



# Geo-Enabling the Global Village

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*The Geospatial Way to a Better World*



# Discussion

NIC - Intro

Geo-Spatial Ecosystem

Geo-Spatial & Drone Policy

Geo-Spatial Policy Guidelines

NIC Geo-Spatial Initiatives

- DBT
- School GIS
- Parivesh
- BBNL
- SVAMITVA
- OneMap

Spatial Planning - GramManchitra

NIC – Other Geo-Spatial Initiatives

Policy on Geo-Spatial Technology for Future

# NIC - Intro



010101010  
10110101

# National Informatics Centre (NIC)'s Mandate

Technology **Partner** of  
Government

Design and **Develop** IT  
System for Government

**Provide** ICT  
Infrastructure on Demand

Explore & **Advise** on use  
of Emerging Technologies





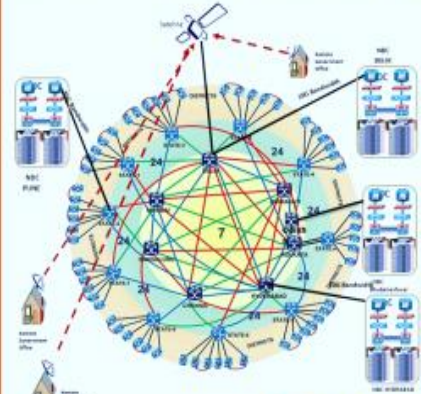
# DIGITAL INFRASTRUCTURE

by NIC

**MeghRaj**  
GOVERNMENT CLOUD

## NICNET

PAN INDIA HIGH SPEED GOVERNMENT NETWORK



Connecting  
Centre States Districts Panchayats



REMOTE SENSING & GIS

**BHARAT MAPS**



## VIDEO CONFERENCING

VC STUDIO

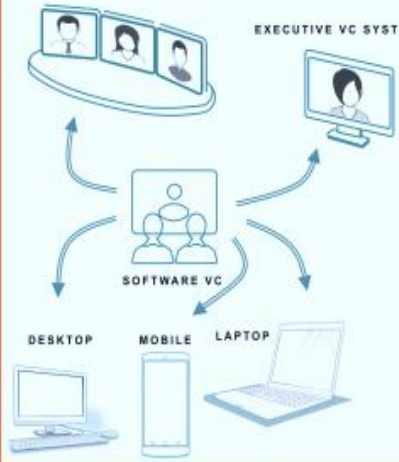
EXECUTIVE VC SYSTEM

SOFTWARE VC

DESKTOP

MOBILE

LAPTOP



@gov



@nic.in

@gov.in



**NATIONAL DATA CENTRE**

**Government Websites**

Government Services

Q2B

Q2E

Q2G

Q2C



**DIGITAL PLATFORM**

# Framework for Data Collection & Storing



Launched in 2014  
1<sup>st</sup> Govt. Cloud



1110+  
Ministries/  
Department/ Govt.  
Projects.



>18,000  
VMs Allocated

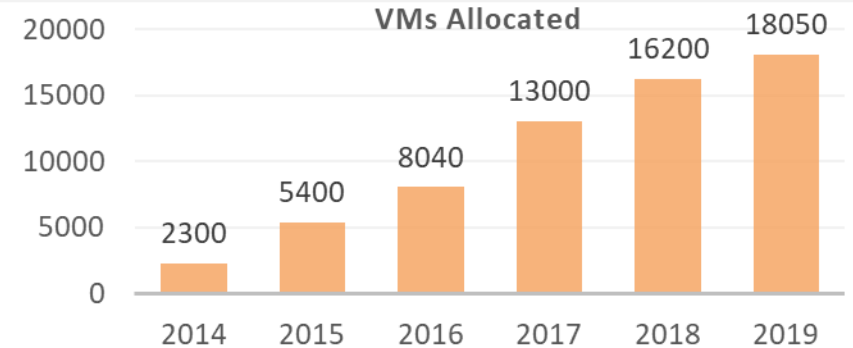
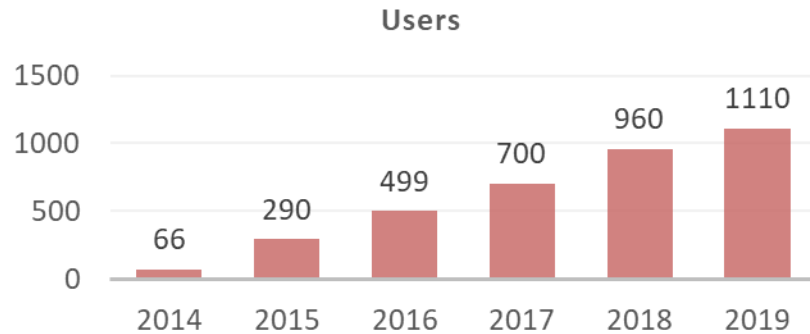
Quick Deployment of  
Digital India Initiatives

