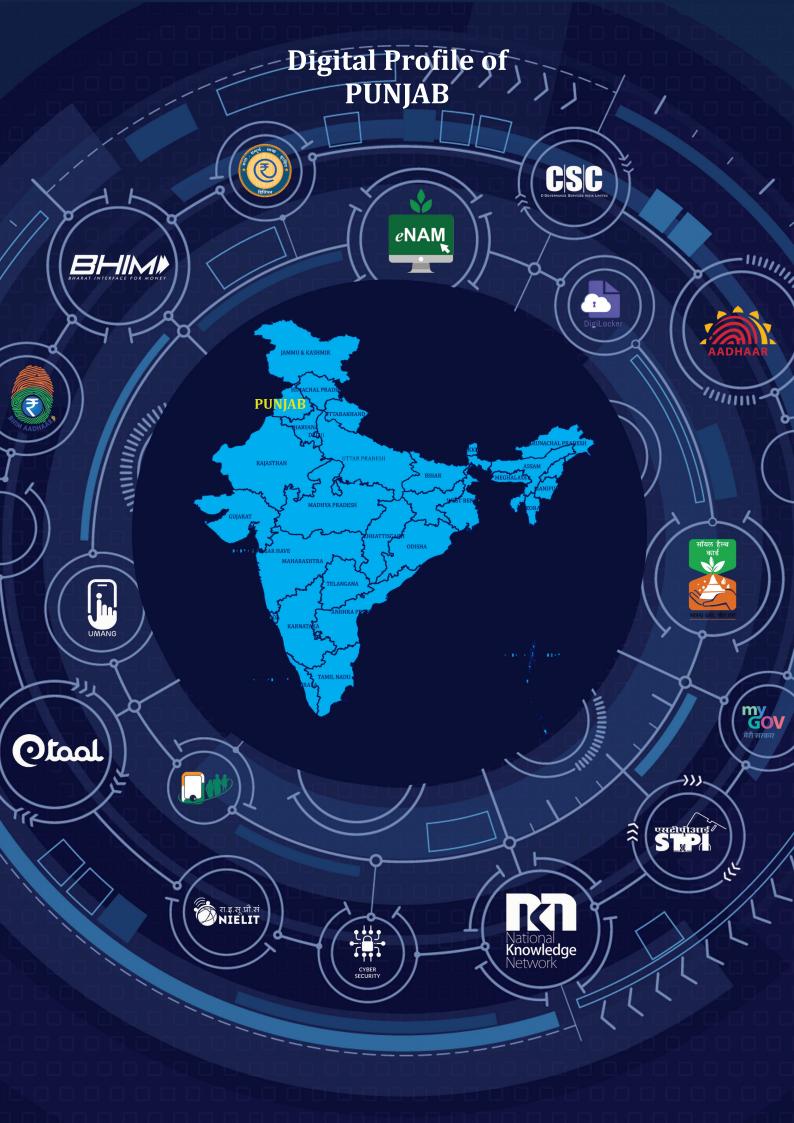
- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'AquaSense: Development of effective Wireless Sensor Network system for water quality and quantity monitoring' has been initiated under the thrust area ITRA-Water. Sambalpur University Institute of Information Technology, Sambalpur is the Participating Institute (PI) in this project.
- Another multi-institutional R&D project titled 'IGWL: Improving Groundwater Levels and Quality through Enhanced Water Use Efficiency in Eastern Indian Agriculture' has also been initiated under the area ITRA-Water1. IIT, Bhubaneshwar, KIIT, Bhubaneshwar and CAET-OUAT Bhubaneshwar are the Participating Institutes (PI) in this project.
- Multi-institutional R&D project titled 'RemoteHealth: A framework for Healthcare Services using Mobile and Sensor Cloud Technologies' has also been initiated under the thrust area ITRA-Mobile. KIIT ,Bhubaneshwar is the Participating Institute (PI) in this project.

### 5. ERNET India

- (i) Eduroam Services
- 6 Institutes of Odisha are facilitating eduroam service.
- (ii) Wi-Fi Enabled Campus Networking at Utkal University, Bhubaneswar, Odisha
- Modern IT & Wi-Fi technology are playing an important role in improving efficiency and increasing communication among students, faculties and many more. Moving one more step in this direction, ERNET India has set up Wi-Fi enabled campus Network under Digital India programme at Utkal University, Bhubaneswar, Odisha.
- Phase 1 of the project is installed and has been operational, and integrated with the existing network of the university. Wireless Network connectivity is reliable, secure and scalable. Wi-Fi can be accessed on anytime, anywhere basis across the coverage area. Wi-Fi facility is being used by +5000 users of the University for Video lectures, online study materials etc. Phase 2 of the project is under process to cover the remaining buildings/ areas.

### 6. CYBER SECURITY

- Number of cyber incident (s) reported: 1,347
- Number of alert(s)/ advisories issued: 1,150



### Digital Profile of PUNJAB

# I. Digital Access

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 2.96 crore
- Numbers of Aadhaar assigned, 2018 (LIVE): 3.02 crore
- % of saturation 2018 (LIVE): 102.3%
- 0-5 years (LIVE) : 16.74 lakh (74.2% Aadhaar Saturation)
- 5-18 years (LIVE): 62.53 lakh (103.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 23 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN Links have also been extended to 25 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Punjab SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 20 Districts Headquarters (DHQ) and 172 Blocks Head Quarters (BHQ).
- Punjab SWAN has been utilising more than 70% bandwidth of its link capacity.

### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 7,815 CSCs are functional; out of these, 4,672 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs (VLEs): 2,709

#### (ii) e-District

• 42 e-District services have been launched in all 22 Districts.

#### (iii) DigiLocker

- More than 1.47 lakh Aadhaar enabled registrations have taken place.
- eDistrict Punjab and Punjab School Education Board are integrated with DigiLocker.

#### (iv) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 13,000 Digital Life Certificates (DLCs) have

been successfully generated.

#### (v) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Punjab can access the Central Government services available on UMANG.

#### (vi) Meghraj:

• More than 32 applications are running on 32 virtual servers.

#### (vii) Soil Health Card

• 17.09 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	8,35,526		
Cycle 2	8,35,526		
Samples Tested			
Cycle 1	12,51,726		
Cycle 2	5,07,313		
SHCs	Dispatched		
Cycle 1	12,51,726		
Cycle 2	4,57,744		

#### (viii) eHospital

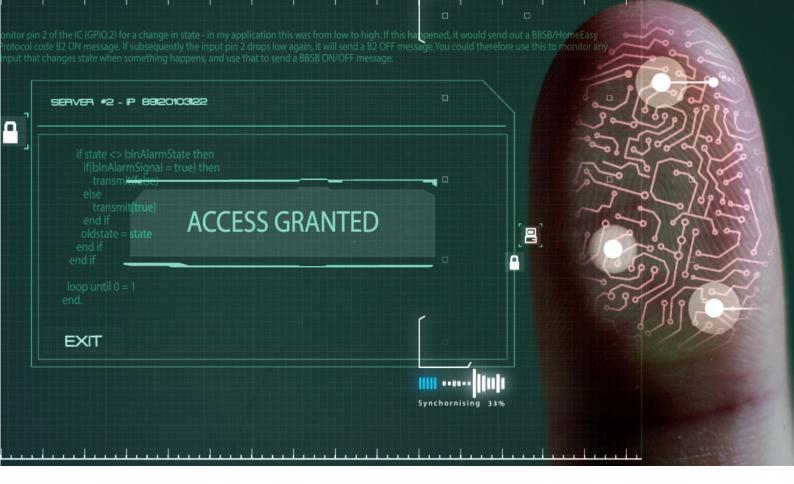
- Rolled out in 2 hospital Civil Hospital, Dasuya and Civil Hospital, Mohali.
- Modules Implemented: Registration.
- Around 4.22 lakh ehospital transactions have been recorded.

#### (ix) e-Transactions under eTaal 2.0 Project

- 239 e-Services have been integrated.
- Around 14.62 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (x) National Scholarship Portal (NSP)

• Around 6.85 lakh applications have been



received; out of these, 5.93 lakh applications have been successfully verified.

• Rs 112.78 crore has been disbursed.

#### (xi) eSign

- Nearly, 15.24 lakh esigns have been issued.
- (xii) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 104 Departments/Services have been integrated for Push SMS.
- Over 64 crore SMSes have been sent by the Departments in Punjab using this platform.
- 18 Mobile applications pertaining to the Departments of Punjab downloaded more than 49,960 times.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- State Implementing Agency: Society for promotion of IT Industry in Punjab (SPITIP), Chandigarh.
- 10,420 Candidates have been enrolled

and trained; out of these, 8,273 have been certified

- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- NIT, Jallandhar and C-DAC, Mohali have been selected for the implementation of ISEA Project Phase II in the capacity of Participating Institute (PI) and Implementing Agency (IA) respectively.
- Outlay for 5 years: Rs 171.45 lakh.
- Funds released: Rs 104.81 lakh.
- 1,534 Candidates have been trained/ under-going training in various formal/ non-formal courses and 244 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 36 awareness workshops on Information Security have been organised, covering 4,007 participants.

#### (iii)Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 12.47 lakh persons.
- 5.65 Lakh persons have been trained; out of these, 3.53 lakh persons have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 33 Full-time and 22 part-time PhD seats

have been allocated to 5 institutes - Dr. B R.Ambedkar National Institute of Technology, Jalandhar; Guru Nanak Dev University, Amritsar; Indian Institute of Technology, Ropar; and Punjabi University, Thapar University.

• 30 Full-time and 5 part-time PhD candidates have been enrolled.

#### (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Punjab, Thapar University; IIT, Ropar; and NIT, Jalandhar; have been included in the programme as Participating Institutions (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been setup at Thapar University; IIT, Ropar; and NIT, Jalandhar.
- 1,986 Persons have been trained at B. Tech, M.Tech and PhD. levels at Thapar University, IIT, Ropar and NIT, Jalandhar in the area of VLSI design/ System design in the first three years of the programme.

#### (vi) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Ropar aims to provide educational and professional services in the areas of Information, Electronics & Communication Technology (IECT) and to create awareness among Government Departments and masses by organising workshops and seminars.
- Area of Excellence: Module Application Development using Andriod; Embedded System Design using Arduino PHP with MySQL.
- **Courses Offered:** Long Term (Non-Formal), Short Term courses and Digital Literacy courses
- Total number of candidate(s) Trained: 7,298
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 394
  - (c) Skill Development in ESDM: 5,867
  - (d) Digital Literacy Courses: 1,037

#### Number of Schedule Caste (SC) candidate(s) - Trained: 2,054

- (a Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 271
- (c) Skill Development in ESDM: 1,574
- (d) Digital Literacy Courses: 209

# Number of Schedule Tribe (ST) candidate(s) - Trained: 31

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 3
- (c) Skill Development in ESDM: 22
- (d) Digital Literacy Courses: 6

# Number of Women candidate(s) - Trained: 3,045

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 186
- (c) Skill Development in ESDM: 2,520
- (d) Digital Literacy Courses: 339

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 68 crore digital payment transactions for 2017-18 and 75 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, for the State of Punjab since April 1, 2017 till December 31, 2018, are as follows:

MODES	Volume (in thousands)
BHIM	33320.26
USSD	75.03
RuPay Card on PoS	18566.19

(Source: Digipay dashboard)

### 3. Digital Entrepreneurship and Industry

**3.1 Promotion os IT/IT Enabled Services** 

(i) India BPO Promotion Scheme (IBPS)



• In-Principle Approval (IPA) has been issued to 8 successful bidders to set up 9 BPO/ITES operation for 2,500 seats in Punjab. Out of 2,500 seats, 1,800 seats are operational. The detail of the units are as mentioned in the table below:

S No.	Unit Name	City	Seats Al- located	Status	Employment Reported
1	AK EDU Technologies Pvt Ltd	Amritsar	300	Operational	65
2	Aerial Telecom Solutions Private Lim- ited	Mohali	100	Operational	6
3	CRM Services India Pvt. Ltd.	Mohali	600	Not Started	NA
4	CRM Services India Pvt. Ltd.	Mohali	1000	Operational	2343
5	Iqbri Telecom Private Limited	Mohali	100	Operational	13
6	Mark Software Systems Private Limited	Mohali	100	Operational	69
7	ND Care Nirogam Private Limited	Mohali	100	Operational	63
8	Signature Forex & Allied Services Private Limited	Mohali	100	Not Started	NA
9	NVR & Associates Limited	Pathankot	100	Operational	10
	Total		2500		2569

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crores
2013-14	340.38
2014-15	336.34
2015-16	324.83
2016-17	369.93
2017-18	369.93

#### (iii) Centres and Incubation Space

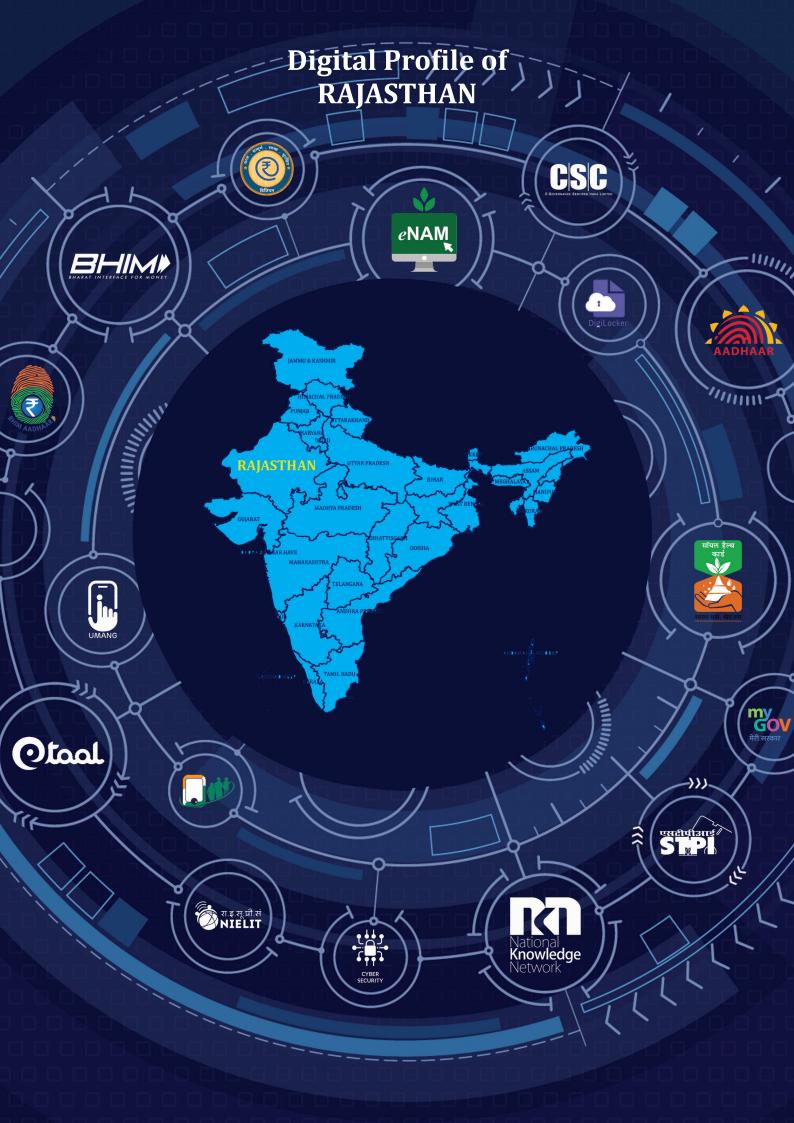
- **Existing centres**: There is one STPI centre in State of Punjab at Mohali.
- **Proposed/upcoming centres**: There is one STPI centre coming up in at Amritsar.

### 4. ERNET India

- (i) Eduroam Services
- 8 Institutes of Punjab are facilitating eduroam service.

### **5. CYBER SECURITY**

- Number of cyber incident (s) reported: 1,642
- Number of alert(s)/ advisories issued: 1,150



### Digital Profile of RAJASTHAN

# **1. Digital Access**

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 7.82 crore
- Numbers of Aadhaar assigned,2018 (LIVE): 6.81 crore
- % of saturation 2018 (LIVE): 87.1%
- 0-5 years (LIVE): 22.30 lakh (26.8% Aadhaar Saturation)
- 5-18 years (LIVE): 1.83 crore (75.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 40 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 34 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Rajasthan SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 32 Districts Headquarters (DHQ) and 217 Blocks Head Quarters (BHQ).
- Rajasthan SWAN has been utilising more than 90% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 15,407 CSCs are functional; out of these, 11,941 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs: 1,861

#### (ii) e-District

• 500 e-District services have been launched in all 33 Districts.

#### (iii) DigiLocker

• More than 3.01 lakh Aadhaar enabled registrations have taken place.

#### (iv) Jeevan Pramaan

- More than 22.91 lakh Digital Life Certificates (DLCs) have been generated.
- (v) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 2 Services of Rajasthan have been onboarded on UMANG platform.
- 3 Services of VAHAN have been onboarded.

#### (vi) Meghraj

• 63 Websites and applications are running on 72 virtual servers.

#### (vii) Soil Health Card

• 46,000 Soil Health Cards have been issued.

Samples Collected				
<b>Cycle 1</b> 13,217				
Cycle 2	6,609			
Samples Tested				
Cycle 1	13,217			
Cycle 2	3,079			
SHCs Dispatched				
Cycle 1	46,000			

#### (viii) eHospital

- Rolled out in 2 hospitals All India Institutes of Medical Sciences(AIIMS), Jodhpur and National Institute of Ayurveda, Jaipur.
- Modules Implemented: OPD, IPD and Billing.