Optimal utilization of  
ICT resources

Enhancement of  
existing e-Governance  
Initiatives

Encouraged standardized  
platforms and products

Expedited cloud adoption in  
the Government



Some of the important projects hosted on the NIC National Cloud



Unified Mobile  
Application for New-age  
Governance

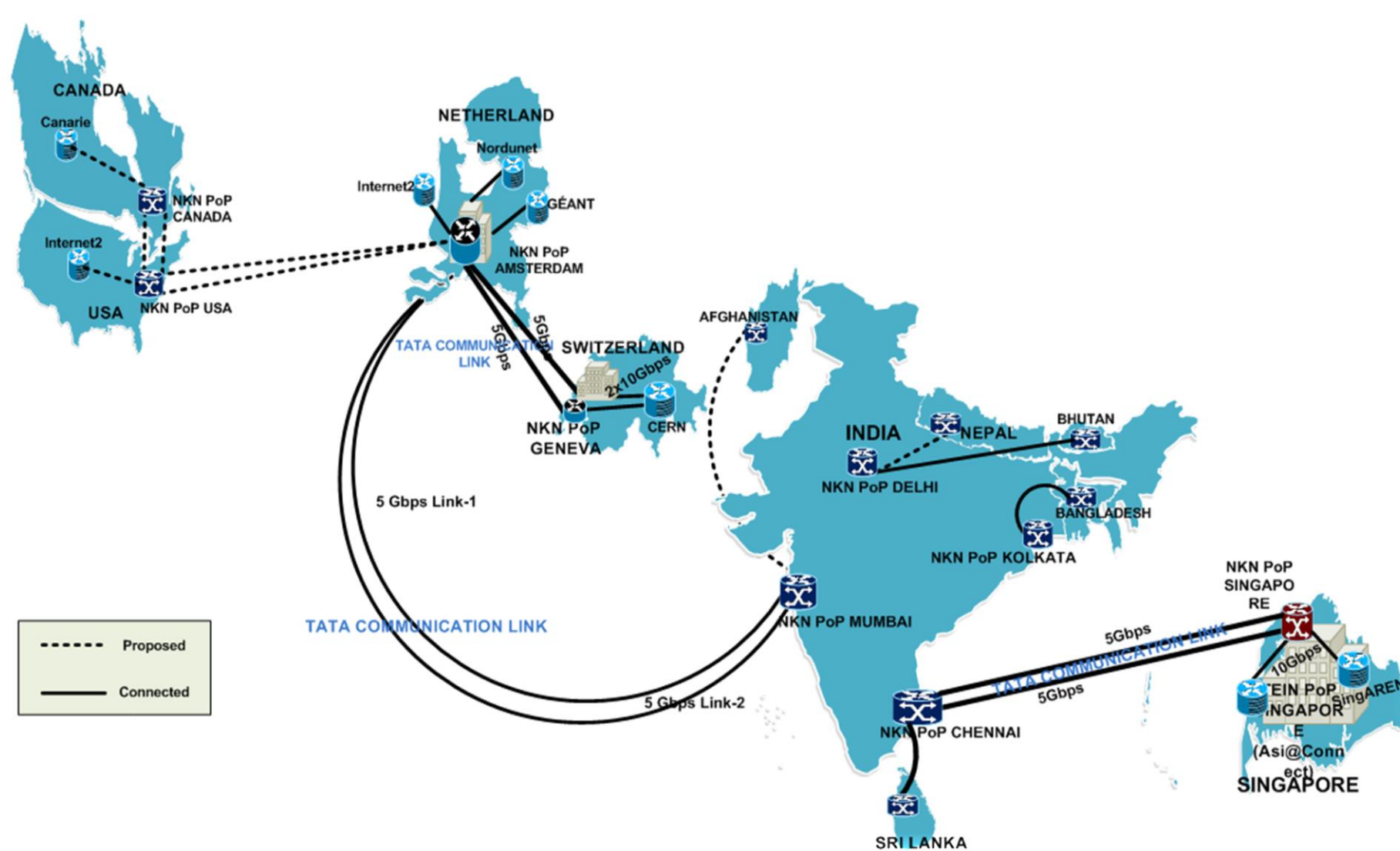


SHRAM SUVIDHA  
MINISTRY OF LABOUR & EMPLOYMENT



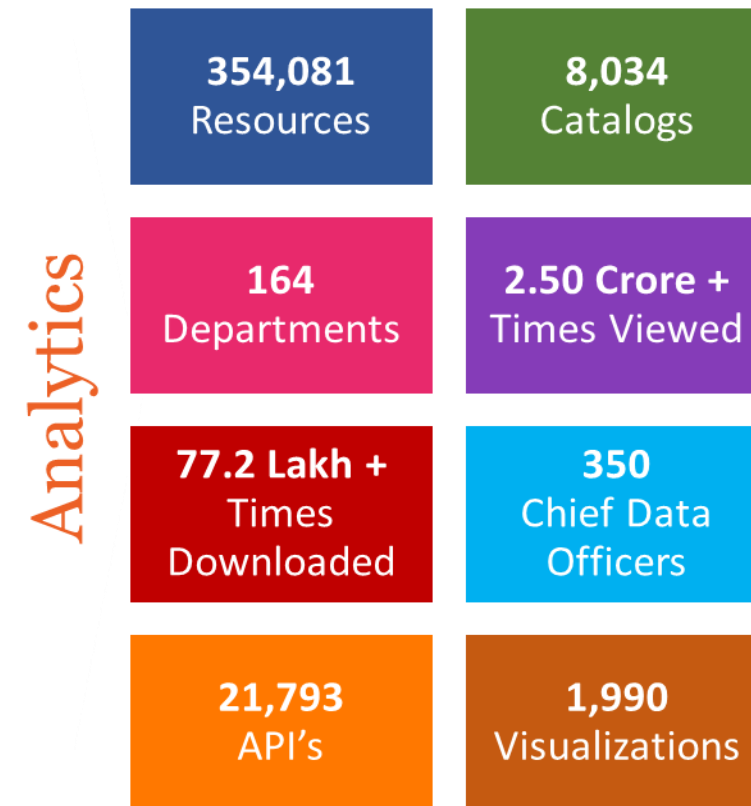


# NKN – From National to International Spread



# Data Management Plans – Open Data Initiatives

- Platform for supporting Open Data initiative of Government of India
- Proactive release of datasets through APIs by Government Entities
- Innovative use of dataset by Community and Citizens at large to promote good governance



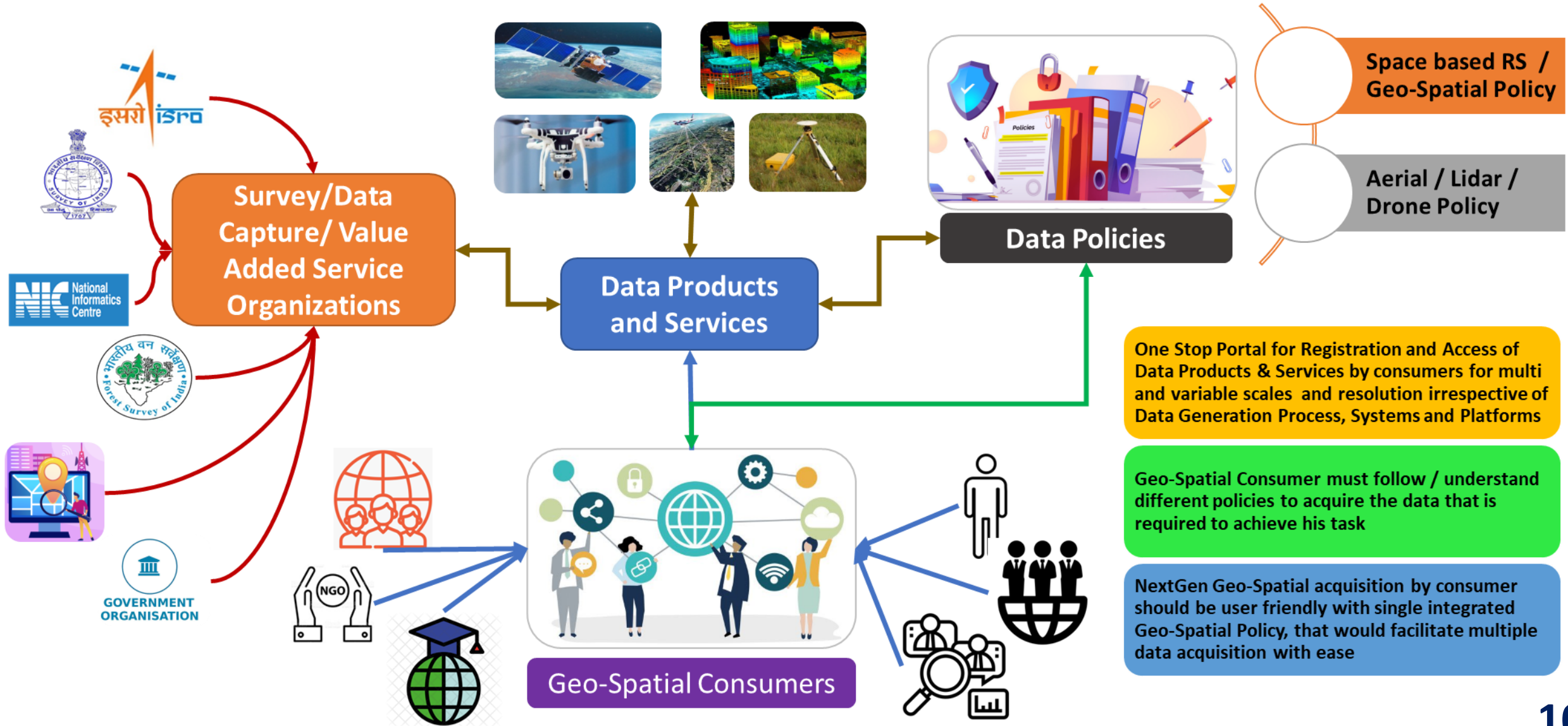
# Geo-Spatial Ecosystem



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# Integrated Geo-Spatial Ecosystem

Multi-Layer Multi-Scales (1M to 1 K or Higher) and Multi-Spatial Resolution (56 m to 50 cm or Higher) from Heterogeneous Sources, Variable Data Generation Processes & Platforms







# Geo-Spatial & Drone Policy



# Geo-Spatial Policy Salient Features

## Atmanirbhar Bharat (Self reliance)

- India's mapping technologies and facilities are reliant on international sources. The liberalization of the mapping industry, as well as the democratization of existing datasets, will spur domestic innovation and allow Indian companies to compete in the global mapping ecosystem by using modern geospatial technologies. Maps and geospatial data that are locally accessible and appropriate will also aid in better resource planning and management, as well as better serving the basic needs of the Indian population.

## Self-Certification Regime

- The production, publication, and use of geospatial data, as well as the conduct of mapping activities, were all heavily supervised and subject to a lengthy approval process.
- All prior approval or license requirements for the collection, generation, planning, distribution, storage, publishing, updating, and/or digitization of geospatial data and maps within the territory of India have now been removed by the Guidelines. Individuals, businesses, organizations, and government agencies have been given broad permission to obtain geospatial data and provide value-added services in relation to it, including building applications, under the guidelines.

## Restricted Data

- Rather than classifying areas as 'restricted areas,' where mapping activities were forbidden or strictly controlled, the Guidelines also provide for a detailed set of sensitive attributes that cannot be shown on any map (Sensitive Attributes).

# Geo-Spatial Policy Guidelines Contd.,

## Focus on Indian Entities

- Subject to the regulations on Sensitive Attributes, the Guidelines allow Indian entities to: acquire, collect, generate, prepare, disseminate, store, share, publish, distribute, update, digitize and/or create Geospatial Data, including maps, of a spatial accuracy above the specified threshold (Thresholds), provided that such data is stored and processed only in India;
- Use technologies such as verification and ground truthing, and access Indian ground stations and augmentation facilities for real-time positioning (such as for Continuously Running Reference Stations) and obtaining access to all related Geospatial Data; and perform activities such as terrestrial mobile mapping survey, street view surveying, and surveying in Indian territorial waters, regardless of whether the survey is performed on Indian soil or in Indian territorial waters.

## Export and localization of maps

- The government previously prohibited the export of maps and map data with a resolution greater than 1:250,000.
- The Guidelines have liberalized this, enabling maps with resolutions up to the Threshold to be exported (1:4000).
- The lowering of this bar would make it easier for foreign companies to gain access to more precise geospatial data in India for their goods. Digital maps and geospatial data with a finer precision than the Threshold, on the other hand, must be localized and can only be stored and processed on servers in India.