#### (ix) e-Transactions under eTaal 2.0 Project:

- 286 e-Services have been integrated.
- Around 67.49 crore e-transactions have been recorded, electronically by various e-Governance applications.
- (x) National Scholarship Portal (NSP):
- Around 3.10 lakh applications have been received; out of these, 2.35 lakh applications have been successfully verified.
- Over Rs 73.04 crore has been disbursed.
- (xi) eSign
- Nearly 33.25 lakh esigns have been issued.
- (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 173 Departments/services have been integrated for Push SMS.
- Over 184.74 crore SMSes have been sent by the Departments in Rajasthan using this platform.
- 19 Mobile applications pertaining to the Departments of Rajasthan have been downloaded 51,230 times.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- State Implementing Agency: Rajasthan Knowledge Corporation Ltd. (RKCL), Jaipur.
- 15,048 Candidates have been enrolled and trained; out of these, 10,873 have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- MNIT, Jaipur has been selected for the implementation of ISEA Project Phase II in the capacity of Resource Centre (RC).
- Outlay for 5 years: Rs 199.04 lakh.
- Funds released: Rs 102.26 lakh.
- 933 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security.

Besides this, 7 awareness workshops on Information Security have been organised covering 294 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 37.12 lakh persons.
- 9.70 Lakh candidates have been trained; out of these, 5.14 lakh candidates have been certified.
- (iv) Electronics and ICT Academy at Malaviya National Institute of Technology(MNIT), Jaipur
- Under the 'Scheme of financial assistance for Setting up of Electronics and ICT Academies', MeitY has set up one of the Electronics and ICT Academy at MNIT Jaipur; out of the 7 such academies set up at premier and leading institutions in the country.
- Rs 5.30 crore has been released to MNIT, Jaipur for implementation of the scheme. MNIT, Jaipur would be imparting training to 6,400 faculties in a period of 4 years.
- MNIT, Jaipur has conducted 64 Faculty Development Programmes and has imparted training to 3,005 beneficiaries.
- (v) Visvesvaraya PhD Scheme for Electronics & IT
- 40 Full-time and 51 part-time PhD seats have been allocated to 3 institutes - Central University of Rajasthan; IIT, Jodhpur; and Malaviya National Institute of Technology, Jaipur.
- 32 Full-time and 4 part-time PhD candidates have been enrolled.
- (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Rajasthan, Central Electronics Engineering Research Institute (CEERI), Pilani as Resource Centre, and IIT, Jodhpur and MNIT, Jaipur have been included in the programme as Participating Institutions (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at CEERI, Pilani; IIT, Jodhpur; and NIT, Jaipur.

• 945 Persons have been trained at B. Tech and M.Tech levels at CEERI, Pilani IIT, Jodhpur and MNIT, Jaipur in the area of VLSI design/System design in the two years of the programme.

#### (vii) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Ajmer aims to provide educational and professional services in the areas of Information, Electronics & Communication Technology (IECT) and to create awareness among Government Departments and masses by organising workshops and seminars.
- Area of Excellence: Training in Non-formal Long and Short-Term Courses in Electronic and Information Technology; Coordination of CCC/BCC/ECC/CCCP Examinations; Training of SC/ST job seekers under DGE&T Scheme; and Training under ESDM Schemes.
- **Courses Offered**: Long Term Courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 43,073
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 1,072
  - (c) Skill Development in ESDM:12,753
  - (d) Digital Literacy Courses: 29,248

#### • Number of Schedule Caste (SC) candidate(s) - Trained: 5,966

- (a) Formal Course: 0
- (b) Non-Formal Courses (own NIELIT centres): 377
- (c) Skill Development in ESDM: 2,552
- (d) Digital Literacy Courses: 3,037

#### • Number of Schedule Tribe (ST) candidate(s) - Trained: 2,000

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres: 308
- (c) Skill Development in ESDM: 703
- (d) Digital Literacy Courses: 989
- Number of Women candidate(s) Trained: 11,792
  - (a) Formal Courses: 0

- (b) Non-Formal Courses (own NIELIT centres: 237
- (c) Skill Development in ESDM: 3,383
- (d) Digital Literacy Courses: 8,172

#### (viii) Promotion of Digital Payments

- MeitY has assigned a target of 129 crore digital payment transactions for 2017-18 and 125 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December, 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	2892.55
USSD	2.0
RuPay Card on PoS	2783.88

(Source: Digipay dashboard)

### 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Salarpur, Khuskhera, Bhiwadi
  - Implementing Agency: M/s ELCINA Electronics Manufacturing Cluster Pvt. Ltd (EEMCPL).
  - Area: 50.30 acres
  - Project Cost: Rs 46.09 crore
  - Project is in implementation phase.
  - Government Grant-in-aid amounting to Rs 6.07 crore has been released.
  - 19 Units have booked their land. 1 unit has started construction activity.
  - Infrastructure development is under progress.
- Greenfield EMC at Karoli Industrial Area, Bhiwadi, District-Alwar.
  - Implementing Agency: M/s Rajasthan

State Industrial Development & Investment Corporation Ltd. (RIICO).

- Area: 121.51 acres
- Project Cost: Rs 78.98 crore
- Project is under implementation phase.
- 2 Units have booked its land. Of these, 1 unit has started its commercial production.
- Infrastructure development is under progress.
- (iii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 19 applications with investment worth Rs 2,951 crore have been received and are under consideration. Out of these 19 applications, 10 applications with proposed investment worth Rs 2,435 crore have been approved.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 4 successful bidders to set up 4 BPO/ITES operation for 500 seats. Out of 500 seats, 400 seats are operational. The details of the units is as mentioned in the table below:

YEAR	Exports in INR crore
2013-14	664.06
2014-15	712.27
2015-16	803.97
2016-17	997.32
2017-18	989.22

### 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'Cognitive Radio: Mobile Broadband Service Support Over Cognitive Radio Networks' has been initiated under the thrust area *ITRA-Mobile.* LNM Institute of Information Technology, Jaipur is the Participating

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Mattsenkumar Services Private Limited	Jaipur	200	Operational	248
2	ParamhansEducare Private Limited	Jaipur	100	Not Started	NA
3	Premkunj Construction & Engineering Private Limited	Jaipur	100	Operational	83
4	Mewar Hi-Tech Engineering Private Limited	Udaipur	100	Operational	41
	Total		500		372

#### (ii) Software Technology Parks of India (STPI) Centres

- STPI centres are operational at Jaipur and Jodhpur.
- Software exports made by registered units are as follows:

Institute (PI) in this project.

### **5. ERNET India**

#### (i) Smart Virtual Classroom

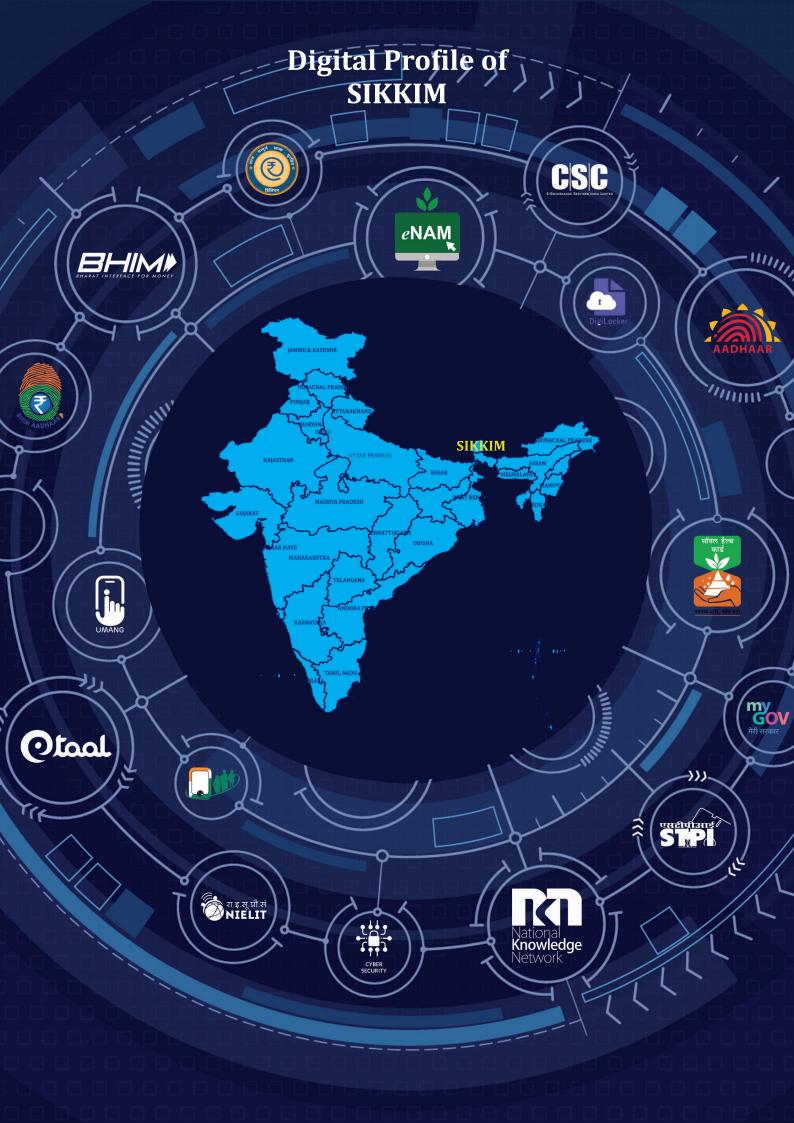
• 770 Schools and 11 District Institute for Electronics and Training (DIETs) have been covered under the project.

#### (ii) eduroam Services

• 8 Institutes of Rajasthan are facilitating eduroam connectivity.

## **6. CYBER SECURITY**

- Number of cyber incident (s) reported: 2,735
- Number of alert(s)/advisories issued: 1,150



# Digital Profile of SIKKIM

# **1. Digital Access**

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018) : 6.7 lakh
- Numbers of Aadhaar assigned, 2018 (LIVE): 5.89 lakh
- % of saturation 2018 (LIVE) : 87.8%
- 0-5 years (LIVE): 0.17 lakh (37.1% Aadhaar Saturation)
- 5-18 years (LIVE): 1.24 lakh (69.2% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 5 Links to Institutions under NKN have been commissioned and made operational.
- NKN Links have also been extended to 3 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Sikkim SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 4 Districts Headquarters (DHQ) and 38 Blocks Head Quarters (BHQ).
- Sikkim SWAN has been utilising more than 80% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 49 CSCs are functional; out of these, 36 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs: 9

#### (ii) e-District

• 28 e-District services have been launched in all 4 Districts.

#### (iii) DigiLocker

- More than 5,460 Aadhaar enabled registrations have taken place.
- (iv) UMANG (Unified Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on

UMANG.

• Citizens of Sikkim can access the Central Government services available on UMANG.

#### (v) Soil Health Card

• 46,000 Soil Health Cards have been issued.

Samples Collected					
<b>Cycle 1</b> 13,217					
Cycle 2	6,609				
Samples Tested					
Cycle 1	13,217				
Cycle 2	3,079				
SHCs Dispatched					
<b>Cycle 1</b> 46,000					

#### (vi) e-Transactions under eTaal 2.0 project:

- 72 e-Services have been integrated.
- Around 21.82 lakh e-transactions have been recorded, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP)

- Around 3,000 applications have been received; out of these, around 10,000 have been successfully verified.
- Around Rs 49 lakh has been disbursed in the using the NSP portal.

#### (viii) eSign

- Nearly, 1.76 esigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance Initiative of Government of India)
- 2 Departments/Services have been

integrated for Push SMS.

- Over 1.94 lakh SMSes have been sent by the Departments in Sikkim using this platform.
- 14 Mobile applications pertaining to the Departments of Sikkim has been downloaded 11,880 times.

### 2. Digital Empowerment through Digital Inclusion

### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 candidates.
- State Implementing Agency: Centre for Research & Training in Informatics (CRTI).
- 367 Candidates have been enrolled and trained; out of these, 206 have been certified.
- (ii) Visvesvaraya PhD Scheme for Electronics & IT
- 5 Full-time PhD seats have been allocated to 1 institute NIT, Sikkim.
- 5 Full-time PhD candidates have been enrolled.

#### (iii) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From Sikkim, NIT, Sikkim has been included in the programme as Participating Institution (PI) in the cluster of IIT, Kharagpur.
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at NIT Sikkim.
- 145 Persons have been trained at B. Tech, M.Tech and PhD. levels at NIT, Sikkim in the area of VLSI design/ System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Gangtok is creating specialized manpower in the areas of Information Electronics and Communication Technologies (IECT). Since inception, NIELIT, Gangtok has been implementing Digital India initiatives of

the Government of India. It has empowered the youth, weaker section of the society and the State Government employees through quality IT/ITeS education and training. The centre successfully implemented capacity building projects sponsored by MeitY and MDoNER, and organised events on current technological developments.

- Area of Excellence: IT Literacy and Cyber Security Awareness.
- **Courses Offered:** Long Term Courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 1,341
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 681
  - (c) Skill Development in ESDM: 367
  - (d) Digital Literacy Courses: 293
- Number of Schedule Caste (SC) candidate(s)
   Trained: 60
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 28
  - (c) Skill Development in ESDM: 8
  - (d) Digital Literacy Courses: 24
- Number of Schedule Tribe (ST) candidate(s) - Trained: 406
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 257
  - (c) Skill Development in ESDM: 1
  - (d) Digital Literacy Courses: 148
- Number of Women candidate(s) Trained: 857
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 474
  - (c) Skill Development in ESDM: 196
  - (d) Digital Literacy Courses: 187

### 2.2 Promotion of Digital Payment

• MeitY has assigned a target of 2.1 crore digital payment transactions for 2017-18 and 3 crore digital payment transactions for 2018-19.

• Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	906.46
USSD	10.12
RuPay Card on PoS	271.38

(Source: Digipay dashboard)

### 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of IT/IT Enabled Services
- STPI centre is operational at Gangtok.

• Software exports made by registered units are as under:

YEAR	Exports in INR crore
2016-17	38.29
2017-18	19.20

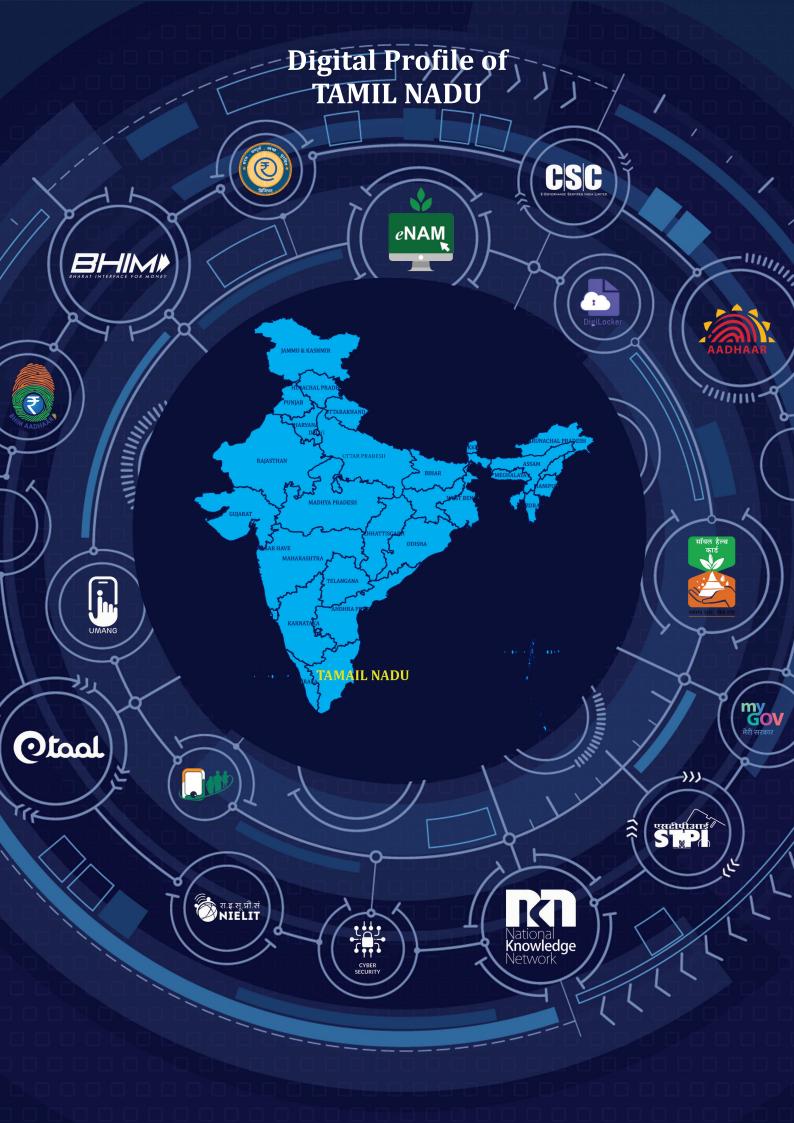
# 4. ERNET India

#### (i) Eduroam Services

• 1 Institute of Sikkim is facilitating eduroam service.

### **5. CYBER SECURITY**

- Number of cyber incident (s) reported: 41
- Number of alert(s)/advisories issued: 1,150



## Digital Profile of TAMIL NADU

# **1. Digital Access**

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 7.64 crore
- Numbers of Aadhaar assigned,2018(LIVE): 7.16 crore
- % of saturation 2018 (LIVE): 93.6%
- 0-5 years (LIVE): 29.23 lakh (52.2% Aadhaar Saturation)
- 5-18 years (LIVE): 1.39 crore (84.9% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 81 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 27 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Tamil Nadu SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 30 Districts Head Quarters (DHQ) and 676 Blocks Head Quarters (BHQ).
- Tamil Nadu SWAN has been utilising more than 85% bandwidth of its link capacity.

### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 9,873 CSCs are functional; out of these, 6,470 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs: 4,574

#### (ii) e-District

• 82 e-District services have been launched in all 32 Districts.

#### (iii) DigiLocker

- More than 6.52 Lakh Aadhaar enabled registrations have taken place.
- Greater Chennai Corporation and Directorate of Government Examinations of Tamil Nadu are integrated with DigiLocker.

#### (iv) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 5 Services of Tamil Nadu are onboarded on UMANG platform.

#### (v) Soil Health Card

• 1.4 Crore Soil Health Cards have been issued.

Samples Collected					
<b>Cycle 1</b> 12,74,536					
<b>Cycle 2</b> 12,98,589					
Samples Tested					
<b>Cycle 1</b> 12,74,536					
Cycle 2	10,41,910				
SHCs Dispatched					
Cycle 1	70,00,000				
Cycle 2	44,02,143				

#### (vi) e-Transactions under eTaal 2.0 Project:

- 213 e-Services have been integrated.
- Around 1,44.75 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP):

- Around 6.52 lakh applications have been received; out of these, 5.73 lakh applications have been successfully verified.
- Around Rs 121 crore has been disbursed using the NSP portal.

#### (viii) eSign

- Nearly, 26.46 esigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 41 Departments/services have been integrated for Push SMS.
- Over 46 crore SMSes have been sent by the Departments in Tamil Nadu using this platform.

### 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- 13,704 Candidates have been enrolled and trained; out of these, 9,351 have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- IIT, Madras; College of Engineering, Guindy; and NIELIT, Chennai; have been selected for implementation of ISEA Project Phase II in the capacity of Information Security Research and Development Centre (ISRDC), Participating Institute (PI) and Implementing Agency (IA).
- Outlay for 5 years: Rs 575.47 lakh.
- Funds released: Rs 314.41 lakh.
- 3,393 Candidates have been trained/ under-going training in various formal/ non-formal courses and 378 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 21 awareness workshops on Information Security have been organised covering 3, 693 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 26.79 lakh persons.
- 4.66 lakh persons have been trained; out of these, 2.64 lakh persons have been certified.

#### (iv) Visvesvaraya PhD Scheme for Electronics & IT

- 99 Full-time and 84 part-time PhD seats have been allocated to 10 institutes - Amrita Vishwa Vidyapeetham, Coimbatore; Anna University, Chennai; Annamalai University, Tamil Nadu; Indian Institute of Information Technology Design and Manufacturing, Kancheepuram; Indian Institute of Technology, Madras; Karunya Institute of Technology and Sciences, Coimbatore; National Institute of Technology, Tiruchirappalli; PSG College of Technology, Coimbatore; Sri Ramaswamy Memorial Institute of Science and Technology, Tamil Nadu; and Vellore Institute of Technology, Chennai.
- 95 Full-time and 23 part-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Tamil Nadu, IIT, Madras as Resource Center and PSGCT, Coimbatore; IIIT, Kanchipuram; and NIT, Trichy; has been included in the programme as Participating Institutions (PI).
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Madras; PSGCT, Coimbatore; IIIT, Kanchipuram; and NIT, Trichy.
- 2,963 Persons have been trained at B. Tech, M.Tech and PhD. levels trained at IIT, Madras; PSGCT, Coimbatore; IIIT, Kanchipuram; and NIT, Trichy; in the area of VLSI Design/ System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Chennai has emerged as an advanced training and electronic product development centre housing state-of-the-art facilities with special emphasis on IECT technologies viz. VLSI Design, Embedded System Design, Industrial Design of Electronic Products, Test and Measurements, Automotive Electronics, Information Security, and IT Applications (e-learning/multimedia animation).
- Area of Excellence: Electronic Product Design; Embedded System VLSI Design; and Information Technology

- **Courses Offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 18,823
  - (a) Formal Courses: 4
  - (b) Non-Formal Courses (own NIELIT centres: 5,597
  - (c) Skill Development in ESDM: 12,757
  - (d) Digital Literacy Courses: 465
- Number of Schedule Caste (SC) candidate(s) - Trained: 4,971
  - (a) Formal Courses: 1
  - (b) Non-Formal Courses (own NIELIT centres): 1,656
  - (c) Skill Development in ESDM: 3,271
  - (d) Digital Literacy Courses: 43
- Number of Schedule Tribe (ST) candidate(s) - Trained: 483
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres: 437
  - (c) Skill Development in ESDM: 44
  - (d) Digital Literacy Courses: 2
- Number. of Women candidate(s) Trained: 9,194
  - (a) Formal Courses: 2
  - (b on-Formal Courses (own NIELIT centres): 2,250
  - (c) Skill Development in ESDM: 6,863
  - (d) Digital Literacy Courses: 79

#### 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 185 crore digital payment transactions for 2017-18 and 200 crore digital payment transactions for 2018-19 to the State of Tamil Nadu.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)			
BHIM	142891.11			
USSD	93.11			
RuPay Card on PoS	84008.57			

### 3. Digital Entrepreneurship and Industry

#### **3.1 Promotion of Electronics**

- (i) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 35 applications with investment worth Rs 14,909 crore have been received and are under consideration. Out of these 35 applications, 18 applications with proposed investment worth Rs 4,321 crore have been approved.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 26 successful bidders to set up 45 BPO/ ITES operation for 6,370 seats. Out of 6, 370 seats, 4,420 seats have been made operational. The details of the units are as mentioned in table no 3.2 on the next page.

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore
2016-17	38.29
2017-18	19.20

#### (iii) Centres and Incubation Space

Existing Centres: There are 5 STPI centres in Chennai, Coimbatore, Madurai, Tirunelveli and Trichy.

#### 3.3 Innovation, Startups and Emerging Technology

- (i) Centre of Excellence on "Next Generation Active-matrix Organic Light-Emitting Diode (AMOLED) Displays, Organic Light-Emitting Diode (OLED) lighting and Organic Photovoltaics (OPV) Products"
  - Implementing Agency: IIT-Madras

(Source: Digipay dashboard)

#### DIGITAL BHARAT, SAKSHAM BHARAT



S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Desicrew Solutions Private Limited	Auroville	100	Operational	62
2	Newgen Digitalworks Private Limited	Auroville	100	Operational	161
3	Verve Financial Services Pvt Ltd	Chengalpattu	50	Not Started	NA
4	Verve Financial Services Privatet Limited	Chengalpattu	50	Operational	19
5	Global Software Solutions(TVL) Private Limited	Cheyyar	50	Not Started	NA
6	Access Healthcare Services Private Limited	Coimbatore	200	Operational	158
7	Access Healthcare Services Private Limited	Coimbatore	400	Not Started	NA
8	Access Healthcare Services Private Limited	Coimbatore	250	Not Started	NA
9	Amazon Development Centre India Private Limited	Coimbatore	400	Operational	748
10	Amazon Development Centre India Private Limited	Coimbatore	600	Operational	954
11	EnoahIsolution India Private Limited	Coimbatore	200	Operational	158
12	Focus Edumatics Private Limited	Coimbatore	100	Operational	148
13	Focus Edumatics Private Limited	Coimbatore	100	Operational	155
14	Focus Edumatics Private Limited	Coimbatore	220	Operational	326
15	Nightingale Software Park Private Limited	Coimbatore	100	Operational	40
16	Raise BPO Private Limited	Coimbatore	100	Operational	150
17	Rathinam Arumugam Research And Educational Foundation Private Limited	Coimbatore	100	Not Started	NA
18	SJB Automobiles Private Limited	Coimbatore	100	Not Started	NA
19	Sri Dwarka Sai Construction (India) Private Limited	Coimbatore	100	Operational	6
20	TNQ Technologies Private Limited	Coimbatore	100	Operational	162
21	TNQ Technologies Private Limited	Coimbatore	100	Operational	214
22	Imarque Solutions Private Limited	Hosur	50	Operational	14
23	Imarque Solutions Private Limited	Hosur	100	Operational	15
24	Anix Education Private Limited	Kotagiri	25	Not Started	NA
25	Rapid Care Transcription Private Limited	Kottakuppam	100	Operational	89
26	AMBC Technologies Private Limited	Madurai	100	Operational	15
27	Aparajitha Corporate Services Private Limited	Madurai	100	Operational	86
28	Imarque Solutions Private Limited	Mayiladuthurai	50	Operational	14
29	Imarque Solutions Private Limited	Mayiladuthurai	300	Operational	474
30	Imarque Solutions Private Limited	Mayiladuthurai	100	Operational	71
31	Mahima Technology Private Limited	Namakkal	300	Operational	428
32	Mahima Technology Private Limited	Namakkal	300	Not Started	NA
33	Verve Financial Services Private Limited	Rajapalayam	50	Not Started	NA

Table no 3.2

#### DIGITAL PROFILE OF TAMIL NADU

34	Verve Financial Services Private Limited	Rajapalayam	50	Operational	15
35	Great Innovus Solutions Private Limited	Thiruparankundram	100	Not Started	NA
36	IVTL Infoview Technologies Private Limited	Tiruchirappalli	100	Operational	34
37	Oasys Cybernetics Private Limited	Tiruchirappalli	300	Not Started	NA
38	Oasys Cybernetics Private Limited	Tiruchirappalli	100	Operational	271
39	Oasys Cybernetics Private Limited	Tiruchirappalli	100	Operational	20
40	Global Software Solutions(TVL) Private Limited	Tirunelveli	50	Not Started	NA
41	MIPS Web Services Private Limited	Tirunelveli	100	Operational	0
42	Boscosoft Technologies Private Limited	Tiruppattur	100	Operational	80
43	Anix Education Private Limited	Tiruppur	75	Not Started	NA
44	Kriya IT Private Limited	Vellore	100	Not Started	NA
45	Newgen Digitalworks Private Limited	Vellore	100	Operational	207
	Total		6,370		5,294

- Area: IIT-Madras
- Project Cost: Rs 32.13 crore.
- Date of Commencement: July, 2018.
- Expected date of completion: July, 2020.
- Administrative approval has been issued.
- Grant-in-aid of Rs 23.32 crore has been released.
- Project is currently under nascent phase of implementation.
- 50 Number of prototypes to be generated in the field of AMOLED display, OLED lighting devices and OPV Power Source for Mobile Phones.

### 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'De-congesting India's transportation networks using mobile devices' ITRA-Mobile. IIT, Madras; IMSC, Chennai; and NIT, Tiruchirappalli; are the Participating Institutes (PI) in this project.

### 5. ERNET India

#### (i) Smart Virtual Classroom

• 770 Schools and 11 District Institutes for

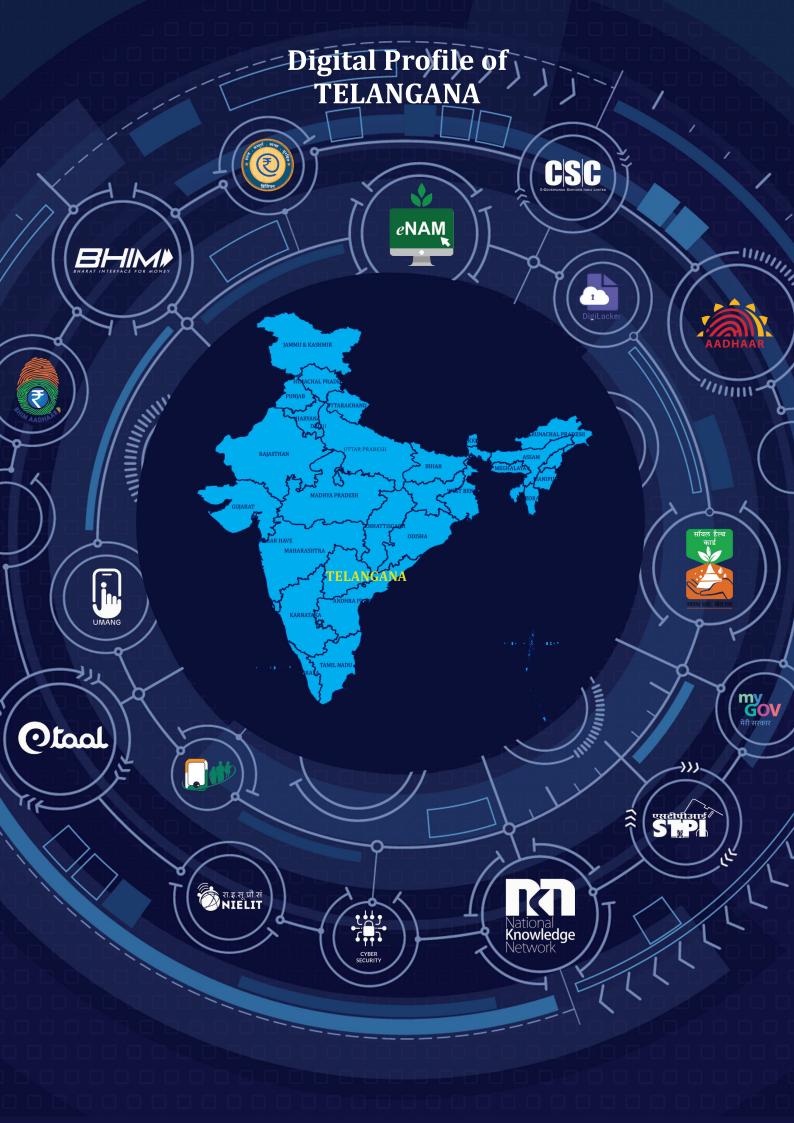
Education and Training (DIETs) have been covered under the project.

#### (ii) Eduroam Services

- 25 Institutes of Tamil Nadu are facilitating eduroam service.
- (iii) LiFi / Visible Light Communications (VLC) Testbed – ERNET joint activities with IIT Madras
- ERNET India is currently working on LiFi testbed project jointly with IIT, Madras. Under this project, indoor LiFi experiments on a single user mode for both Line of Sight (LOS)/Non line of sight (NLOS) scenarios was completed and primary results have been published in Global LiFi Congress 2018 and Network Research Workshop at APAN44, Dalian, China.
- Further, setting up of LiFi multiuser test bed to study the various deployment challenges, hybrid LiFi–WiFi and aggregation experimentations and application use case deployment of LiFi in Healthcare will be carried out.

# **6. CYBER SECURITY**

- Number of cyber incident (s) reported: 6,236
- Number of alert (s)/ advisories issued: 1,150



## Digital Profile of TELANGANA

# **1. Digital Access**

### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 3.84 crore
- Numbers of Aadhaar assigned,2018 (LIVE): 3.89 crore
- % of saturation 2018 (LIVE): 101.1%
- 0-5 years (LIVE): 20.45 lakh (70.9% Aadhaar Saturation)
- 5-18 years (LIVE): 81.75 lakh (86.7% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 62 Links to Institutions under NKN have been commissioned and made operational.
- NKN links have also been extended to 7 NIC Districts.

### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 5,436 CSCs are functional; out of these, 3,927 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level Entrepreneurs (VLEs): 1,876

#### (ii) e-District

• 47 e-District services have been launched in all 31 Districts.

#### (iii) DigiLocker

- More than 97,150 Aadhaar enabled registrations have taken place.
- Mee Seva Telangana and Dr B R Ambedkar Open University, Telangana are integrated with DigiLocker.
- (vi) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 8 Services of AKPS (Annapurna Krishi Prasara Seva)/m4agri have been onboarded.

#### (v) Soil Health Card

• 22.81 Lakh Soil Health Cards have been issued.

Samples Collected						
Cycle 1	10,34,678					
Cycle 2	9,57,209					
Samples Tested						
Cycle 1	10,34,678					
Cycle 2	6,91,991					
SHCs Dispatched						
Cycle 1	1,17,723					
Cycle 2	21,64,073					

#### (vi) eHospital:

- eHospital has been implemented in 33 Hospitals of Telangana State, which includes Government General Hospital, Nizamabad; Community Health Centre, Badepally; and Area Hospital, Narayanpet.
- The same is running on cloud network.
- Modules Implemented: OPD and IPD registrations.
- Around 14 lakh ehospital transactions have been recorded.

#### (vii) e-Transactions under eTaal 2.0 Project

- 402 e-Services have been integrated.
- Around 353.90 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP)

- Around 3.69 lakh applications have been received; out of these, 2.96 lakh applications have been successfully verified.
- Around Rs 83.37 crore has been disbursed using the NSP portal.

- (ix) eSign
- Nearly, 10.01 lakh esigns have been issued.
- (x) Mobile Seva (nationwide Mobile Governance Initiative of Government of India)
- 105 Departments/Services have been integrated for Push SMS.
- Over 26.35 crore SMSes have been sent by the Departments in Telangana using this platform.

### 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 7,500 Candidates.
- State Implementing Agency: Telangana Academy for Skill and Knowledge (TASK), Secunderabad.
- 7,011 Candidates have been enrolled and trained; out of these, 5,876 candidates have been certified.
- (ii) Electronics and ICT Academy at NIT Warangal
- Under the Scheme of financial assistance for Setting up of Electronics and ICT Academies, MeitY has set up one of the Electronics and ICT Academy at NIT, Warangal; out of the 7 such academies set up at premier and leading institutions in the country.
- Academy has been set up for faculty development of engineering/other streams and is catering to assigned States/UTs, namely Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Telangana and Goa.
- Rs 13.25 crore has been released to NIT, Warangal for implementation of the scheme. NIT, Warangal has imparted training to 16,000 faculties in a period of 4 years.
- NIT, Warangal has conducted 238 Faculty Development Programs and has imparted training to 11, 241 beneficiaries.

#### (iii) Information Security Education and

#### Awareness (ISEA) Project Phase II

- NIT, Warangal; IIIT, Hyderabad; and JNTU, Hyderabad; and C-DAC, Hyderabad have been selected for implementation of ISEA Project Phase II in the capacity of Resource Centre (RC), Participating Institute (PI) and Implementing Agency (IA). C-DAC Hyderabad has been designated as coordination centres for awareness activities.
- Outlay for 5 years: Rs 1415.19 lakh.
- Funds released: Rs 750.55 lakh.
- 3,611 Candidates have been trained/ under-going training in various formal/ non-formal courses and 347 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 146 awareness workshops on Information Security have been organised covering 12,169 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 20.28 lakh persons
- 3.20 lakh persons have been trained; out of these, 1.81 lakh persons have been certified.

# (iii) Visvesvaraya PhD Scheme for Electronics & IT

- 75 Full-time and 55 part-time PhD seats have been allocated to 5 institutes - Indian Institute of Technology, Hyderabad; International Institute of Information Technology, Hyderabad; University of Hyderabad; Osmania University; and National Institute of Technology, Warangal.
- 73 Full-time and 23 part-time PhD candidates have been enrolled.