## Inter-ministerial Committee

- The Guidelines create a Geospatial Data Promotion and Development Committee (Committee), which will be made up of representatives from all relevant government agencies.
- The Committee will be in charge of governing and facilitating all geospatial data-related activities, as well as resolving any disputes that might arise as a result of the identification of Sensitive Attributes and the regulations that go along with them.

# Drone Policy Now & Before

- Several approvals abolished: unique authorization number, unique prototype identification number, certificate of manufacturing and airworthiness, certificate of conformance, certificate of maintenance, import clearance, acceptance of existing drones, operator permit, authorization of R&D organization, student remote pilot license, remote pilot instructor authorization, drone port authorization etc.
- Number of forms reduced from 25 to 5
- Types of fee reduced from 72 to 4
- Quantum of fee reduced to nominal levels and delinked with size of drone
- Digital sky platform shall be developed as a user-friendly single-window system
- No permission required for operating drones in green zones
- Yellow zone reduced from 45 km to 12 km from the airport perimeter
- No remote pilot license required for micro drones (for non-commercial use) and nano drones
- No requirement for security clearance before issuance of any registration or license
- No requirement of Type Certificate, unique identification number and remote pilot license by R&D entities operating drones in own or rented premises, located in a green zone
- No restriction on foreign ownership in Indian drone companies.
- Import of drones to be regulated by DGFT
- Requirement of import clearance from DGCA abolished
- Coverage of drones under Drone Rules, 2021 increased from 300 kg to 500 kg

# NIC – Map Service Delivery

- The use of GIS services is restricted to the organizations of Indian Government at various levels right from Central, State/UT, District & Sub-District.

- The Authorization and forwarding letter required for the application deployment in the deployment server

- Both the Authorization Letter & forwarding letter need to submit to State Informatics Officer, NIC of the respective state . For the ministry, Both letters need to send directly to The Deputy Director General, Remote Sensing & GIS Division, National Informatics Centre (NIC)



E-mail ID:

Enter your e-mail address with '@nic.in' or '@gov.in' .

Password:

Enter the password that accompanies your e-mail.

j2Q2j8



Enter the characters shown in the above image.

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# OGC Compliant Map Service Delivery Framework



## EMPOWERING E-GOVERNANCE THROUGH GIS

Multi-layer GIS consists of various categories of GIS layers namely Administrative Boundaries, Administrative Hq., transport layers such as Road and railway network, Forest, River, Settlements etc and also has base map services like Topographic map, Street Map, Terrain Map and Satellite imagery.



## WELCOME TO NATIONAL PORTAL OF MAP SERVICES

Digital India aims to establish end to end geo-spatial electronics delivery systems as part of Mission Mode Projects in e-Governance domain and envisages "National GIS Mission" as core foundation of location based Electronic Delivery of Services for Planning & Governance. NIC/DeitY has created Multi-Layer GIS Platform named "Bharat Maps" which depicts core foundation data as "NICMAPS", an integrated base map service using 1:50,000 scale reference data from Survey of India, ISRO, FSI, DGI and so



Before Geo-Spatial Policy

URL: <https://mapservice.gov.in/gismapserviceMVC>

# MAP SERVICE

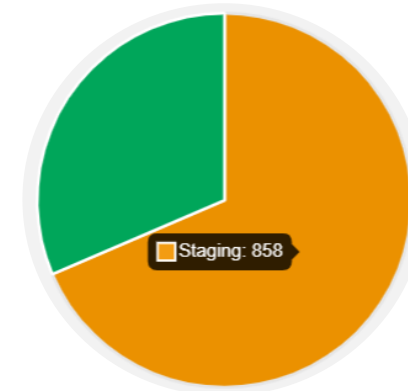
Overview

32 Map services integrated

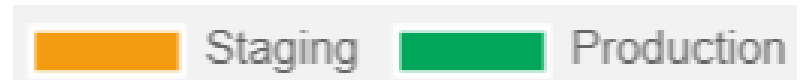
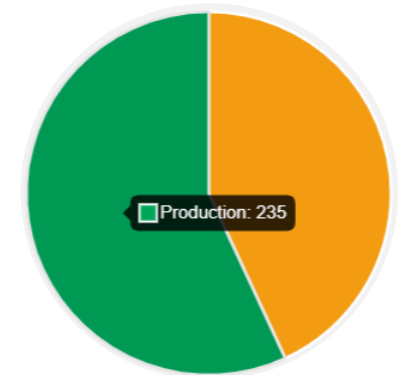
Self service portal with metadata

Template for application development

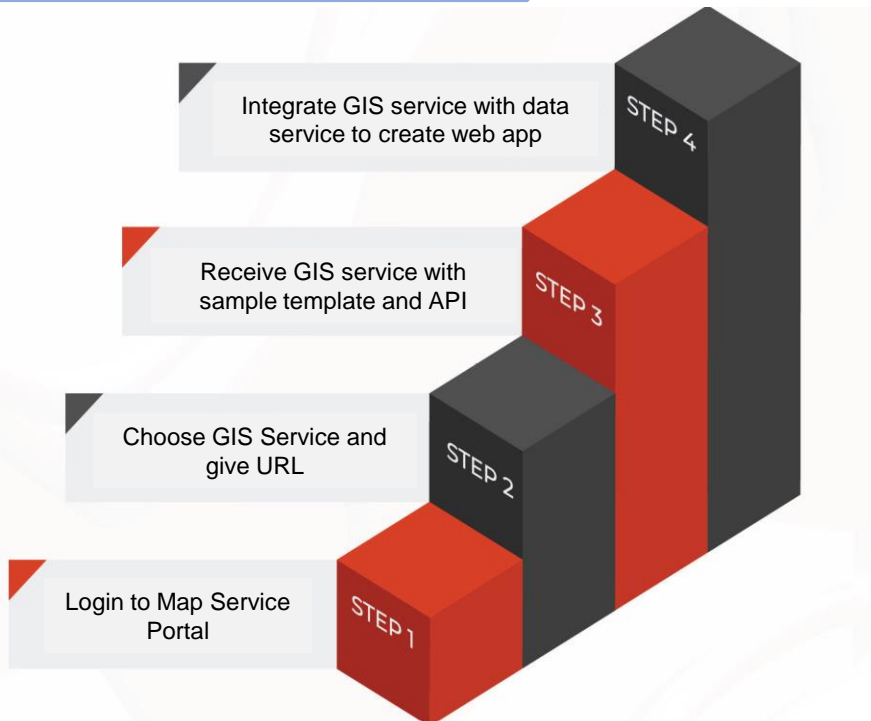
Service Statistics  
(1252)



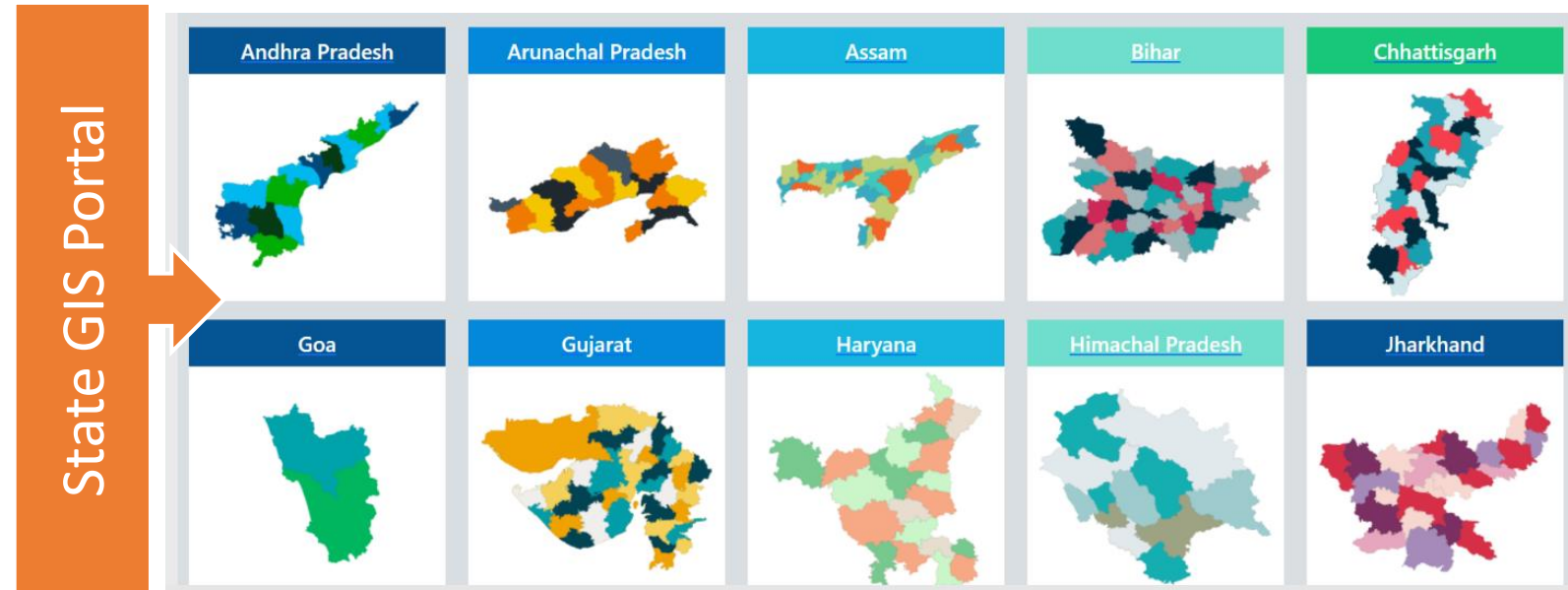
Active Service Statistics  
(413)