#### (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Telangana, IIT, Hyderabad and NIT, Warangal have been included in the programme as Participating Institutions (PI) in the cluster of IISc., Bangalore.
- State-of-the-art VLSI Design laboratory equipped with EDA Tools has been set up at IIT, Hyderabad and NIT, Warangal.

• 756 Persons have been trained at B. Tech, M.Tech and PhD. levels at IIT, Hyderabad and NIT, Warangal in the area of VLSI design/ System design in the first two years of the programme.

#### 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 65 crore digital payment transactions for 2017-18 and 100 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)		
BHIM	129646.07		
USSD	141.81		
RuPay Card on PoS	76721.66		

(Source: Digipay dashboard)

### 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

- (1) Electronic Manufacturing Cluster (EMC)
  - Greenfield EMC at e-City, Hyderabad
    - Implementing Agency: Chief Promoter: M/s Telangana State Industrial Infrastructure Corporation (TSIIC).
    - Area: 603.52 Acres
    - Project Cost: Rs 667.60 crore.
- Project is under implementation phase.

- Government Grant-in-aid amounting to Rs 50.48 crore has been released.
- 18 Units have booked their land. Out of these, 7 units have started its production.
- Infrastructure development is under progress.
- Greenfield EMC at Maheshwaram(Ranga Reddy District)
  - Implementing Agency: Chief Promoter: M/s Telangana State Industrial Infrastructure Corporation (TSIIC).
  - Area: 310.70 acres
  - Project Cost: Rs 436.97 crore
  - Project is under implementation phase.
- Government Grant-in-aid amounting to Rs 27.72 crore has been released.
- 1 Unit has booked its land.
- Infrastructure development is under progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 11 applications with investment worth Rs 2,890 crore have been received and are under consideration. Out of these 11 applications, 4 applications with proposed investment worth Rs 330 crore have been approved.

#### 3.2 Promotion of IT/IT enabled Services

- (i) India BPO Promotion Scheme (IBPS)
- In-Principle Approval (IPA) has been issued to 6 successful bidders to set up 6 BPO/ITES operation for 2,718 seats in Telangana. Out of 2,718 seats, 400 seats are operational. The details of the units are as mentioned in the table below:

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Omics International Private Limited	Ameenpur	1998	Not Started	NA
2	Writer Business Services Private Limited	Ghatkesar	120	Not Started	NA
3	ECLAT Health Solutions Private Limited	Karimnagar	200	Operational	94
4	RuralShores Business Services Private Limited	Nizamabad	200	Operational	83

5	Enormous IT Services Pvt Ltd	Warangal	100	Not Started	NA
6	Exceed management Private Limited	Warangal	100	Not Started	NA
Total		2718		177	

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR Crore
2013-14	36404.18
2014-15	39186.00
2015-16	41480.00
2016-17	46429.00
2017-18	50795.82

#### (iii) Centres and Incubation Space

• Existing Centres: There are two STPI centres at Hyderabad and Warangal.

## 4. Research and Development

- (i) Demonstration plant of Recovery of metals from Printed Circuit Boards (PCBs)-C-MET Hyderabad: C-MET has developed few technologies for end-to-end recycling and has set up a demonstration plant at Bangalore with participation from State Government, where organised and unorganised sector are utilising the facility to process PCBs by safe and environmentally sound method. This is the first e-waste recycling plant in the country, carrying out printed circuit board recycling. This demonstration plant has the recycling capacity of 1 MT (35MT of e-waste)/day Printed Circuit Board (PCB). A tabletop model of smaller recycling capacity of 100kg (3.5MT of e-waste) /batch has also been set up at C-MET Hyderabad, which might be suitable for informal sector.
- (ii) Pilot plant facility of Preparation of

**Hafnium sponge at CMET, Hyderabad:** The first indigenous Hafnium (Hf) metal sponge production plant in India with an annual production capacity of 320 kg/annum has been established and commissioned at C-MET, Hyderabad laboratory to cater the VSSC requirement for space applications. This Hf sponge will also cater to the needs of Department of Atomic Energy (DAE) in control rods of nuclear reactors. C-MET is also working on developing novel spin off products based on the indigenous availability of Hf in different forms.

- (iii) Government owned RoHS (Restriction Hazardous Substances) of Testing & certification Laboratory at C-MET Hyderabad: C-MET has created world class, first government testing laboratory for hazardous substances present in electronics and electrical equipments at Hyderabad. The laboratory can certify and issue internationally valid certificate as per ISO 17025 and it can also test mercury levels in CFLs and Fluorescent Lamps(FLs) as per test method IS 15906 (BIS Standards). The laboratory has served 218 different companies/institutions and tested 4,448 samples for RoHS and non RoHS categories. C-MET also signed a MoU with Central Pollution Control Board (CPCB), New Delhi, which has established it as a reference testing laboratory for RoHS testing as per MoEF&CC's E-waste Management Rule 2016. The laboratory is now slated to become selfsufficient with its function running through its own generated revenue.
- (iv) Information Technology Research Academy (ITRA):
  - A multi-institutional R&D project titled 'Virtual Assistant For Mobile Devices Using Voice And Gesture Technologies' has been initiated under the thrust area ITRA-Mobile. IIIT, Hyderabad (Telengana) and VNRVJIET, Hyderabad are the Participating Institutes (PI) in this project.

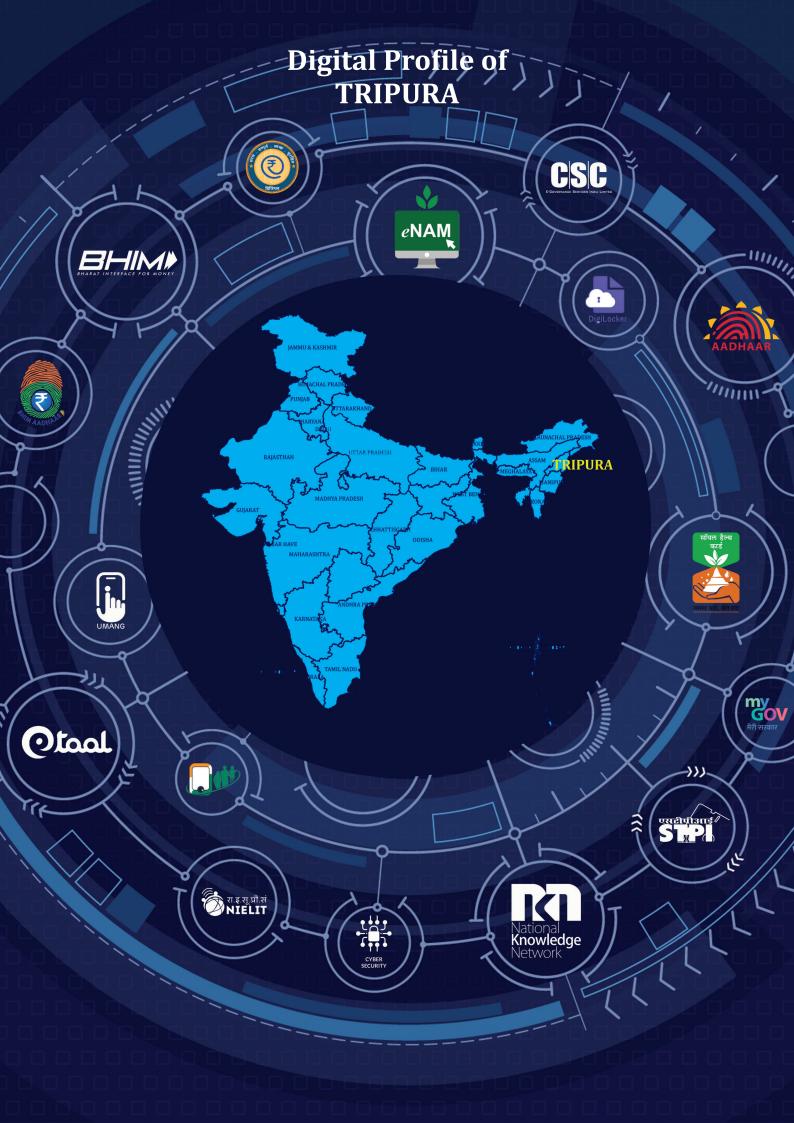
- A multi-institutional R&D project titled 'AquaSense: Development of effective Wireless Sensor Network system for water quality and quantity monitoring' has been initiated under the thrust area ITRA-Water. University of Hyderabad; VNRVignana Jyothi Institute of Engineering and Technology; Hvderabad International Institute of Information Technology, Hyderabad; Sree Chaitanya College of Engineering, Karimnagar; and Sree Chaitanya Institute of Technological Sciences, Karimnagar; are the Participating Institutes (PI) in this project.
- A multi-institutional R&D project titled UrbanFlood: Integrated Urban Flood Management in India (IUFM) Technology-Driven solutions has been initiated under the area ITRA-Water. BITS, Hyderabad and NIT, Warangal are the Participating Institutes (PI) in this project.
- A multi-institutional R&D project titled 'GridSense: ICT in Water and Pest/Disease Management for Yield Improvement in Horticulture (Citrus) has been initiated under the thrust area ITRA-Water. IIT, Hyderabad is the Participating Institute (PI) in this project.

### 5. ERNET India

- (i) Eduroam Services
- 7 Institutes of Telangana are facilitating eduroam service.
- (ii) Wi-Fi Enabled Campus Networking at Osmania University, Hyderabad, Telangana
  - ERNET India has set up Wi-Fi enabled campus Network under Digital India programme at Osmania University, Hyderabad, Telangana. Phase 1 of the project is installed, is operational and has been integrated with the existing network of the university. Wireless Network connectivity is reliable, secure and scalable. Wi-Fi can be accessed on anytime, anywhere basis across the coverage area. Wi-Fi facility is being used by +6300 users of the University for study purpose, e-Books, e-Journals, etc. Phase 2 of the project is under process to cover the remaining buildings/ area.

### 6. CYBER SECURITY

- Number of cyber incident (s) reported: 1,054
- Number of alert(s)/advisories issued: 1,150



## Digital Profile of TRIPURA

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 40.57 lakh
- Numbers of Aadhaar assigned, 2018(LIVE): 36 lakh
- % of saturation 2018 (LIVE): 90.1%
- 0-5 years (LIVE): 1.43 lakh (40.1% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 8 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN Links have also been extended to 7 NIC Districts.

#### (ii) State Wide Area Network (SWAN)

- Tripura SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 3 Districts Headquarters (DHQ) and 58 Blocks Head Quarters (BHQ).
- Tripura SWAN has been utilising more than 85% bandwidth of its link capacity.

#### **1.1 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 702 CSCs are functional; out of these, 485 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs: 91

#### (ii) e-District

• 23 e-District services have been launched in all 8 Districts.

#### (iii) DigiLocker

• More than 7,540 Aadhaar enabled registrations have taken place.

#### (iv) Jeevan Pramaan

• During the last cycle of Jeevan Pramaan, 4,415 Digital Life Certificates (DLCs) were successfully generated by the state pensioners and out of which 3,919 DLCs were successfully processed.

#### (v) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Tripura can access the Central Government services available on UMANG.

#### (vii) Soil Health Card

• 2.16 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	<b>Cycle 1</b> 32,736		
Cycle 2	2,659		
Samples Tested			
Cycle 1	32,736		
Cycle 2	28,745		
SHCs Dispatched			
Cycle 1	1,17,723		
Cycle 2	98,652		

#### (vii) eHospital :

- e-Hospital has been implemented in 13 hospitals on cloud installation.
- 5 District hospitals of Tripura have started using e-hospital.
- Around 1.14 lakh e-hospital transactions have been made, since inception.

#### (viii) e-Transactions under eTaal 2.0 Project:

- 127 e-Services have been integrated.
- Around 1.15 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (ix) National Scholarship Portal (NSP):

- Around 15,000 applications have been processed using NSP in the State of Tripura during the year 2017-18.
- Around Rs 3 crore has been disbursed using the portal in Tripura during the year 2017-18.

#### (x) eSign

• Nearly, 2.86 lakh esigns have been issued.

#### (xi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)

- 4 Departments/services have been integrated for Push SMS.
- More than 9.20 lakh SMSes have been sent by the Departments in the State of Tripura using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 candidates.
- State Implementing Agency: Tripura State Computerisation Agency, Tripura.
- 5,044 candidates have been enrolled and trained; out of these, 3,161 have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- NIELIT, Agartala has been selected for the implementation of ISEA Project Phase II in the capacity of Participating Institute (PI) and Implementing Agency (IA).
- Outlay for 5 years: Rs 106.15 lakh
- Funds released: Rs 61.46 lakh
- 486 Candidates have been trained/undergoing training in various formal/non-formal courses and 500 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security.
- (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 1.95 lakh persons.
- 54,000 Persons have been trained and out of these, 27,000 persons have been certified.

#### (iv) Visvesvaraya PhD Scheme for Electronics & IT

- 3 Full-time and 6 part-time PhD seats have been allocated to 1 institute NIT, Agartala.
- 3 Full-time and 2 part-time PhD candidates

have been enrolled.

- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Tripura, NIT, Agartala has been included under the programme as Participating Institution (PI) in the cluster of IIT, Guwahati.
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at NIT, Agartala.
- 288 Persons have been trained at B. Tech, M. Tech and PhD. levels at NIT, Agartala in the area of VLSI design/ System design in the first three years of the programme.
- (vi) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Agartala centre is aimed to facilitate the youth of Tripura to have easy access to education and training in the field of computer science and Information technology in a well equipped state-of-the-art training infrastructure with qualified and trained faculty members, resulting in generation of quality and employable manpower.
- Area of Excellence: Information Security; e-learning & e-Governance; Information, Electronics & Communication Technology (IECT); Medical Electronics; and Cloud Computing and App Development.
- **Courses Offered:** Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 12,575
  - (a) Formal Courses: 435
  - (b) Non-Formal Courses (own NIELIT centres): 6,682
  - (c) Skill Development in ESDM: 4,663
  - (d) Digital Literacy Courses: 795
- Number of Schedule Caste (SC) candidate(s)
   Trained: 2,231
  - (a) Formal Courses: 155
  - (b) Non-Formal Courses (own NIELIT centres: 1,027
  - (c) Skill Development in ESDM: 944
  - (d) Digital Literacy Courses: 105
- Number of Schedule Tribe (ST) candidate(s)
   Trained: 6,032

- (a) Formal Courses: 134
- (b) Non-Formal Courses (own NIELIT centres: 4,625
- (c) Skill Development in ESDM: 906
- (d) Digital Literacy Courses: 367

#### • Number of Women candidate(s) - Trained:

• NEBPS aims to incentivise establishment of 5000 BPO/ITES seats, with financial support of Rs 1 lakh per seat in the form of Viability Gap Funding (VGF), with an outlay of Rs 50 crore (Rupees fifty crore only) up to December 31, 2019. The details of registered units are as below:

Sno.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Senrysa Technologies Pvt Ltd	Agartala	50	Not Started	NA
2	Xlayer Technologies Private Lim- ited	Agartala	25	Operational	130
	Total		75		130

#### 4,134

- (a) Formal Courses: 160
- (b) Non-Formal Courses (own NIELIT centres: 2,247
- (c) Skill Development in ESDM: 1,409
- (d) Digital Literacy Courses: 318

#### 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 8.2 crore digital payment transactions for 2017-18 and 5 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	2986.78
USSD	3.92
RuPay Card on PoS	703.46

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of IT/IT Enabled Services
- (i) NorthEastBPOPromotionScheme(NEBPS)

#### (ii) Centres and Incubation Space

• Existing Centres: There is one STPI centre at Agartala.

# 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'ImagelDGP: Image based Systems for Identification of Individuals, Breeds and Diseases of Pigs and Goats' has been initiated under the thrust area ITRA-Ag&Foo. ICAR Tripura is the Participating Institute (PI) in this project.

### **5. ERNET India**

- (i) Smart Virtual Classroom
- 140 Schools and 2 District Institutes for Education and Training (DIETs) have been covered under the project.

#### (ii) eduroam services

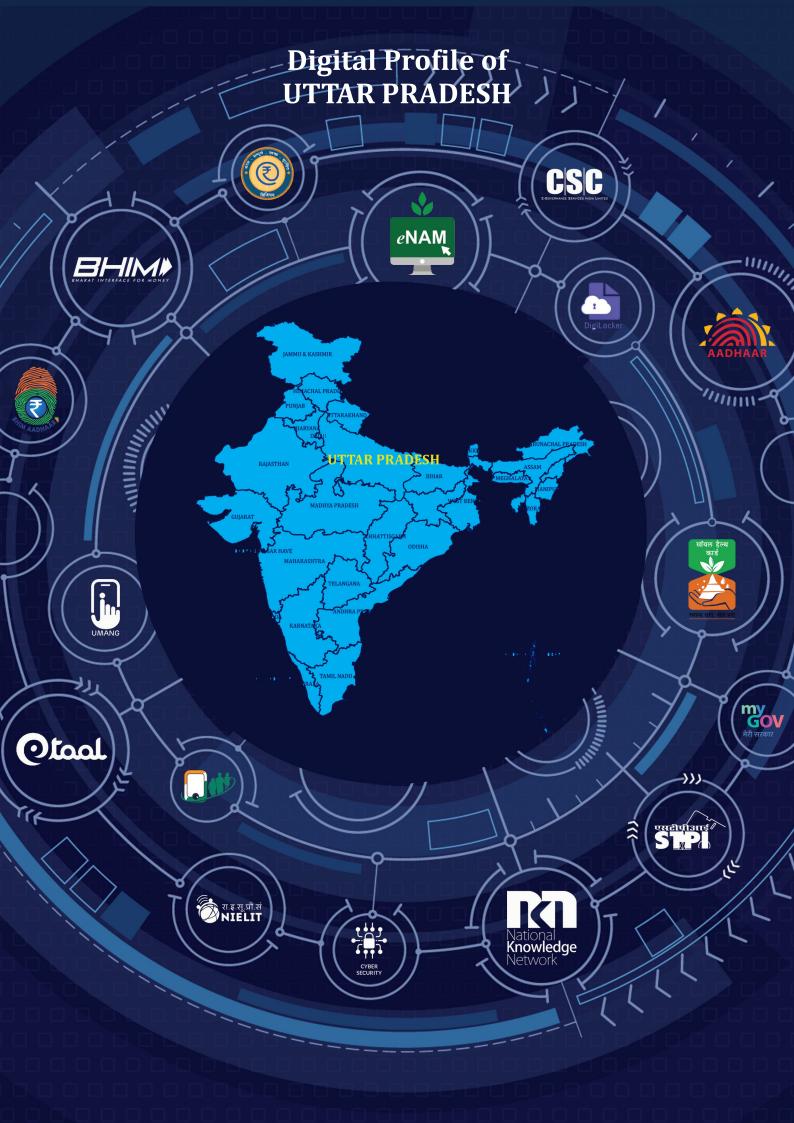
• 1 Institute of Tripura is facilitating eduroam service.

#### (iii) VSAT Network:

• VSAT has been set up and made operational at 2 sites.

## 6. CYBER SECURITY

- Number of cyber incident (s) reported: 50
- Number of alert(s)/ advisories issued: 1,150



## Digital Profile of UTTAR PRADESH

## I. Digital Access

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 22.89 crore
- Numbers of Aadhaar assigned,2018(LIVE): 20.15 crore
- % of saturation 2018 (LIVE): 88.0%
- 0-5 years (LIVE) 1.22 crore (51.6% Aadhaar Saturation)
- 5-18 years (LIVE): 5.54 crore (73.9% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 86 Links to Institutions under NKN have been commissioned and made operational.
- NKN Links have also been extended to 62 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- UPSWAN established a secured intranet connecting one State Head Quarter (SHQ) with 70 Districts Head Quarters (DHQ) and 814 Blocks Head Quarters (BHQ).
- UPSWAN has been utilising more than 70% bandwidth of its link capacity.

#### 2. Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- 67,291 CSCs are functional; out of these, 47,983 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 11,965

#### (ii) e-District

• 26 e-District services have been launched in all 75 Districts.

#### (iii) DigiLocker

- More than 7.08 lakh Aadhaar enabled registrations have taken place.
- eDistrict UP, Board of High School and Intermediate, Joint Entrance Examination

Council, State Council of Vocational Training, Board of Technical Education, National Institute of Open Schooling and Department of Legal Metrology are integrated with DigiLocker.

## (iv) UMANG (Unified Mobile Application for New-Age Governance)

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 3 Services of Uttar Pradesh are onboarded on UMANG platform.
- 3 Services of VAHAN have been onboarded.

#### (v) Soil Health Card

• 3.05 Crore Soil Health Cards have been issued.

Samples Collected			
Cycle 1	47,70,399		
Cycle 2	48,67,442		
Samples Tested			
Cycle 1	47,70,399		
Cycle 2	40,43,297		
SHCs D	Dispatched		
Cycle 1	1,69,91,346		
Cycle 2	1,35,89,357		

#### (vi) eHospital

- eHospital has been implemented in 48 hospitals in Uttar Pradesh, which includes major hospitals such, as, King George's Medical University; Dr Shyama Prasad Mukherjee Civil Hospital, Lucknow; Dr Ram Manohar Lohia Combined Hospital, Lucknow; Balrampur Hospital, Lucknow; SBD District Hospital, Saharanpur; and many more. The same is running on cloud network.
- Around 1.40 crore ehospital transactions have been recorded, which includes OPD, IPD and LAB registrations.

#### (vii) e-Transactions under eTaal 2.0 Project:

- 236 e-Services have been integrated.
- Around 175.82 crore e-transactions have been recorded, electronically by various e-Governance applications

#### (viii) National Scholarship Portal (NSP):

• Around 11.13 lakh applications have been received; out of these, 8.03 lakh applications have been successfully verified.

#### (ix) eSign

- Nearly, 68.16 lakh esigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 17 Departments/services have been integrated for Push SMS.
- Over 4.79 crore SMSes have been sent by the Departments in Uttar Pradesh using this platform.
- 3 Mobile applications pertaining to the departments of Uttar Pradesh have been downloaded over 1.01 lakh times.

## 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
  - Total Target: 15,000 candidates.
  - State Implementing Agency: Uttar Pradesh Electronics Corporation Ltd. (UPECL), Lucknow.
  - 8,808 Candidates have been enrolled and trained; out of which, 6,899 have been certified.
- (ii) Electronics and ICT Academy at IIT, Kanpur
  - Under the scheme of financial assistance for setting up of Electronics and ICT Academies, MeitY has set up one of the Electronics and ICT Academy at IIT Kanpur, out of 7 such academies set up at premier and leading institutions in the country.
  - Academy has been set up for faculty

development of engineering/ other streams and is catering to assigned States/UTs, namely Uttar Pradesh, Haryana, Punjab, Chandigarh and Delhi.

- Rs 9.25 crore has been released to IIT, Kanpur for implementation of the scheme. IIT, Kanpur would be imparting training to 16,000 faculties in a period of 4 years.
- 3,956 Candidates have been registered on the online platform; out of these, 2,351 candidates have completed training/certified through the 68 courses delivered through the online platform.
- (iii) Information Security Education and Awareness (ISEA) Project Phase II
- MNIT, Allahabad; C-DAC, Noida and NIELIT, Gorakhpur; have been selected for implementation of ISEA Project Phase II in the capacity of Participating Institute (PI) and Implementing Agency (IA). NIELIT, Gorakhpur has been designated as coordination centre for awareness activities.
- Outlay for 5 years: Rs 605.59 lakh.
- Funds released: Rs 242.75 lakh.
- 2,653 Candidates have been trained/ under-going training in various formal/ non-formal courses and 611 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 27 awareness workshops on Information Security have been organised covering 2,605 participants.
- (iv) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
  - The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 111.71 lakh persons.
- 38.07 Lakh persons have been trained; out of these, 20.76 lakh persons have been certified.

#### (v) Visvesvaraya PhD Scheme for Electronics & IT

- 90 Full-time and 25 part-time PhD seats have been allocated to 5 institutes - Aligarh Muslim University; Indian Institute of Information Technology, Allahabad; Indian Institute of Technology BHU; Indian Institute of Technology, Kanpur; and Motilal Nehru National Institute of Technology, Allahabad.
- 73 Full-time and 4 part-time PhD candidates have been enrolled.

- (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Uttar Pradesh, IIT, Kanpur as Resource Centre and IIT BHU; IIIT, Allahabad; MNNIT, Allahabad have been included under the programme as Participating Institutions (PI) in the cluster of IIT, Kanpur.
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at IIT Kanpur; IIT BHU; IIIT, Allahabad; and MNNIT, Allahabad.
- 1,705 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Kanpur; IIT BHU; IIIT, Allahabad; and MNNIT, Allahabad in the area of VLSI design/ System design in the first two years of the programme.

#### (vii) National Institute of Electronics and Information Technology (NIELIT)

- NIELIT, Gorakhpur caters to Training & Education needs of Diploma/ Graduate/ Master Level students and corporate training programmes for Small-Scale Industries and allied sectors. It also conducts training programmes for promotion of potential entrepreneurs through various services. This centre is affiliated to Dr A.P.J. Abdul Kalam Technical University, Lucknow, UP for the conduct of M.Tech in "Electronics Design and Technology" and M.Tech in "VLSI Design".
- Area of Excellence: Electronic Product Design; Embedded System Design; Information Security; Hardware and Networking Integrated Electronics, and Computer & Communication Services.
- **Courses Offered**: Long Term Courses (Formal & Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 2,265,220
  - (a) Formal Courses: 102
  - (b) Non-Formal Courses (own NIELIT centres: 12,343
  - (c) Skill Development in ESDM: 7,211
  - (d) Digital Literacy Courses: 2,245,564
- Number of Schedule Caste (SC) candidate(s)

#### - Trained: 352,566

- (a) Formal Courses: 15
- (b) Non-Formal Courses (own NIELIT centres): 3,260
- (c) Skill Development in ESDM: 1,395
- (d) Digital Literacy Courses: 347,896
- Number of ST candidate(s) Trained: 20,792
  - (a) Formal Courses: 3
  - (b) Non-Formal Courses (own NIELIT centres): 149
  - (c) Skill Development in ESDM: 44
  - (d) Digital Literacy Courses: 20,596
- Number of Women candidate(s) Trained: 579,275
  - (a) Formal Courses: 15
  - (b) Non-Formal Courses (own NIELIT centres: 2,368
  - (c) Skill Development in ESDM: 1,341
  - (d) Digital Literacy Courses: 575,551

#### 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 312 crore digital payment transactions for 2017-18 and 300 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	1148802.99
USSD	615.81
RuPay Card on PoS	279522.4

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of Electronics Manufacturing
- (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Plot No. 6/A, sector-24, Yamuna Expressway, Greater Noida
  - Implementing Agency: M/s U.P. Electronics Corporation Limited (UPLC).
  - Area: 100 acres
  - Project Cost: Rs 155.67 crore.
  - Legal/administrative agreements to be executed.
- Greenfield EMC at Plot No. -1, Block-C, Ecotech-VI Industrial Area, Greater Noida
  - Implementing Agency: M/s TEGNA Electronics Pvt. Ltd. (TEPL)
  - Area: 99.41 acres
  - Project Cost: Rs 115.32 crore
  - Project is under nascent phase of implementation.
  - Government Grant-in-aid amounting to Rs 10.00 crore has been released.
  - 7 Units have booked its land.
  - Infrastructure development is under progress.
- (ii) Modified Special Incentive Package Scheme (M-SIPS)
- Under M-SIPS, a total of 59 applications with investment worth Rs 22,919 crore have been received and are under consideration. Out of these 59 applications, 22 applications with proposed investment worth Rs 10,491 crore have been approved.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 13 successful bidders to set up 13 BPO/ ITES operation for 3,330 seats in Uttar Pradesh. Out of 3,330 seats, 3,130 seats have been operational. The details of the units are as mentioned in the table below:

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crores
2013-14	13352.66
2014-15	13740.00
2015-16	16451.00
2016-17	17237.00
2017-18	18508.46

#### (ii) Centres and Incubation Space

- Existing Centres: There are four STPI centres operational at Allahabad, Kanpur, Lucknow and Noida.
- Proposed/upcoming centres: There are four upcoming STPI centres at Agra, Varanasi, Meerut and Gorakhpur.

#### 3.3 Innovation and Startups

- (i) National Centre of Excellence for Large Area Flexible Electronics (NCFleXE)
- Implementing Agency: IIT-K
- Area: IIT-Kanpur.
- Project Cost: Rs 155.67 crore.
- Project is currently under implementation phase.
- Grant-in-aid amounting to Rs 55.46 crore has been released.
- Six of the technology development projects have been undertaken and have reached to prototype demonstration stages.
- 1 Company M/s Transpacks (Smart Tags) has been incubated.
- Number of Patent/IPR filed : 19

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	RD Outdoor Media Private Limited	Allahabad	100	Not Started	NA
2	RuralShores Business Services Private Limited	Baitalpur	200	Operational	172
3	Mayur Industries Private Limited	Bareilly	200	Operational	38

4	Mediffic Lifesciences Private Limited	Faizabad	100	Not Started	NA
5	Ratan Housing Development Limited	Kanpur	300	Operational	162
6	Management Control Systems Pvt Ltd	Lakhimpur	100	Operational	30
7	AVSM Security And Outsourcing Services Pvt Ltd	Lucknow	100	Operational	10
8	HarbansramBhagwandas Ayurvedic Sansthan Private Limited	Lucknow	120	Operational	44
9	Karvy Data Management Services Limited	Lucknow	350	Operational	132
10	Tatwa Technologies Limited	Lucknow	110	Operational	12
11	Dataman Computer Systems Private Limited	Unnao	100	Operational	106
12	Route Connect Private Limited	Varanasi	550	Operational	5
13	Tata Consultancy Services Limited	Varanasi	1000	Operational	250
	Total		3330		961

## 4. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'HumanSense:Towards context aware sensing, inference and actuation for applications in Energy has been initiated under the thrust area ITRA-Mobile. Shiv Nadar University, Noida is the Participating Institute (PI) in this project.
- A multi-institutional R&D project titled 'RemoteHealth: A framework for Health care services using Mobile and Sensor Cloud Technologies' has also been initiated under

the thrust area ITRA-Mobile. FGIET, Raebareli is the Participating Institute(PI) in this project.

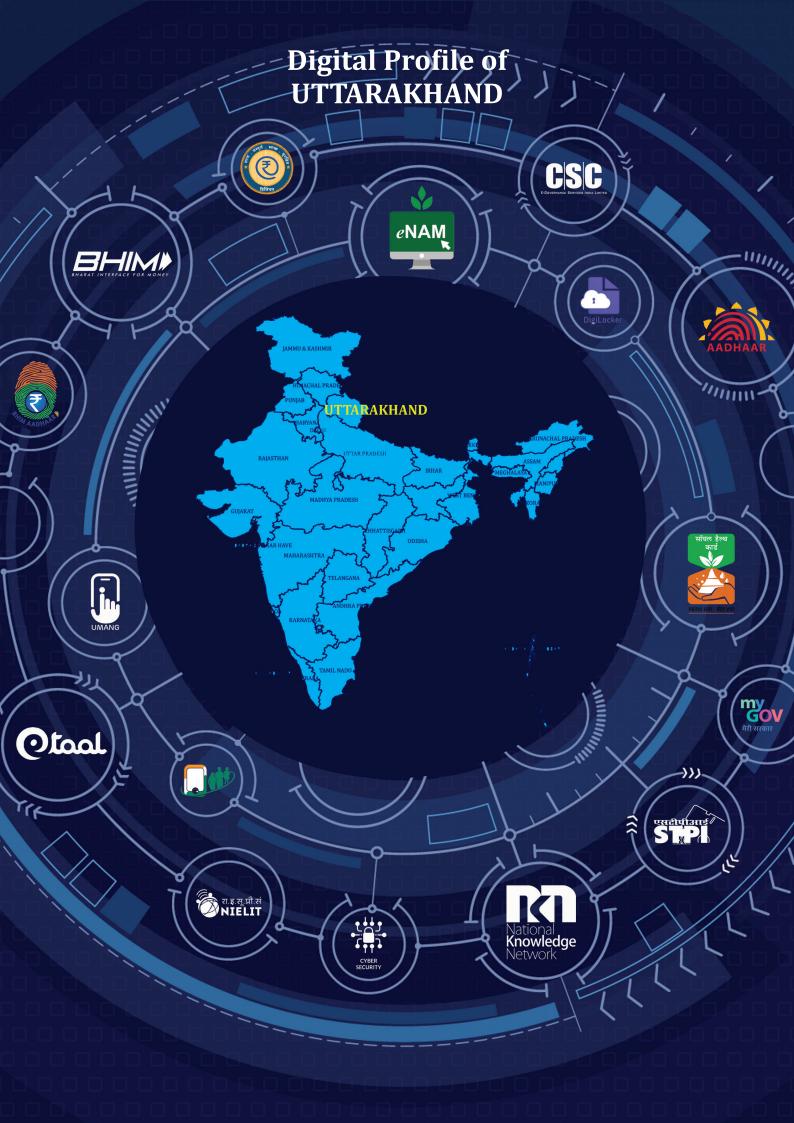
## **5. ERNET India**

#### (i) eduroam services

• 13 Institutes of Uttar Pradesh are facilitating eduroam services.

## 6. Cyber Security

- Number of cyber incident (s) reported: 6,569
- Number of alert (s)/ advisories issued: 1,150



## Digital Profile of UTTARAKHAND

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 1.10 crore
- Numbers of Aadhaar assigned, 2018(LIVE): 1.09 crore
- % of saturation 2018 (LIVE) : 99.1%
- 0-5 years (LIVE): 8.33 lakh (82.1% Aadhaar Saturation)
- 5-18 years (LIVE): 26.78 lakh (83.4% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 28 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 7 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- UKSWAN established a secured intranet connecting one State Head Quarter (SHQ) with 13 Districts Headquarters (DHQ) and 119 Blocks Head Quarters (BHQ).
- UKSWAN has been utilising more than 60% bandwidth of its link capacity.

#### (iv) National Information Infrastructure (NII) pilot project

 A pilot proposal for a period of one year on National Information Infrastructure (NII) for one District each in 7 States, namely Nagaland, Karnataka, Kerala, Gujarat, Uttarakhand, Chandigarh and Puducherry has been implemented successfully covering 36 blocks, 1,560 Gram Panchayats (GPs) and more than 4,000 Government offices.

#### 2. Digital Delivery of Services

#### (i) Common Services Centres (CSCs)

- 5,249 CSCs are functional; out of these, 4,363 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 1,133

#### (ii) e-District

• 17 e-District services have been launched in all 13 Districts.

#### (iii) DigiLocker

- More than 98,990 Aadhaar enabled registrations have taken place.
- DigiLocker is also integrated with New India Assurance and Bajaj Allianz General Insurance Company Limited to provide insurance certificates to citizens.
- (iv) UMANG (Unified Mobile Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 2 Services of Uttarakhand are onboarded on UMANG platform.



#### (v) Soil Health Card

• 14.09 Lakh Soil Health Cards have been issued.