## Map Service Implementation Process ( 4Step Integration)



## All States & Union Territories





# Map Service Portal

English



Sabka Saath  
Sabka Vikas  
Sabka Vishwas  
Sabka Prayas



Please enter details to proceed

Next

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[Update Profile](#)

Tip of the day

Ministry of  
Electronics  
& Information



एन आई सी  
National  
Informatics  
Centre

Sabka Saath  
Sabka Vikas  
Sabka Vishwas  
Sabka Prayas



Tip of the day

Keep changing your Password often and make them complex and not guessable.





# State GIS Map Service Portal



Ministry of Electronics & Information Technology  
National Informatics Centre  
Government of India

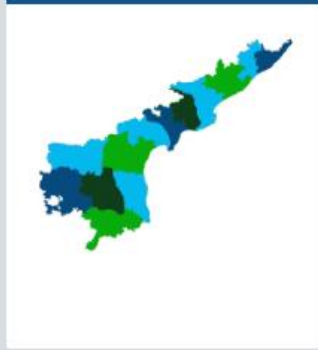
## State GIS Portal



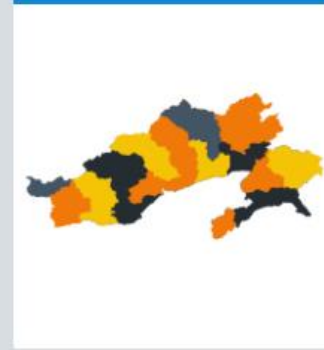
States

Union Territories

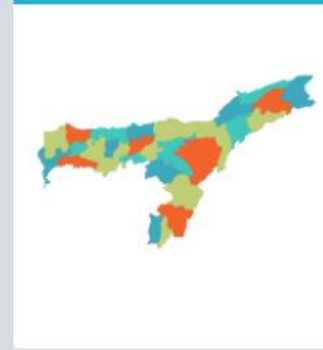
Andhra Pradesh



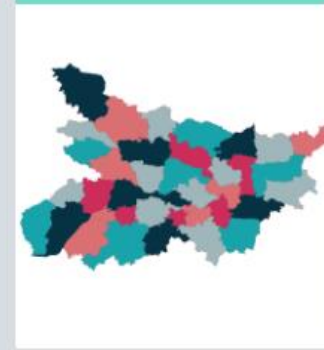
Arunachal Pradesh



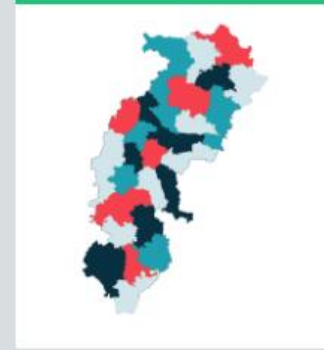
Assam



Bihar



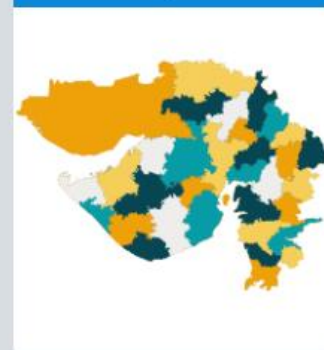
Chhattisgarh



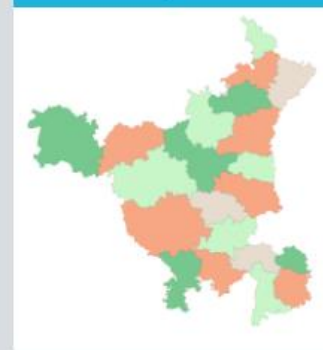
Goa



Gujarat



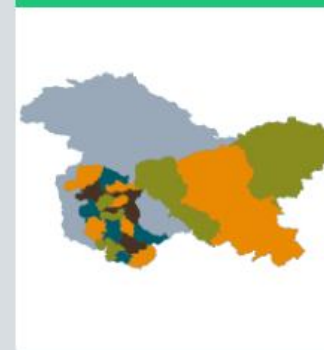
Haryana



Himachal Pradesh



Jammu & Kashmir



Jharkhand



Karnataka



Kerala



Maharashtra



Manipur



BHARATMAPS MAPSERVICES

# NIC Geo-Spatial Initiatives

## Geo-Spatial Framework

## Bhartmaps & Applications

- School GIS
- Direct Benefit Transfer
- BBNL
- Parivesh
- OneMap (Greater Noida)

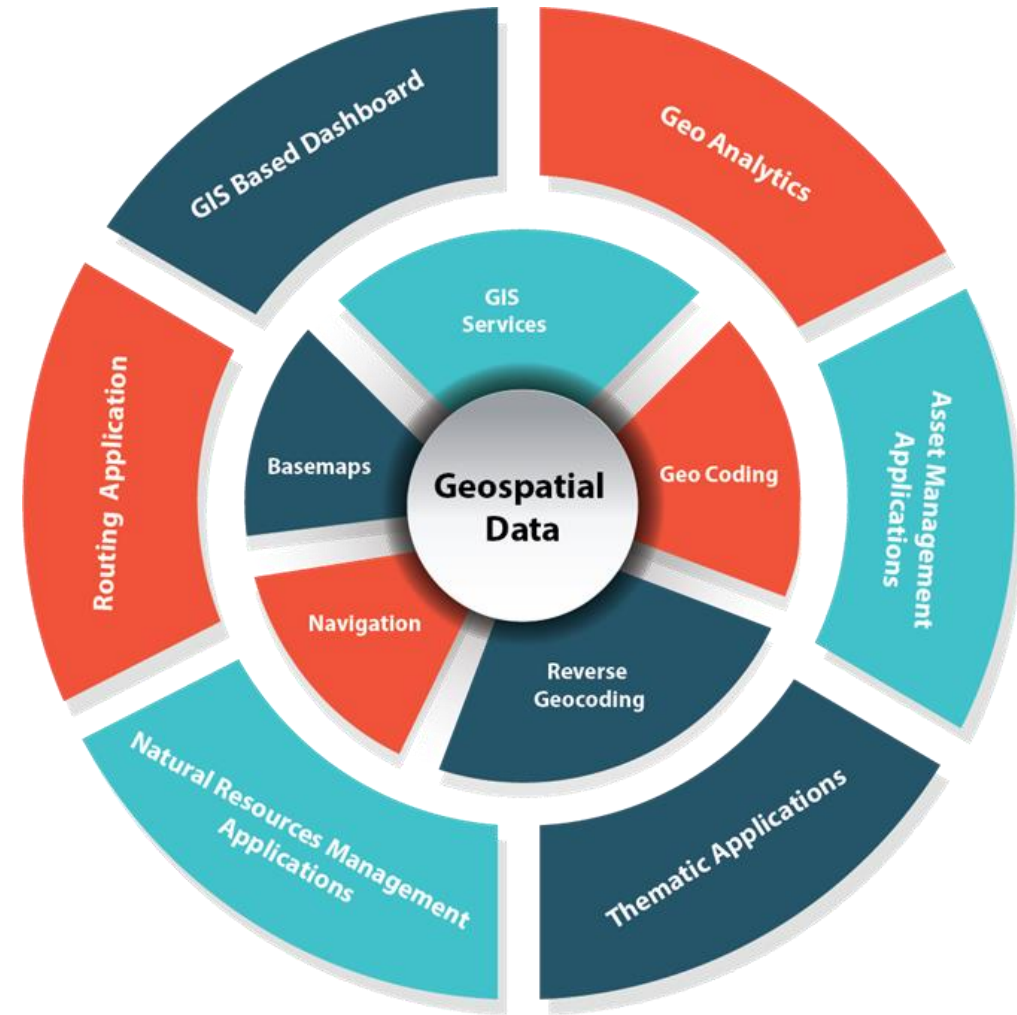
# Geo-Spatial Framework

- All India Basemap which is uniform and serve the navigation needs of citizen touching all villages/ habitations of India
- POI database of Govt. assets
- Provide Geo coding/ Reverse Geo coding services
- Provide a GIS framework for data update for any Govt. department on demand
- Navigation services for nearest Govt. locations

National Portal

State Portal

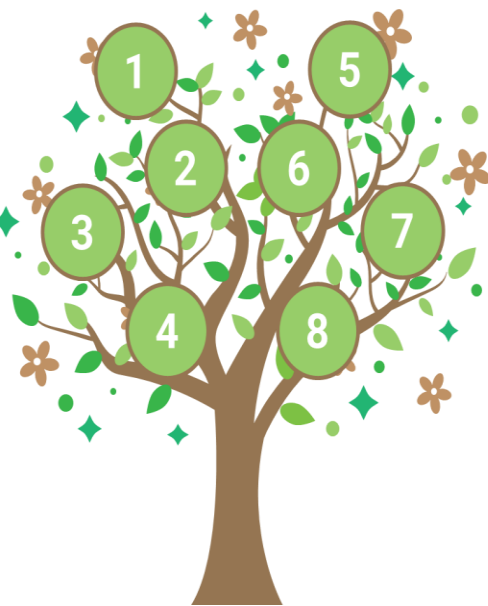
API Based Integration



Map Service Sharing

# DIGITAL TRANSFORMATION

- 1 SVAMITVA - Digitization of Property Cards
- 2 BBNL – Digitization of OFC network
- 3 Transport System - Vahan & Sarthi Services
- 4 Gram Manchitra – Rural Spatial Planning



- 5 Slum Rehabilitation - Micro Planning of Slum Clusters
- 6 Greater Noida City Portal - City Operation Services
- 7 Financial Services - Green Field Areas for Financial Service Requirement
- 8 Post Portal - Digitization of Post



BBNL GIS



CGHS



Bank GIS



School GIS



Punjab GIS



GIS for Food Processing



NIC map (1:50K)



Street map (1:10K)