Samples Collected				
Cycle 1	1,35,738			
Cycle 2	1,26,342			
Samp	les Tested			
Cycle 1	1,35,738			
Cycle 2	1,23,033			
SHCs I	Dispatched			
Cycle 1	7,50,494			
Cycle 2	6,59,149			

#### (vi) eHospital

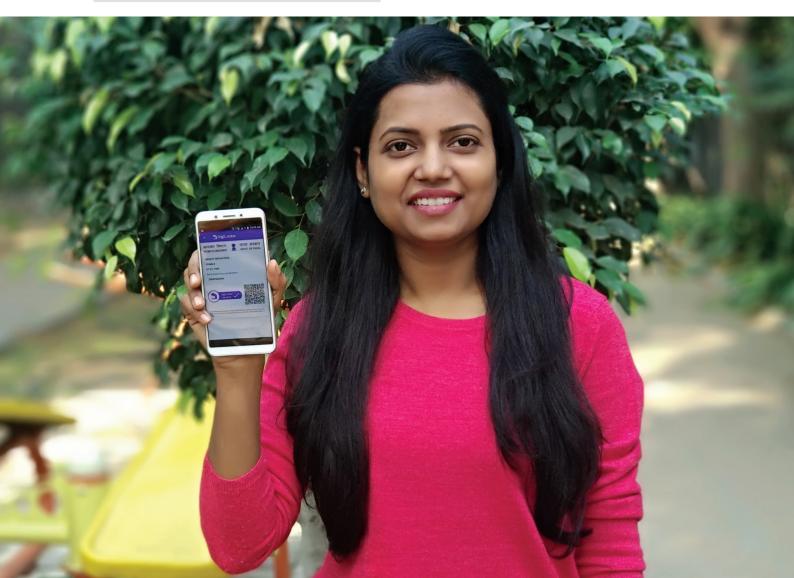
- eHospital has been implemented in 3 hospitals of Uttarakhand, which includes All India Institute of Medical Sciences, Rishikesh; District Hospital, Almora; and Pandit Deen Dayal Government Coronation Hospital. The same is running on cloud network.
- Around 8.98 lakh ehospital transactions have been recorded, which includes OPD and IPD registrations.

#### (vii) e-Transactions under eTaal 2.0 Project

- 125 e-Services have been integrated.
- Around 10.27 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP)

- Around 40,000 applications have been received; out of these, 31, 000 have been successfully verified.
- Rs 12.48 crore has been disbursed in Uttarakhand using the NSP portal.



(ix) eSign

- Nearly, 4.81 lakh esigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 7 Departments/services have been integrated for Push SMS.
- Over 48.27 lakh SMSes have been sent by the Departments in Uttarakhand using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 3,750 candidates.
- State Implementing Agency: Institute of Research Development & Training (IRDT), Dehradun.
- 2,752 Candidates have been enrolled and trained; out of these, 1,657 have been certified.
- (ii) Electronics and ICT Academy at IIT Roorkee
- Under the 'Scheme of financial assistance for Setting up of Electronics and ICT Academies', MeitY has set up one of the Electronics and ICT Academy at IIT, Roorkee and out of the seven such academies set up at premier and leading institutions in the country.
- Academy has been set up for faculty development of engineering/ other streams and is catering to assigned States/UTs of Uttar Pradesh, Haryana, Punjab, Chandigarh and Delhi.
- Out of the outlay of Rs 10 crore; an amount of Rs 5.30 crore has already been released to IIT, Roorkee for the implementation of the scheme. IIT, Roorkee would be imparting training to 6,400 faculties in a period of 4 years (@1600 faculty/ year).
- IIT, Roorkee has already conducted 56 Faculty Development Programmes imparting training to 2,184 beneficiaries.

#### (iii) Information Security Education and Awareness (ISEA) Project Phase II

• IIT, Roorkee has been selected for the

implementation of ISEA Project Phase II in the capacity of Resource Centre (RC).

- Outlay for 5 years: Rs 199.04 lakh.
- Funds released: Rs 57.10lakh.
- 814 Candidates have been trained/undergoing training in various formal/non-formal courses in the area of Information Security. Besides this, 5 awareness workshops on Information Security have been organised covering 383 participants.
- (iv) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)
- The implementing agency for the scheme is CSC e-Governance Services India Limited. The indicative target is 5.06 lakh persons; out of these, 2.28 lakh candidates have been trained. From these, 1.35 lakh candidates have been certified.

## (v) Visvesvaraya PhD Scheme for Electronics & IT

- 21 Full-time and 2 part-time PhD seats have been allocated to 2 institutes IIT, Roorkee and NIT, Srinagar.
- 21 Full-time PhD candidates have been enrolled.

#### (vi) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)

- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of Uttarakhand, IIT, Roorkee as Resource Center and NIT, Uttarakhand has been included under the programme as Participating Institution (PI) in the cluster of IIT, Roorkee. Following activities have been carried out under the programme at these institution:
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at IIT, Roorkee and NIT, Uttarakhand.
- 615 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Roorkee and NIT, Uttarakhand in the area of VLSI design/ System design in the first three years of the programme.
- Projects for development of working prototypes of System/ System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.
- A total of Rs 117.30 lakh has been released to Uttarakhand, including Rs 83.10 lakh to IIT, Roorkee and Rs 34.20 lakh to NIT, Uttarakhand.

#### (vii) National Institute of Electronics and Information Technology (NIELIT)

• Training activities have been started by NIELIT, Haridwar at its temporary premises at Government Polytechnic, SIDCUL Haridwar, where about 8,000 sqft built-up space has been provided by the State Government for setting up initial training facility.

## • Total number of candidate(s) - Trained: 28,181

- (a) Formal Courses: 0 (?)
- (b) Non-Formal Courses (own NIELIT centres: 0
- (c) Skill Development in ESDM: 13,384
- (d) Digital Literacy Courses: 74,018

#### • Number of Schedule Caste (SC) candidate(s) - Trained: 10,929

(a) Formal Courses: 0

- (b) Non-Formal Courses (own NIELIT centres: 0
- (c) Skill Development in ESDM: 2,031
- (d) Digital Literacy Courses: 8,898
- Number of Schedule Tribe (ST) candidate(s) - Trained: 1,926
  - (a) Formal Courses: 0 (?)
  - (b) Non-Formal Courses (own NIELIT centres: 0 (?)
  - (c) Skill Development in ESDM: 287
  - (d) Digital Literacy Courses: 1,639
- Number of Women candidate(s) Trained: 27,012
  - (a) Formal Courses: 0 (?)
  - (b) Non-Formal Courses (own NIELIT centres: 0
  - (c) Skill Development in ESDM: 6,520
  - (d) Digital Literacy Courses: 20,492

#### 2.2 Promotion of Digital Payment

- MeitY has assigned a target of 27 crore digital payment transactions for 2017-18 and 30 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in thousands)
BHIM	25643.3
USSD	67.39
RuPay Card on PoS	10310.73

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

#### (i) Modified Special Incentive Package Scheme (M-SIPS)

• Under M-SIPS, a total of 6 applications with investment worth Rs 387 crore have been received and are under consideration. Out of these 6 applications, 3 applications with proposed investment worth Rs 190 crore has been approved.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

In-Principle Approval (IPA) has been issued to 4 successful bidders to set up 4 BPO/ITES operation for 400 seats in Uttarakhand. Out of 400 seats, 300 seats have been operational. The details of the units are as mentioned in the table below:

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Asset Infotech Limited	Dehradun	50	Operational	67

2	CSOS Corporate Solution Pvt. Ltd.	Dehradun	50	Operational	10
3	Granada Services Pvt Ltd	Dehradun	200	Operational	139
4	Edscience Knowledge Solutions Private Limited	Haldwani	100	Not Started	NA
	Total		400		216

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR crore
2013-14	69.27
2014-15	74.67
2015-16	82.57
2016-17	89.88
2017-18	130.42

#### (ii) Centres and Incubation Space

• Existing centres: There is one STPI centre at Dehradun.

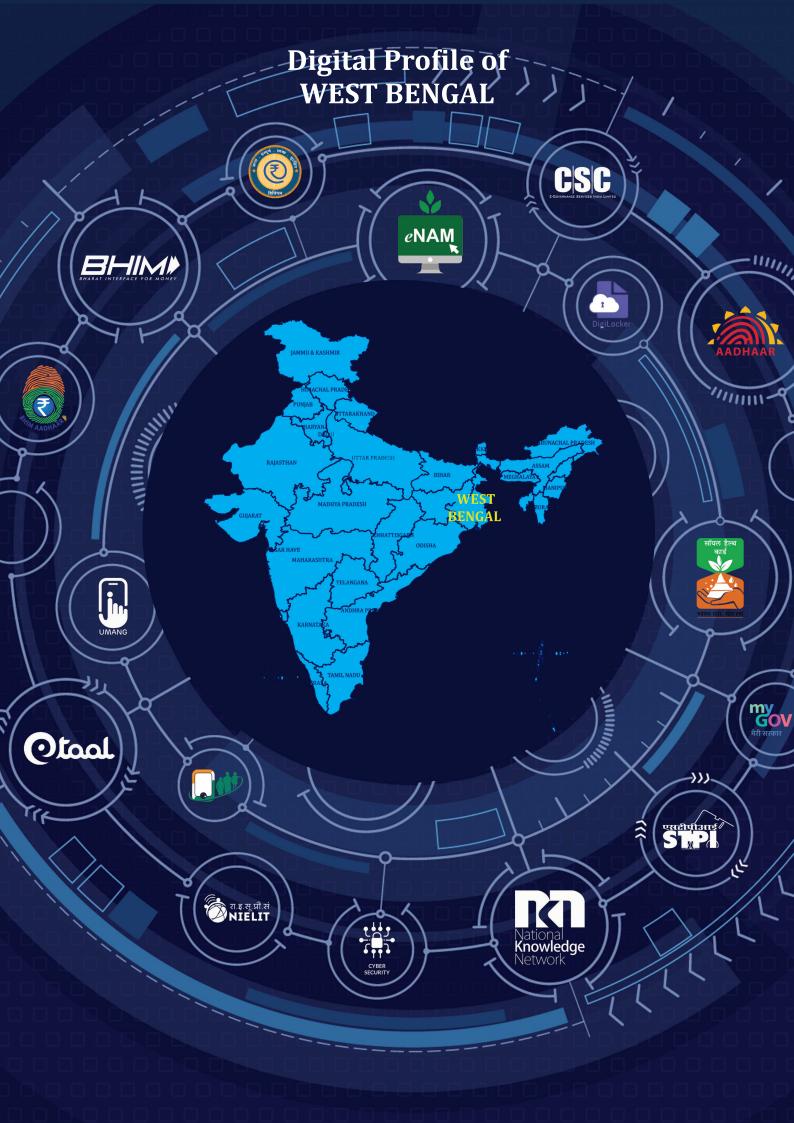
## 4. ERNET India

#### (i) Eduroam services

• 4 Institutes of Uttarakhand are facilitating eduroam services.

## **5. Cyber Security**

- Number of cyber incident (s) reported: 403
- Number of alert(s)/ advisories issued: 1,150



# Digital Profile of WEST BENGAL

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total (Projected 2018): 3.45 crore
- Total Population (Projected 2018): 9.76 crore
- Numbers of Aadhaar assigned, 2018(LIVE): 9.17 crore
- % of saturation 2018 (LIVE): 94.0%
- 0-5 years (LIVE): 49.42 lakh (63.0% Aadhaar Saturation)
- 5-18 years (LIVE): 1.9 crore (77.4% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 71 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 21 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- WBSWAN established a secured intranet connecting one State Head Quarter (SHQ) with 18 Districts Headquarters (DHQ) and 338 Blocks Head Quarters (BHQ).
- WBSWAN has been utilising more than 70% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 15,229 CSCs are functional; out of these, 10,305 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 2,610

#### (ii) e-District

• 116 e-District services have been launched in all 18 Districts.

#### (iii) DigiLocker

• More than 2.38 lakh Aadhaar enabled registrations have taken place.

## (iv) UMANG (Unified Mobile Application for New-Age Governance)

- 189 services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of West Bengal can access the Central Government services available on UMANG.

#### (v) Soil Health Card

• 50.49 Lakh Soil Health Cards have been issued.

Samples Collected			
Cycle 1	13,00,349		
Cycle 2	8,76,000		
Samples Tested			
Cycle 1	8,76,000		
Cycle 2	5,71,000		
SHCs Dispatched			
Cycle 1	50,40,510		
Cycle 2	5,900		

#### (vi) eHospital

- eHospital has been implemented in B.R Singh Hospital of West Bengal. The same is running on cloud network.
- Around 27,589 ehospital transactions have been recorded, which includes OPD and IPD registrations.

#### (vii) eTransactions under eTaal 2.0 Project

- 196 e-Services have been integrated.
- Around 81.63 crore e-transactions have been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP)

- Around 35.45 lakh applications have been received in West Bengal; out of these, 32.25 lakh have been successfully verified.
- Around 257 crore has been disbursed in West Bengal using the NSP portal.

#### (ix) eSign

- Nearly, 30.58 lakh esigns have been issued.
- (x) Mobile Seva (Nationwide Mobile Governance Initiative of Government of India)
- About 51 Departments/services have been integrated for Push SMS.
- Over 14.34 crore SMSes have been sent by the Departments in West Bengal using this platform.
- 14 Mobile applications pertaining to the departments of West Bengal have been downloaded over 12,150 times.

## 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- 15,066 Candidates have been enrolled and trained; out of these, 10,407 have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- IIT, Kharagpur (RC); NIT, Durgapur (PI), C-DAC Kolkata (PI/IA); and Maulana Abdul Kalam Azad University of Technology, Kolkata (PI) have been selected for the implementation of ISEA Project Phase II in the capacity of Resource Centre (RC), Participating Institute (PI) and Implementing Agency (IA) respectively.
- Outlay for 5 years: Rs 481.79 lakh.
- Funds released: Rs 228.51 lakh.
- 1,330 Candidates have been trained/ under-going training in various formal/ non-formal courses and 222 Government

officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 37 awareness workshops on Information Security have been organised covering 2, 565 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 44.81 lakh persons.
- 4.38 Lakh candidates have been trained and out of these, 2.26 lakh candidates have been certified.
- (iv) Visvesvaraya PhD Scheme for Electronics & IT
- 92 Full-time and 57 part-time PhD seats have been allocated to 6 institutes - Indian Institute of Engineering Science and Technology, Shibpur; IIT, Kharagpur; ISI Kolkata; Jadavpur University, Kolkata; NIT, Durgapur; and University of Calcutta.
- 83 Full-time and 14 part-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From the State of West Bengal, IIT, Kharagpur as Resource Centre and IIEST, Shibpur; NIT, Durgapur; Jadavpur University; and Calcutta University have been included under the programme as Participating Institution (PI).
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at IIT, Kharagpur; IIEST, Shibpur; NIT, Durgapur; Jadavpur University; and Calcutta University.
- 2,765 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Kharagpur; IIEST, Shibpur; NIT, Durgapur; Jadavpur University; and Calcutta University in the area of VLSI design/ System design in the first two years of the programme.

#### (vi) National Institute of Electronics and Information Technology (NIELIT)

 NIELIT, Kolkata is imparting IT education and training and is a pioneer in providing IT training and consultancy services in IT/ITeS in eastern India.

- Area of Excellence: Software (S/W) Development & S/W Testing; Office Automation; Programming Languages; Databases; Multimedia Animation Technology; Governance & Corporate Training – ERP; e-Waste Management; AutoCAD Training on the recent IT courses – Androids, Data Analytics, Data Warehousing & Data Mining & Cloud Computing.
- Courses Offered: Long Term Courses (Non-Formal), Short Term courses and Digital Literacy Courses.
- Total number of candidate(s) Trained: 28,181
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 10,715
  - (c) Skill Development in ESDM: 12,528
  - (d) Digital Literacy Courses: 4,938

#### • Number of Schedule Caste (SC) candidate(s) - Trained: 9,012

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 4,949
- (c) Skill Development in ESDM: 3,383
- (d) Digital Literacy Courses; 680

#### • Number of Schedule Tribe (ST) candidate(s) - Trained: 1,149

- (a) Formal Courses: 0
- (b) Non-Formal Courses (own NIELIT centres): 543
- (c) Skill Development in ESDM: 518
- (d) Digital Literacy Courses: 88
- Number of Women candidate(s) Trained: 8,706
  - (a) Formal Courses: 0
  - (b) Non-Formal Courses (own NIELIT centres): 3,070
  - (c) Skill Development in ESDM: 3,787
  - (d) Digital Literacy Courses: 1,849

#### 2.2 Promotion of Digital Payments

• MeitY has assigned a target of 180 crore digital payment transactions for 2017-18

and 150 crore digital payment transactions for 2018-19.

• Digital payment transactions for 3 payment modes, namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume(in lakh)
BHIM	1,283.58
USSD	1.79
RuPay Card on PoS	1,447.10

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

#### (i) Electronic Manufacturing Cluster (EMC)

- Greenfield EMC at Falta Industrial Growth Centre (Sector-IV & V), P.S- Ramnagar, South 24 Parganas District.
  - Implementing Agency: M/s West Bengal Electronics Industry Development Corporation Limited (WEBEL).
  - Area: 58.04 acres
  - Project Cost: 58.86 crore.
  - Project is in implementation phase.
  - Government Grant-in-aid amounting to Rs 5.13 crore has been released.
  - Infrastructure development is underway.
- Greenfield EMC at Naihati town, North 24 Parganas in District.
  - Implementing Agency: M/s West Bengal Electronics Industry Development Corporation Limited (WEBEL).
  - Area: 70 acres
  - Project Cost: Rs 58.31 crore.
  - Project is under implementation phase.
  - First installment of the Government Grant-in-aid amounting to Rs 5.14 crore has been released.

• Infrastructure development is underway.

#### (ii) Modified Special Incentive Package Scheme (M-SIPS)

• Under M-SIPS, a total of 6 applications with investment worth Rs 1,087 crore have been received and are under consideration. Out of these 6 applications, 4 applications with proposed investment worth Rs 948 crore have been approved.

#### 3.2 Promotion of IT/IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to 4 successful bidders to set up 4 BPO/ITES operation for 700 seats in West Bengal. Out of 700 seats, 200 seats are operational. Details of the units are as mentioned in table below:

#### (iii) Centres and Incubation Space

Existing Centres: There are 5 STPI centres in West Bengal at Durgapur, Haldia, Kharagpur, Kolkata and Siliguri.