Satellite map



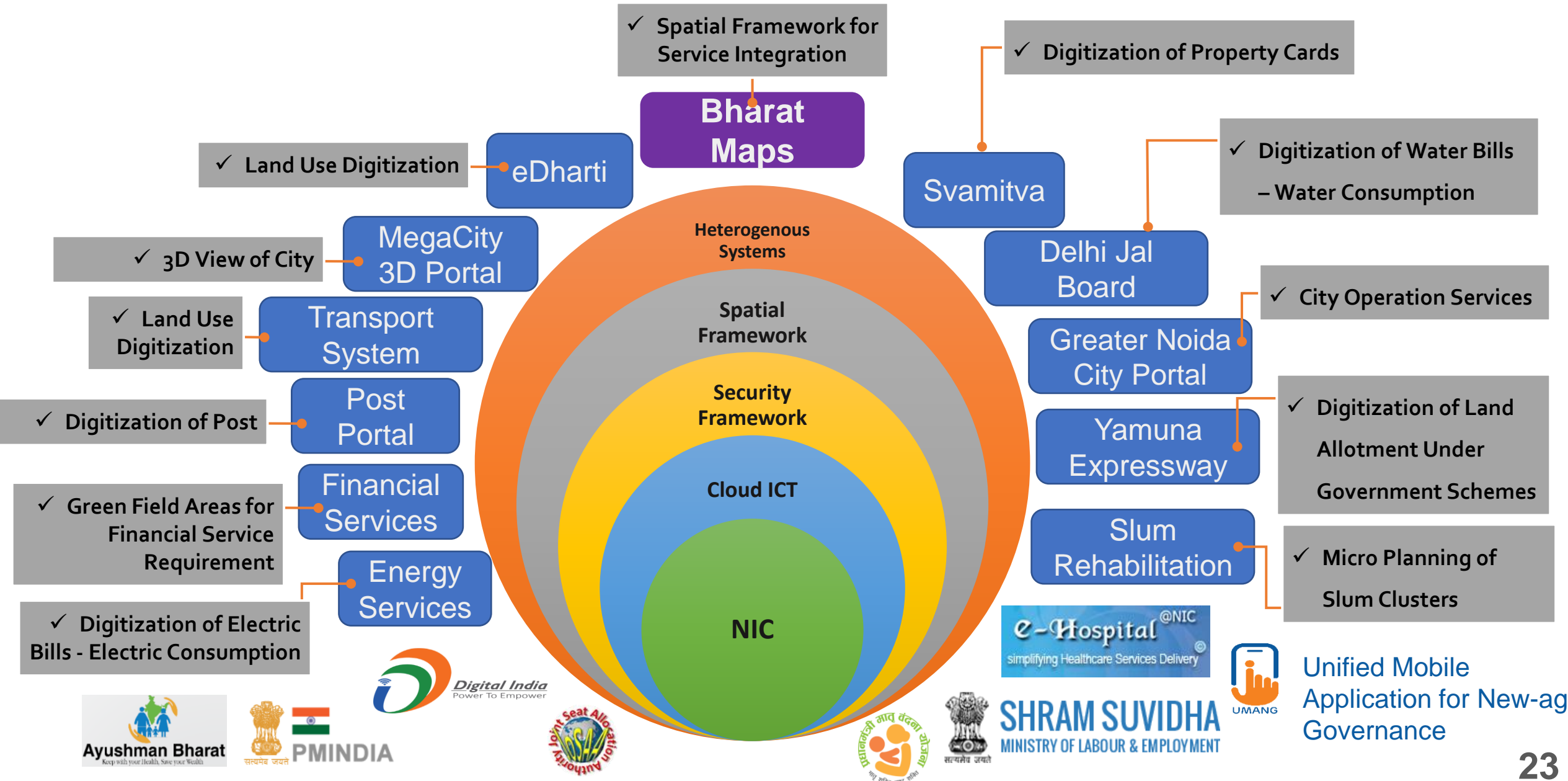
Terrain map



Basemap Integration

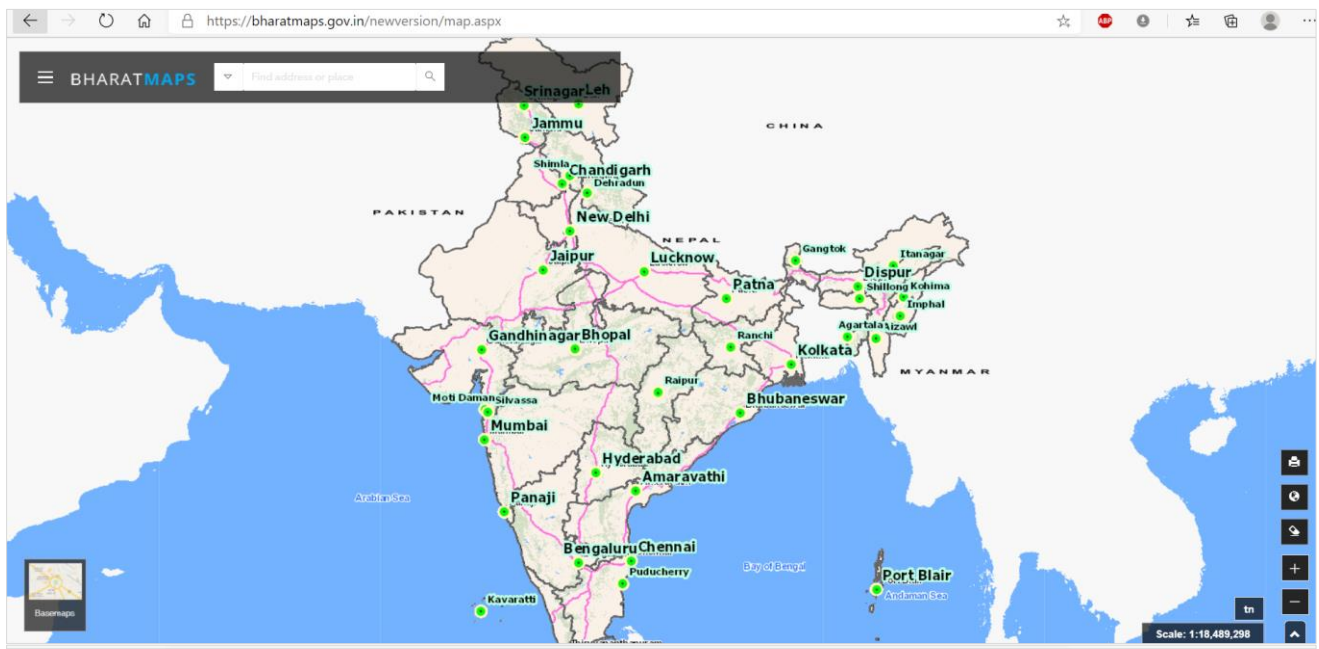


# Geo-Spatial Enabled Data Sharing Framework



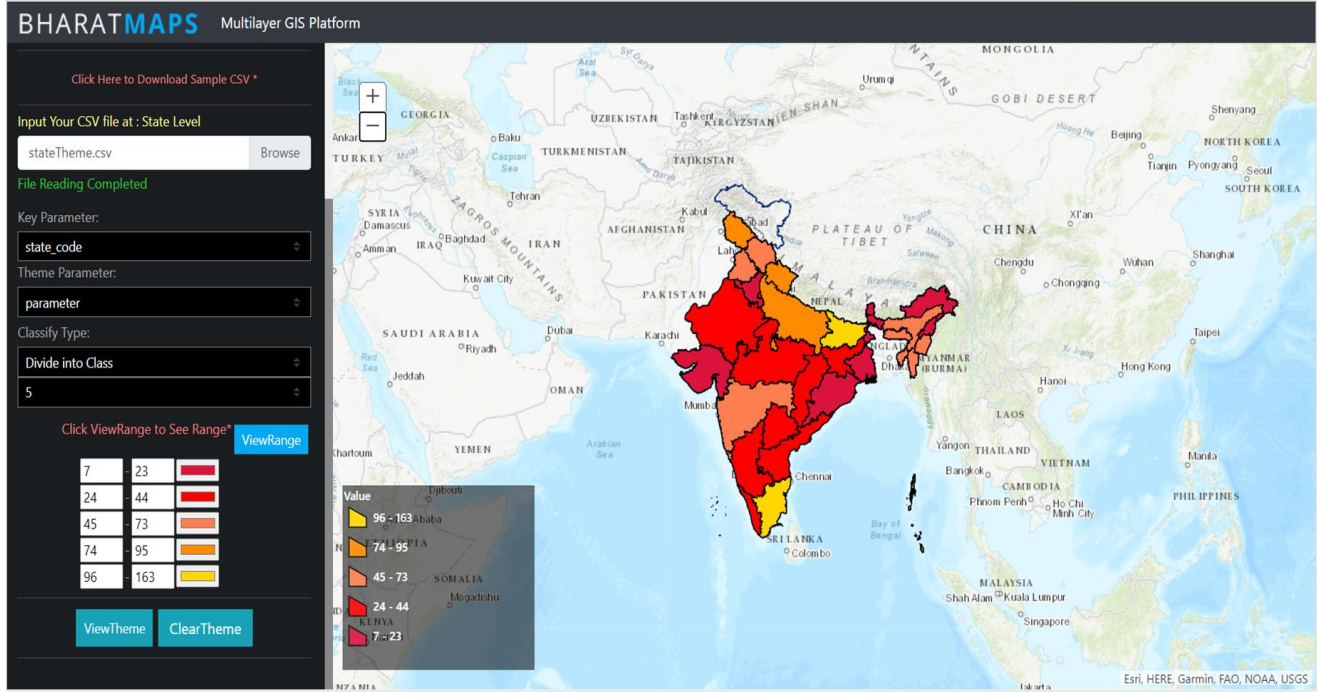
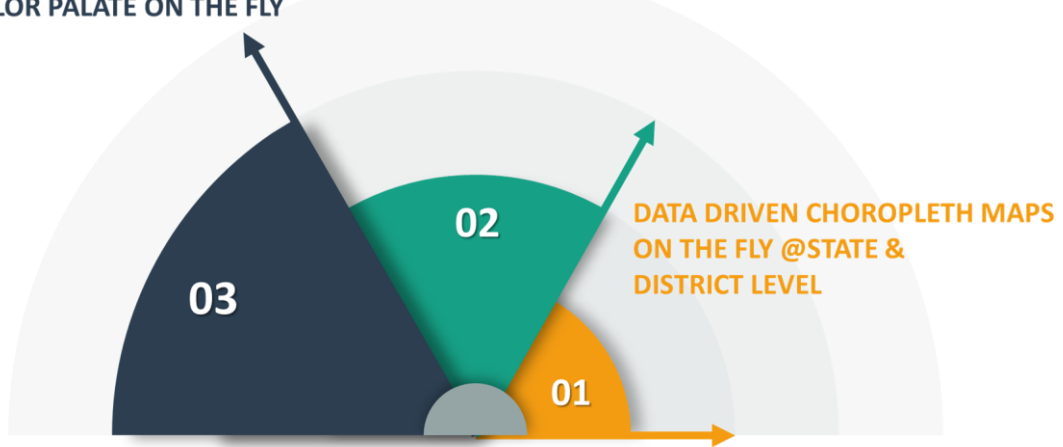
# Bharat Maps

Bharat Maps is a Multi-layered GIS platform/web service comprising of seamless country wide base maps, satellite images and hybrid maps aligned as per the global geo-spatial standards, It is an essential component of Digital India program to ensure easy, effective and economical governance.