#### 3.3 Research and Development

#### (i) Information Technology Research Academy (ITRA)

- A multi-institutional R&D project titled 'De-congesting India's transportation networks using mobile devices' ITRA-Mobile. Department of Physics, University of Calcutta, Kolkata is the Participating Institutes (PI) in this project.
- A multi-institutional R&D project titled 'ImagelDGP: Image based Systems for Identification of Individuals, Breeds and Diseases of Pigs and Goats' has been initiated

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Steel City Compto Aids Private Limited	Durgapur	100	Not Started	NA
2	Annadatri Rice Mill Private Limited	Krishnanagar	400	Not Started	NA
3	Fast Tech Technologies Services Private Limited	Ranaghat	100	Operational	31
4	Cegura Technology Solutions Pri- vate Limited	Siliguri	100	Operational	42
	Total		700		73

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR Crores
2013-14	6,482.22
2014-15	7,015.00
2015-16	6,990.00
2016-17	7,152.00
2017-18	6,683.00

under the thrust area ITRA-Ag&Food. KGEC Kalyani (West Bengal), and UBKV are the Participating Institutes (PI) in this project.

- A multi-institutional R&D project titled 'M2M: Improved Water Use efficiency and Agricultural Productivity through Experimental Sensor' has been initiated under the thrust area ITRA-Water. IIT Kharagpur is the Participating Institute (PI) in this project.
- A multi-institutional R&D project titled 'RemoteHealth: A framework for Healthcare Services using Mobile and Sensor Cloud Technologies' has been initiated under the thrust area ITRA-Mobile. Jadavpur University, Kolkata, University of Calcutta, IIEST Shibpur, NIT Durgapur, are the Participating Institutes (PI) in this project.

• A multi-institutional R&D project titled 'DiSARM: Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks' has also been initiated under the thrust area ITRA-Mobile. IIT, Kharagpur; IIM Calcutta; IIEST, Shibpur; NIT, Durgapur; KGEC Kalyani; and HIT, Kolkata are the Participating Institutes (PI) in this project.

## 4. ERNET India

#### (i) Eduroam Services

• 9 Institutes of West Bengal are facilitating eduroam services.

## 5. Cyber Security

- Number of cyber incident (s) reported: 4,182
- Number of alert(s)/advisories, issued: 1,150



India is very well poised to march towards a 'One Trillion Dollar Digital Economy', which will not only create employment opportunities for the youth but also will pave way for exciting business avenues in the ICT and related sector.

#### Shri Ravi Shankar Prasad

Minister of Electronics & IT and Law & Justice, Government of India

## Digital Profile of ANDAMAN AND NICOBAR ISLANDS



## Digital Profile of ANDAMAN and NICOBAR ISLANDS

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 4.19 lakh
- Number of Aadhaar assigned (2018 LIVE): 3.95 lakh
- % Saturation, 2018 (LIVE): 94.2%
- 0-5 years (LIVE) 0.25 lakh (78.0% Aadhaar Saturation)
- 5-18 years (LIVE) 0.79 lakh (85.8% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

• One link to Institutions under NKN has been commissioned and made operational.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 54 CSCs are functional; out of these, 53 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 21

#### (ii) DigiLocker

- More than 2,490 Aadhaar enabled registrations have taken place.
- (iii) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens can access the Central Government services available on UMANG.

#### (iv) Soil Health Card (SHC)

• 15,900 Soil Health Cards have been issued.

Samples Collected				
Cycle 1	<b>Cycle 1</b> 1,405			
Cycle 2	1,406			
Samples Tested				
Cycle 1	1405			
Cycle 2	1406			
SHCs Dispatched				
Cycle 1	10000			
Cycle 2	5900			

#### (v) e-Transactions under eTaal 2.0 Project

- 61 e-services have been integrated.
- Around 31.82 lakh e-transactions have been recorded, electronically by various e-Governance applications.

#### (vi) National Scholarship Portal (NSP)

- Around 1,000 appliactions have been registered and verified.
- Over Rs 26 lakh crore has been disbursed during the year 2017-18.

#### (vii) eSign

• Nearly, 1.56 lakh eSigns have been issued.

#### (viil) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)

- 33 Departments/services have been integrated for Push SMS
- Over 55.47 lakh SMSes have been sent by the Departments using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

#### (I) Skill Development in ESDM for Digital India

- Total Target: 2,000 candidates.
- 158 Candidates have been enrolled and trained; out of these, 60 candidates have been certified.

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 1 crore digital payment transactions for 2017-18 and 1 crore digital payment transactions for 2018.
- Digital Payment Transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 is as follows:

## **3. CYBER SECURITY**

- Number of cyber incident (s) reported: 237
- Number of alert (s)/ advisories issued: 1,150



# Digital Profile of CHANDIGARH

## I. Digital Access

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 11.26 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 11.47 lakh
- % of saturation 2018 (LIVE) : 101.8%
- 0-5 years (LIVE): 0.84 lakh (97.3% Aadhaar Saturation)
- 5-18 years (LIVE): 2.51 lakh (97.2% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

• 16 Links to Institutions under NKN have been commissioned and made operational in Chandigarh.

#### (iii) State Wide Area Network (SWAN)

- Chandigarh SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 7 Blocks Head Quarters (BHQ).
- Chandigarh SWAN is utilising more than 80% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 71 CSCs are functional; out of these, 27 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 28

#### (ii) e-District

• 22 e-District services have been launched.

#### (iii) DigiLocker

- More than 20,375 Aadhaar enabled registrations have taken place.
- Punjab State eGovernance Society and eDistrict Chandigarh are integrated with DigiLocker.

- (vi) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 6 Services of Chandigarh are onboarded on UMANG platform.

#### (v) eHospital

- Rolled out in 3 hospital in Chandigarh Civil Hospital, Sector-22; Civil Hospital, Sector-45; and Government Multi-specialty Hospital, Sector-16, Chandigarh.
- Modules Implemented : Registration and IPD.
- A total number of 24 lakh transactions have been carried out, since September, 2015.

#### (vi) e-Transactions

- 102 e-Services have been integrated.
- Around 1.96 crore e-transactions have been performed, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP)

- Around, 4,000 applications have been received and verified.
- A total of Rs 46 lakh has been disbursed during the year 2017-18.

#### (viii) eSign

- Nearly, 1.25 lakh eSigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 48 Departments/services have been integrated for Push SMS.
- Over 1.94 crore SMSes have been sent by Departments in Chandigarh using this platform.
- 3 Mobile applications pertaining to the Departments of Chandigarh have been downloaded 6,950 times.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 candidates.
- State Implementing Agency: Department of Information Technology, Chandigarh Administration.
- 5,543 Candidates have been enrolled and trained; out of these, 4,562 have been certified.
- (ii) Visvesvaraya PhD Scheme for Electronics & IT
- 11 Full-time and 7 part-time PhD seats have been allocated to 2 institutes - Institute of Engineering and Technology, Panjab University and Punjab Engineering College.
- 11 Full-time PhD candidates have been enrolled.
- (iii) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Chandigarh is providing services in the areas of Information, Electronics & Communication Technology (IECT). The centre is ISO 9001-2008 certified. It aims to disseminate knowledge on all aspects of Information, Electronics & Communication Technology (IECT) to utmost user satisfaction and has built-up a formidable track record for the same. The centre provides specialised services to different segments of clients based on requirements assessed from time to time.
- Area of Excellence: The centre offers services in the areas of Capacity Building in IECT; Computer Education in schools; Corporate Training; Turn key projects in the field of IT including large-scale data capturing and data processing; Software development for on-line and web enabled applications; Feasibility and System Studies; Consultancy in selection of Hardware and Software; and Computer Aided Designing (CAD).
- **Courses offered**: Long Term courses (Formal & Non-Formal), Short Term courses and Digital Literacy courses.
- Total number of candidate(s) Trained: 45,995
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 40,157

- (c) Skill Development in ESDM: 5,388
- (d) Digital Literacy courses: 450
- Number of Schedule Caste (SC) candidate(s) - Trained: 3,694
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres); 2,945
  - (c) Skill Development in ESDM: 671
  - (d) Digital Literacy courses: 78
- Number of Schedule Tribe (ST) candidate (s) Trained: 1,111
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 1,099
  - (c) Skill Development in ESDM: 12
  - (d) Digital Literacy courses: NIL
- Number of women candidate (s) Trained: 18,011
  - (a) Formal Course: NIL
  - (b) Non-Formal Courses (own NIELIT centres): 15,777
  - (c) Skill Development in ESDM: 2,141
  - (d) Digital Literacy courses: 93

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 5 crore digital payment transactions for 2017-18 and 5 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April1, 2017 till December 31, 2018 is as follows:

MODES	Volume (in lakh)
BHIM	326
USSD	0.75
RuPay Card on PoS	41.72

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of IT/ IT Enabled Services

#### (i) India BPO Promotion Scheme (IBPS)

• In-Principle Approval (IPA) has been issued to one successful bidder to set up one BPO/ ITES operation for 100 seats in Chandigarh. All 100 seats are operational. The details of the units are as mentioned in table below:

# 4. Research and Development

#### (i) Information Technology Research Academy (ITRA)

• A multi-institutional R&D project titled 'CARTS: Communication Assisted Road Transportation Systems' has been initiated. Punjab Engineering College (PEC) and University Institute of Engineering and Technology (UIET) are the Participating Institutes (PI) in the project.

Sl. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Health Biotech Limited	Chandigarh	100	Operational	61
Total			100		61

#### (ii) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR Crore
2013-14	558.49
2014-15	519.89
2015-16	700.79
2016-17	758.82
2017-18	668.27

## **5. CYBER SECURITY**

- Number of cyber incident (s) reported: 237
- Number of alert (s)/ advisories issued: 1,150



## Digital Profile of DADRA AND NAGAR HAVELI

## I. Digital Access

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018) : 3.78 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 3.76 lakh
- % of saturation 2018 (LIVE) : 99.4%
- 0-5 years (LIVE): 0.30 lakh (73.9% Aadhaar Saturation)
- 5-18 years (LIVE): 0.93 lakh (95.9% Aadhaar Saturation)

#### (ii) State Wide Area Network (SWAN)

- The Dadra and Nagar Haveli SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 2 Districts Head Quarters (DHQs).
- Dadra and Nagar Haveli SWAN is utilising more than 60% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- A total of 48 CSCs are functional; out of these, 12 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 10

#### (ii) e-District

• 43 e-District services have been launched in 1 District.

#### (iii) DigiLocker

• More than 3,878 Aadhaar enabled registrations have taken place.

#### (vi) UMANG

- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Dadra and Nagar Haveli can access the Central Government services available on UMANG.

#### (v) Soil Health Card

• 2,222 Soil Health Cards have been issued.

Samples Collected				
Cycle 1	<b>Cycle 1</b> 2,222			
Cycle 2	2,816			
Samples Tested				
<b>Cycle 1</b> 2,222				
SHCs Dispatched				
<b>Cycle 1</b> 2,222				



238 MINISTRY OF ELECTRONI

#### (vi) e-Transactions

- 111 e-Services have been integrated.
- More than 77.85 lakh crore e-transactions have been performed, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP)

- Around, 4,000 applications have been received and verified.
- A total of Rs 46 lakh has been disbursed during the year 2017-18.

#### (viii) eSign

- Nearly, 80,000 eSigns have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
  - 1 Department/service has been integrated

for Push SMS.

 More than 2.39 lakh SMSes have been sent by the Departments in Dadra and Nagar Haveli using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 2,000 candidates.
- State Implementing Agency: Omnibus Industrial Development Corporation of Dadar & Nagar Haveli.



• 159 Candidates have been enrolled and trained; out of these, 89 have been certified.

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 4 lakh digital payment transactions for 2017-18 and 5 lakh digital payment transactions for 2018-19 to the UTs of Dadra & Nagar Haveli.
- Digital payment transactions for 3 payment modes namely BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 is as follows:

MODES	Volume(in lakh)
BHIM	15.93
USSD	0.04
RuPay Card on PoS	11.74

(Source: Digipay dashboard)

## **3. CYBER SECURITY**

- Number of cyber incident (s)reported: 14
- Number of alert (s)/ advisories issued: 1,150



## Digital Profile of DAMAN AND DIU

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 2.2 lakh
- Numbers of Aadhaar assigned (2018 LIVE): 2.13 lakh
- % of saturation 2018 (LIVE) : 97.0%
- 0-5 years (LIVE): 0.11 lakh (64.9% Aadhaar Saturation)
- 5-18 years (LIVE): 0.48 lakh (110.7% Aadhaar Saturation)

#### (ii) State Wide Area Network (SWAN)

- The Daman and Diu SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 2 Districts Head Quarters (DHQs).
- Daman and Diu SWAN is utilising more than 60% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 40 CSCs are functional; out of these, 10 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs: 8

#### (ii) e-District

• 43 e-District services have been launched in 2 Districts.

#### (iii) DigiLocker

- Around 1,533 Aadhaar enabled registrations have taken place.
- (vi) UMANG (Unified Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available.
- Citizens of the State can access the Central Government services available on UMANG.

#### (vi) e-Transactions

- 107 e-Services have been integrated.
- Around 19.77 lakh e-transactions have been recorded electronically, by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP)

- Around, 2,000 applications have been registered and verified.
- Rs 3 lakh has been disbursed during the year 2017-18.

#### (viii) eSign

• Nearly, 2.14 lakh eSigns have been issued.

(ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)

- 2 Departments/services have been integrated for Push SMS.
- More than 7,590 SMSes have been sent by the Departments using this platform.

## 2. Digital Empowerment through Digital Inclusion

2.1 Digital Skilling

#### (i) Skill Development in ESDM for Digital India

- Total Target: 2,000 candidates.
- State Implementing Agency: Omnibus Industrial Development Corporation of Dadar & Nagar Haveli.
- 158 Candidates have been enrolled and trained; out of these, 60 have been certified.
- Funds released by the Government: Rs 75.33 lakh

#### (ii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- The indicative target is 4,000 persons. Out of these, 191 candidates have been trained and 2 candidates have been certified.

#### **2.2 Promotion of Digital Payments**

- MeitY has assigned a target of 3 lakh digital payment transactions for 2017-18 and 5 lakh digital payment transactions for 2018-19.
- Digital Payment Transactions for 3 payment modes namely BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, is as follows:

MODES	Volume (in thousands)
BHIM	930.76
USSD	2.24
RuPay Card on PoS	927.95

(Source: Digipay dashboard)

# 3. Digital Entrepreneurship and Industry

#### 3.1 Promotion of Electronics Manufacturing

- (i) Modified Special Incentive Package Scheme (M-SIPS)
- One application with investment worth Rs 131 crore has been received and approved.

### 4. CYBER SECURITY

- Number of cyber incident(s) reported: 7
- Number of alert (s)/advisories issued: 1,150



## Digital Profile of LAKSHADWEEP

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total population (Projected 2018) : 71,218
- Numbers of Aadhaar assigned, 2018 (LIVE) : 69,931
- % Saturation, 2018 (LIVE) : 98.2%
- 0-5 years (LIVE) : 0.04 lakh (64.6% Aadhaar Saturation)
- 5-18 years (LIVE) : 0.14 lakh (85.6% Aadhaar Saturation)

#### (ii) State Wide Area Network (SWAN)

- Lakshdweep SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 9 Blocks Head Quarters (BHQs).
- Lakshdweep SWAN has been utilising more than 90% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 9 CSCs are functional; out of these, 7 CSCs are functional at Gram Panchayat levels.
- Number of Women Village Level Entrepreneurs (VLEs): 3

#### (ii) DigiLocker

- About 197 Aadhaar enabled registrations have taken placed.
- (iii) UMANG (Unified Mobile App for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Lakshadweep can access the Central Government services available on UMANG.

#### (iv) e-Transactions under eTaal 2.0 project:

- 45 e-Services have been integrated.
- Around 79.25 lakh e-transactions have been recorded, electronically by various e-Governance applications.

- (v) eSign
- Nearly, 65,000 esigns have been issued.
- (vi) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 2 Departments/services have been integrated for Push SMS
- Over 1.23 lakh SMSes have been sent by the Departments in Lakshadweep using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Promotion of Digital Payment

- MeitY has assigned a target of 1 lakh digital payment transactions for 2017-18 and 1 lakh digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes, namely, BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 is as follows:

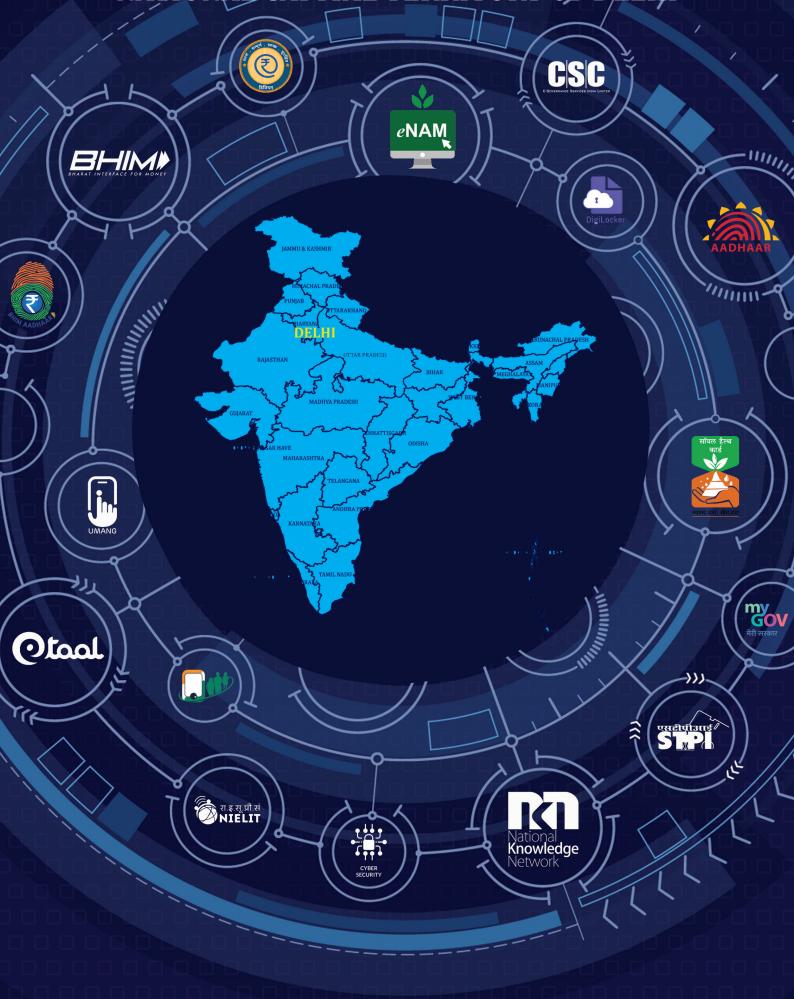
MODES	Volume (in lakh)	
BHIM	1296	
USSD	1.4	
RuPay Card on PoS	767	

(Source: Digipay dashboard)

## 3. Cyber Security

- Number of cyber incident(s) reported: 0
- Number of alert (s)/advisories issued: 1,150

## Digital Profile of NATIONAL CAPITAL TERRITORY OF DELHI



## Digital Profile of NATIONAL CAPITAL TERRITORY OF DELHI

## **1. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population (Projected 2018): 1.83 crore
  Numbers of Aadhaar assigned (2018 LIVE):
- 2.18 crore
- % of saturation 2018 (LIVE): 118.9%
- 0-5 years (LIVE): 11.08 lakh (73.2% Aadhaar Saturation)
- 5-18 years (LIVE): 49.84 lakh (109.9% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

• 117 Links to Institutions under NKN have been commissioned and made operational.