USER SPECIFIC COLOR PALATE ON THE FLY

POINT CLOUD VISUALIZATION FROM EXCEL SHEETS

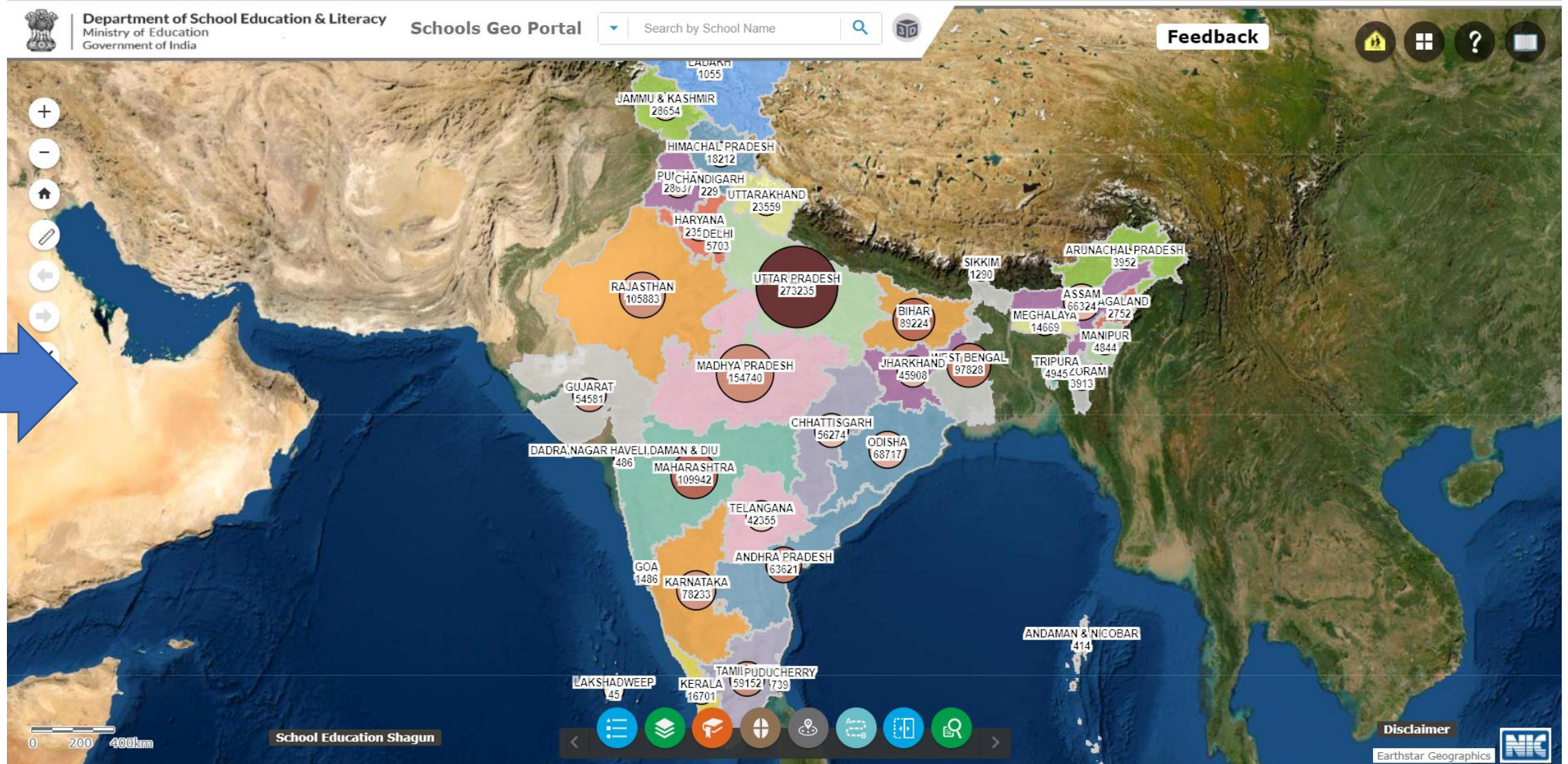


Mobile Friendly Application



# SCHOOL GIS - GAP ANALYSIS

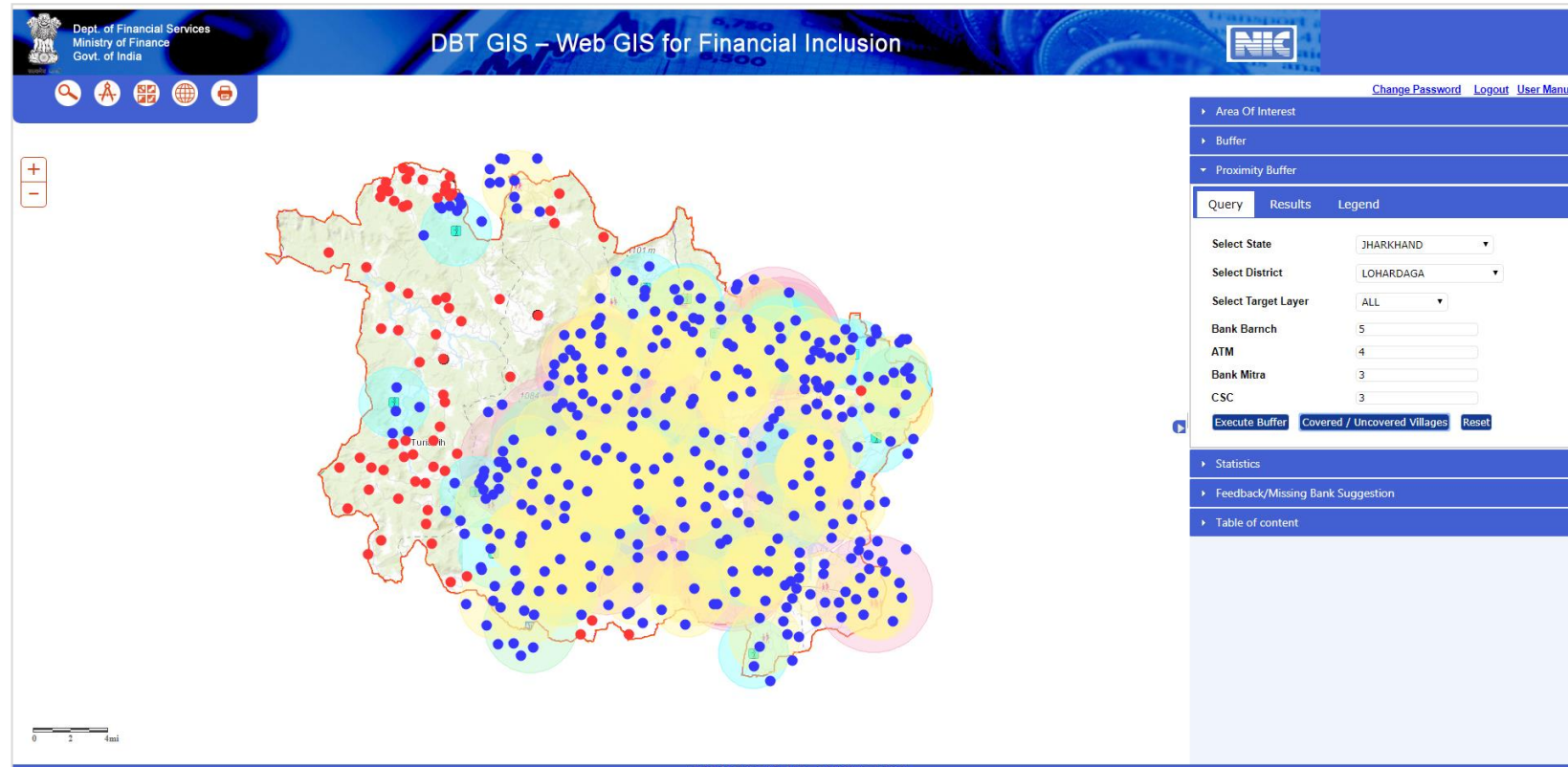
- Developed tools for spatial redistribution of schools
- GAP Analysis – Identifying of schools within the villages





# Financial Services Framework

- ❑ Map all financial institution (Banks/ATMs/ Bank Mitra), Postal offices, CSC, FP Shop
- ❑ Identify gap areas based on the criteria defined
- ❑ Provide a robust framework for data update and monitoring mechanism
- ❑ Provide access to the data all stakeholders including citizen



Branches  
1,53,066



ATMs  
2,05,395



Bank Mitra (BC)  
1,31,328



Post offices  
1,51,231

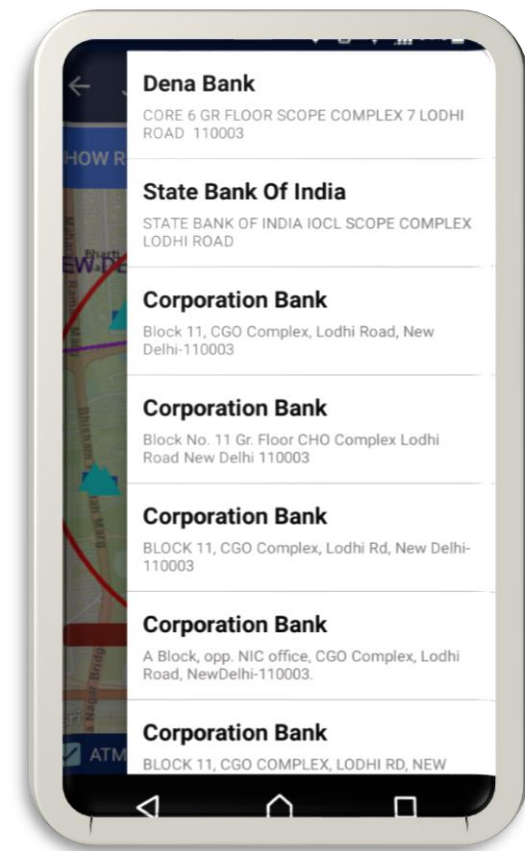
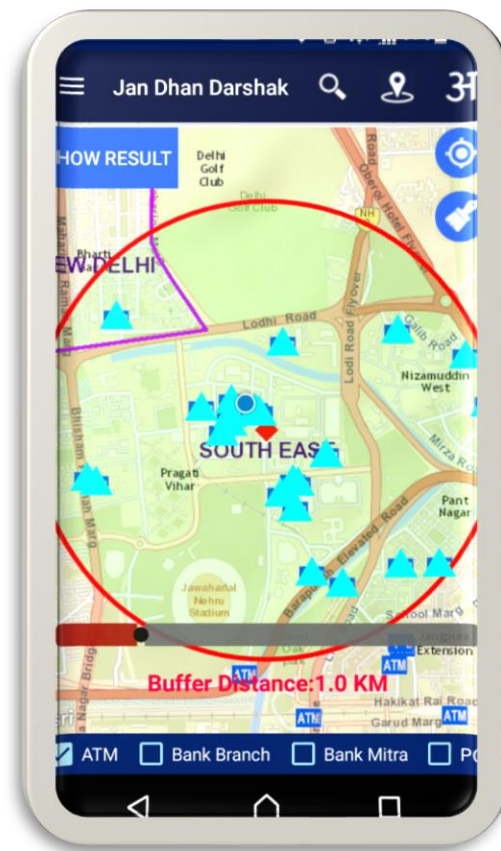
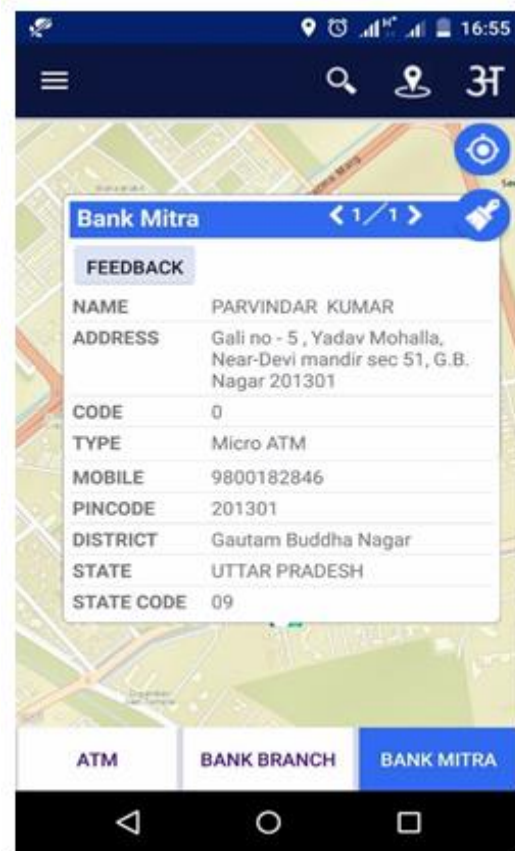


CSC  
3,02,000



Fair Price shop  
3,22,262

# Financial Services Framework



# BBNL GIS

Develop and standardize methodology for capture of various assets in GIS

Design and develop application for visualization, management and monitoring.