#### (iii) State Wide Area Network (SWAN)

- Delhi SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 9 Districts Head Quarters (DHQs) and 11 Blocks Head Quarters (BHQs).
- Delhi SWAN is utilising more than 65% bandwidth of its link capacity.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 1,465 CSCs are functional.
- Number of Women Village Level Entrepreneurs (VLEs): 414

#### (ii) e-District

• 14 eDistrict services have been launched in all 11 Districts.

#### (iii) DigiLocker

- More than 2.59 lakh Aadhaar enabled registrations have taken place.
- eDistrict Delhi is integrated with DigiLocker.

## (vi) UMANG (Unified Application for New-Age Governance)

- 1.189 Services of 49 applications of the Central Government Departments are available on UMANG.
- 6 Services have been onboarded on UMANG.
- 3 Services of Vahan have been onboarded.

#### (v) eHospital

• Rolled out in 29 hospital, such as, Safdarjung Hospital, Dr. Ram Manohar Lohia Hospital,

Kalawati Saran Children Hospital, Lady Hardinge Medical College, Smt S K Hospital and NDMC Polyclinic, Chanakya puri.

- Modules Implemented: Registration, Lab and IPD.
- Total number of transactions since September, 2015 have been over 1.72 crore.

#### (vi) e-Transactions

- 204 e-Services have been integrated.
- Around 2,923 lakh e-transactions have been performed, electronically by various e-Governance applications.

#### (vii) National Scholarship Portal (NSP)

- Around 57,000 applications have been registered; out of these, 15,000 have been verified.
- Rs 5.30 crore has been disbursed during the year 2017-18.

#### (viii) eSign

- Nearly, 49.84 lakh eSign have been issued.
- (ix) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- 15 Departments/services have been integrated for Push SMS.
- More than 8.41 crore SMSes have been sent by the Departments using this platform.
- 2 Mobile applications pertaining to the Departments of Delhi have been downloaded over 2,970 times.

## 2. Digital Empowerment through Digital Inclusion

#### 2.1 Digital Skilling

- (i) Skill Development in ESDM for Digital India
- Total Target: 15,000 candidates.
- State Implementing Agency: Directorate of Higher Education and Directorate of Training & Technical Education, Delhi.
- 14,250 Candidates have been enrolled and trained; out of these, 9,530 have been certified.

- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- Delhi Technological University (DTU); Delhi; IIIT, Delhi; and Indira Gandhi Delhi Technological University for Women, Delhi; have been selected for implementation of ISEA project phase II in the capacity of Participating Institute (PI) respectively.
- Outlay for 5 years: Rs 195.90 lakh.
- Funds released: Rs 114.48 lakh.
- 2,938 Candidates have been trained/ under-going training in various formal/ non-formal courses and 317 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, 61 awareness workshops on Information Security have been organised covering 8,547 participants.
- (iii) Visvesvaraya PhD Scheme for Electronics & IT
- 127 Full-time and 84 part-time PhD seats have been allocated to 6 institutes - IIT, Delhi; IIIT, Delhi; JNU; IP University; South Asian University; and Jamia Millia University, Delhi.
- 117 Full-time and 54 part-time PhD candidates have been enrolled.
- (iv) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country, including IITs, NITs, IISc, IIITs and other engineering colleges. From Delhi, IIT, Delhi as Resource Center and NIT, Delhi, and IGTDUW, has been included under the programme as Participating Institutions (PI). Following activities have been carried out under the programme:
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at IIT, Delhi; NIT, Delhi; and IGTDUW, Delhi.
- 972 Persons have been trained at B. Tech, M. Tech and PhD. levels at IIT, Delhi, NIT, Delhi; and IGTDUW in the area of VLSI design/ System design in the first two years of the programme.
- Projects for development of working prototypes of System/ System on Chip (SoC)/ Application Specific Integrated Circuit (ASIC) leading to Proof-of-Concept development are being implemented.
- Rs 162.43 lakh have been released to Delhi

including Rs 83.10 lakh to IIT, Delhi; Rs 36.20 lakh to NIT, Delhi; and Rs 43.14 lakh to IGTDUW, Delhi.

- (v) National Institute of Electronics and Information Technology (NIELIT)
- NIELIT, Delhi has been providing quality computer education and has been handling large projects of the Government organisations in different sectors.
- Area of Excellence: Electronics, Computer Science, Information Technology and other related disciplines for making industry ready professionals available and to promote e-learning.
- **Courses offered:** Long Term courses (Non-Formal), Short Term courses and Digital Literacy courses.
- Total number of candidate(s) Trained: 46,530
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT *centres:* 9,629
  - (c) Skill Development in ESDM: 12,085
  - (d) Digital Literacy courses: 24,816
- Number of Schedule Caste (SC) candidate(s) - Trained: 9,282
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 2,074
  - (c) Skill Development in ESDM: 2,049
  - (d) Digital Literacy courses: 5,159
- Number of Schedule Tribe (ST) candidate(s) - Trained: 420
  - (a) Formal courses: NIL
  - (b) Non-Formal courses (own NIELIT centres): 81
  - (c) Skill Development in ESDM: 16
  - (d) Digital Literacy courses: 323
- Number of Women candidate(s) Trained: 12,861
  - (a) Formal courses: 0
  - (b) Non-Formal courses (own NIELIT centres): 1,217
  - (c) Skill Development in ESDM: 4,332
  - (d) Digital Literacy courses: 7,312

#### 2.2 Promotion of Digital Payments

• MeitY has assigned a target of 68 crore digital payment transactions for 2017-18 and 70 crore digital payment transactions for 2018-19.

• Digital payment transactions for 3 payment modes, namely, BHIM, USSD and RuPAY Card on PoS, since April 1, 2017 till December 31, 2018 are as follows:

MODES	Volume (in thousands)		
BHIM	80951		
USSD	98.54		
RuPay Card on PoS	60844.67		

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

- 3.1 Promotion of Electronics Manufacturing
- (i) Modified Special Incentive Package Scheme (M-SIPS)
- A total of 2 applications with investment worth Rs 27 crore have been received.

#### 3.2 Promotion of IT/ IT Enabled Services

#### (i) IT/ITeS

• Software exports made by registered units are as under:

YEAR	Exports in INR Crore		
2013-14	1173.02		
2014-15	2217.90		
2015-16	1442.30		
2016-17	1483.60		
2017-18	1662.82		

- (ii) Establishment of Incubator for Electronics Startups in Delhi-NCR (Electropreneur Park)
- The Electropreneur Park has been set up in collaboration with Software Technology Parks of India (STPI), India Electronics & Semiconductor Association (IESA) and Delhi University (DU) with the state-of-the-art

facilities at South Campus, Delhi University. The Electropreneur Park has been established in an area of over 10,000 sqft constructed space with facilities including laboratories (RF and Power Labs) at South Campus, Delhi University to promote ESDM innovation, R&D and to create Indian IPs.

The total project duration to set up the Electropreneur Park is 5 years. The project will support 50 startups, which will be benefitted over a period of 5 years. As on date, the Electropreneur Park is supporting 26 startups to avail Incubation facilities at the park; out of these, 10 are onboard, 8 startups have graduated and 6 startups are at revenue stage. As an outcome, 14 new products, 12 working prototypes have been developed, 18 Patents have been filed, 20 crore VC/Grants/CSR have been received by onboarded startups and 196 number of employment has been generated by startups.

# 3. Research and Development

- (i) Information Technology Research Academy (ITRA)
- A multi-institutional R&D project titled 'Cognitive Radio: Mobile Broadband Service Support over Cognitive Radio Networks' has been initiated under the area ITRA-Mobile. IIT, Delhi is the Participating Institute (PI) in the project.
- Another multi-institutional R&D project titled 'Human Sense: Towards context aware sensing, inference and actuation for applications in Energy' has been initiated under the area ITRA-Mobile. IIIT, Delhi and IGDTUW, Delhi are the Participating Institutes (PI) in this project.

## 4. ERNET India

#### (i) eduroam Services

• 85 Institutes have eduroam connectivity.

## 5. CYBER SECURITY

- Number of cyber incident (s) reported: 12,113
- Number of alert (s)/advisories issued: 1,150



# Digital Profile of **PUDUCHERRY**

## **I. Digital Access**

#### **1.1 Digital Infrastructure**

#### (i) Digital Identity: Aadhaar

- Total Population, 2018 (Projected): 13.75 lakh
- Numbers of Aadhaar assigned, 2018(LIVE) : 12.97 lakh
- % of saturation 2018 (LIVE) : 94.4%
- 0-5 years (LIVE) : 0.73 lakh (70.6% Aadhaar Saturation)
- 5-18 years (LIVE) : 2.51 lakh (86.5% Aadhaar Saturation)

#### (ii) National Knowledge Network (NKN)

- 8 Links to Institutions under NKN have been commissioned and have been made operational.
- NKN links have also been extended to 2 NIC Districts.

#### (iii) State Wide Area Network (SWAN)

- Puducherry SWAN established a secured intranet connecting one State Head Quarter (SHQ) with 3 Districts Headquarters (DHQ) and 8 Blocks Head Quarters (BHQ).
- Puducherry SWAN has been utilizing more than 60% bandwidth of its link capacity.

#### (iv) National Information Infrastructure (NII) pilot project

• A pilot proposal for a period of one year on National Information Infrastructure (NII) for one district each in 7 States namely Nagaland, Karnataka, Kerala, Gujarat, Uttarakhand, Chandigarh and Puducherry has been implemented successfully, covering 36 blocks, 1,560 Gram Panchayats (GPs) and more than 4,000 Government offices.

#### **1.2 Digital Delivery of Services**

#### (i) Common Services Centres (CSCs)

- 183 CSCs are functional, out of these, 98 CSCs are functional at Gram Panchayat level.
- Number of Women Village Level

Entrepreneurs (VLEs): 81

#### (ii) e-District

• 72 e-District services have been launched in all 4 Districts.

#### (iii) DigiLocker

- About 18,930 lakh Aadhaar enabled registrations have taken place.
- Department of Sainik Welfare, Puducherry is integrated with DigiLocker.
- •
- (iv) UMANG(Unified Application for New-Age Governance)
- 189 Services of 49 applications of the Central Government Departments are available on UMANG.
- Citizens of Puducherry can access the Central Government services available on UMANG.

#### (v) Soil Health Card

• 21,794 Soil Health Cards have been issued.

Samples Collected			
Cycle 1	3,530		
Cycle 2	4,525		
Samples Tested			
Cycle 1	3,530		
Cycle 2	4,525		
SHCs Dispatched			
Cycle 1	19,594		
Cycle 2	2,200		

#### (vi) eHospital

• eHospital has been implemented in Indira Gandhi Government General Hospital and Post-Graduation Institute of Puducherry. The same is running on cloud network.

#### (vii) e-Transactions under eTaal 2.0 project

- 108 e-Services have been integrated.
- Around 1.15 crore e-transactions have

been recorded, electronically by various e-Governance applications.

#### (viii) National Scholarship Portal (NSP):

- Around 5,000 applications have been received; out of these, 3,000 have been successfully verified.
- Around Rs 1 crore has been disbursed in Puducherry using the NSP portal.

#### (ix) eSign

- Nearly 0.66 lakh esigns have been issued.
- (x) Mobile Seva (nation-wide Mobile Governance initiative of the Government of India)
- About 11 Departments/Services have been integrated for Push SMS.
- Over 3.85 lakh SMSes have been sent by the Departments in Puducherry using this platform.

## 2. Digital Empowerment through Digital Inclusion

#### **2.1 Digital Skilling**

- (i) Skill Development in ESDM for Digital India
- Total Target: 8,000 candidates.
- 5,548 Candidates have been enrolled and trained; out of these, 4,350 candidates have been certified.
- (ii) Information Security Education and Awareness (ISEA) Project Phase II
- Pondicherry Engineering College, Puducherry has been selected for the implementation of ISEA Project Phase II in the capacity of Participating Institute (PI).
- Outlay for 5 years: Rs 65.30 lakh.
- Funds released: Rs 38.66lakh.
- 733 Candidates have been trained/undergoing training in various formal/non-formal courses and 80 Government officials have been trained in short term programmes of 2/3/5 days duration in the area of Information Security. Besides this, one awareness workshop on Information Security has been organised, covering 346 participants.

#### (iii) Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- The implementing agency for the scheme is CSC e-Governance Services India Limited.
- Indicative target: 28,000 persons.
- 8,912 Persons have been trained; out of these, 3, 843 candidates have been certified.

#### (iv) Visvesvaraya PhD Scheme for Electronics & IT

- 10 Full-time and 6 part-time PhD seats have been allocated to 2 institutes - NIT, Puducherry and Pondicherry University.
- 8 Full-time and 1 part-time PhD candidates have been enrolled.
- (v) Special Manpower Development Programme for Chips to System Design (SMDP-C2SD)
- An umbrella programme spread across the country including IITs, NITs, IISc, IIITs and other engineering colleges. From Puducherry, NIT Puducherry has been included under the programme as Participating Institution (PI).
- State-of-the-art VLSI Design lab equipped with EDA Tools has been set up at NIT Puducherry.
- 182 Persons have been trained at B. Tech, M. Tech and PhD. level at NIT Pudducherry in the area of VLSI design/ System design in the first three years of the programme.

#### 2.2 Promotion of Digital Payments

- MeitY has assigned a target of 4.7 crore digital payment transactions for 2017-18 and 5 crore digital payment transactions for 2018-19.
- Digital payment transactions for 3 payment modes namely BHIM, USSD, RuPAY Card on PoS, since April 1, 2017 till December 31, 2018, are as follows:

MODES	Volume(in thousands)	
BHIM	2892.55	
USSD	2.0	
RuPay Card on PoS	2783.88	

(Source: Digipay dashboard)

## 3. Digital Entrepreneurship and Industry

## 3.1 Promotion of IT/IT enabled Services

• In-Principle Approval (IPA) has been issued to 1 successful bidders to set up 1 BPO/ITES operation for 100 seats and all 100 seats are operational. The details of the units are as mentioned in the table below:

YEAR	Exports in INR crore
2013-14	77.00
2014-15	94.59
2015-16	117.17
2016-17	85.13
2017-18	82.79

#### (ii) Centres and Incubation Space

• **Existing centres:** There is one STPI centre at Puducherry.

S. No.	Unit Name	City	Seats Allocated	Status	Employment Reported
1	Imarque Solutions Private Limited	Puducherry Taluk	100	Operational	156
	Total		100		156

#### (i) IT/ITeS

• Software exports made by registered units are as follows:

### 4. CYBER SECURITY

- Number of cyber incident (s) reported: 178
- Number of alert(s)/ advisories issued: 1,150

### LIST OF ABBREVIATION

**AEPS** Aadhaar Enabled Payment System AI Artificial Intelligence BHIM Bharat Interface for Money BOSS Bharat Operating System Solutions **BSNL** Bharat Sanchar Nigam Limited C-DAC Centre for Development of Advanced Computing CFC **Common Facility Centre Common Services Centre** CSC CTDP **Comprehensive Telecom Development Plan** C2SD Chip to System Design Department of Telecommunications DoT DIC **Digital India Corporation** DSC **Digital Signature Certificate Electronics Manufacturing Clusters** EMC Education and Research Network ERNET FINTECH **Financial Technologies** FOSS Free and Open Source Software FSOC Free Space Optical Connectivity Government eMarketplace GeM Human Resource Development HRD Indian Institute of Food Processing Technology IIFPT IIT Indian Institute of Technology IoT Internet of Things JanDhan, Aadhaar and Mobile JAM National Centre of Geo-informatics NCoG NeGD National e-Governance Division NER North Eastern Region NERS Nationwide Emergency Response System NIC National Informatics Centre National Institute of Electronics & Information Technology NIELIT NLCPR Non-Lapsable Central Pool of Resources MHA Ministry of Home Affairs NKN National Knowledge Network **MNRE** Ministry of New and Renewable Energy Ministry of Skill Development And Entrepreneurship MSDE Modified Special Incentive Package Scheme M-SIPS ORS Online Registration System PFMS Public Financial Management System PMGDISHA Pradhan Mantri Gramin Digital Saksharta Abhiyan State Data Centre SDC SEZ Special Economic Zone SMDP Special Manpower Development Programmes SSDG State Service Delivery Gateway STPI Software Technology Parks of India **SWAN** State Wide Area Network Ministry of Electronics and Information Technology MeitY **MDoNER** Ministry of Development for North Eastern Region NEBPS, North East BPO Promotion Scheme UIDAI Unique Identification Authority of India UMANG Unified Mobile App for New-Age Governance UPI Unified Payment Interface USOF Universal Services Obligation Fund Unstructured Supplementary Service Data USSD Zilla Parishad ΧR

## **Conversion Table**

1 Million = 10 Lakh 1 Billion = 1 Crore 1 Billion = 1000 Million 1 Crore = 100 Lakh



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