Assess and estimate the hardware and software required for capturing proposed OFC network.

Mapping the features Out Side Plant.

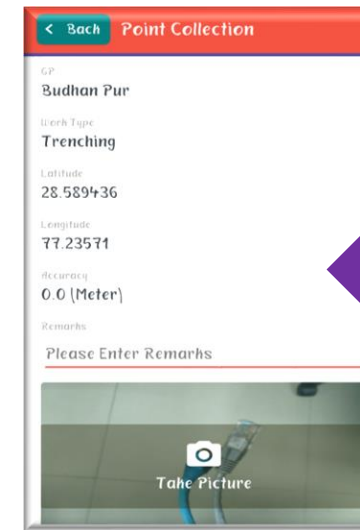
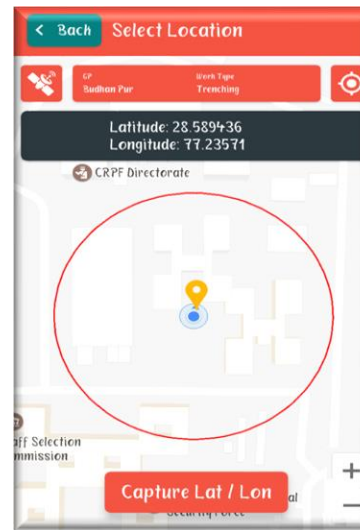
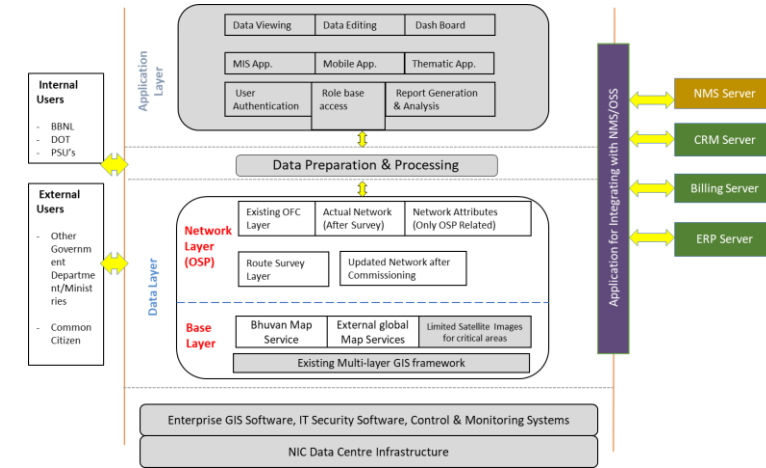
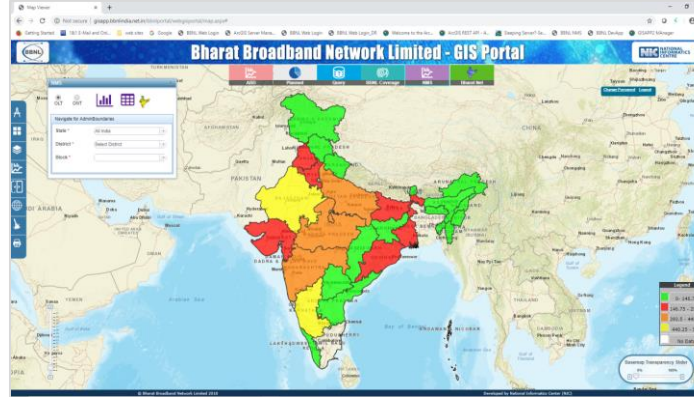
Repository of As Built Drawing and survey Data.

GIS Platform for Integration with Cable fault localization system & Planning Tool.

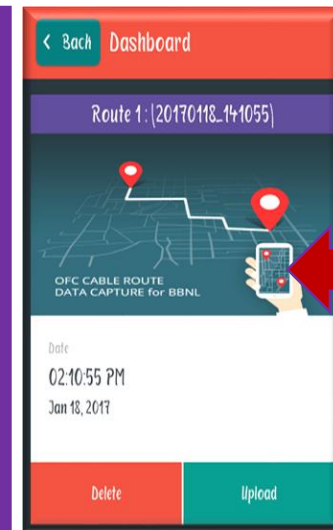
Generation of reports and analysis based on GIS platform.

Provide web based platform for data access and data editing.

Training and Capacity Building for BBNL stakeholders in GIS mapping.



Capture Data

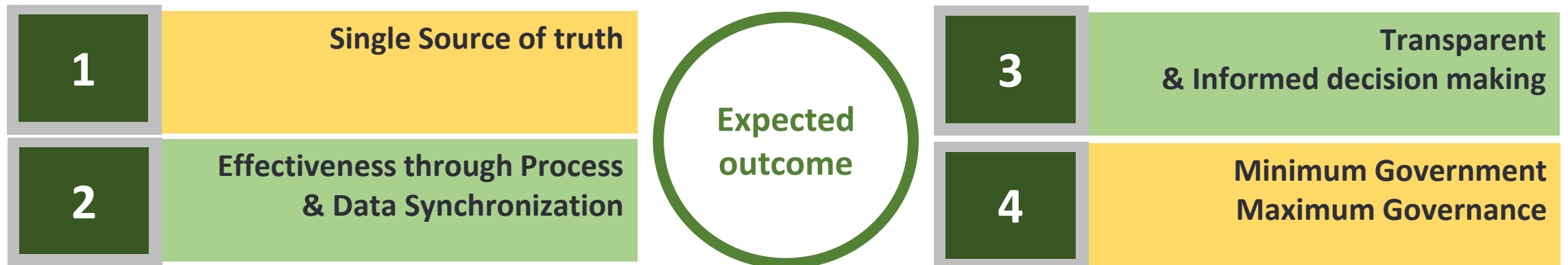


Monitor

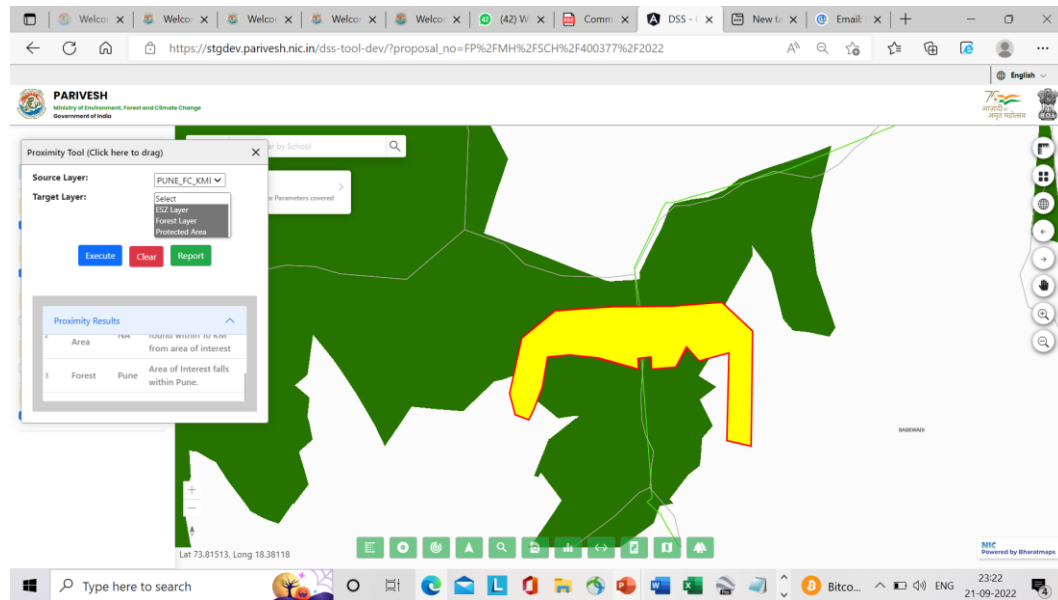


# PARIVESH Application

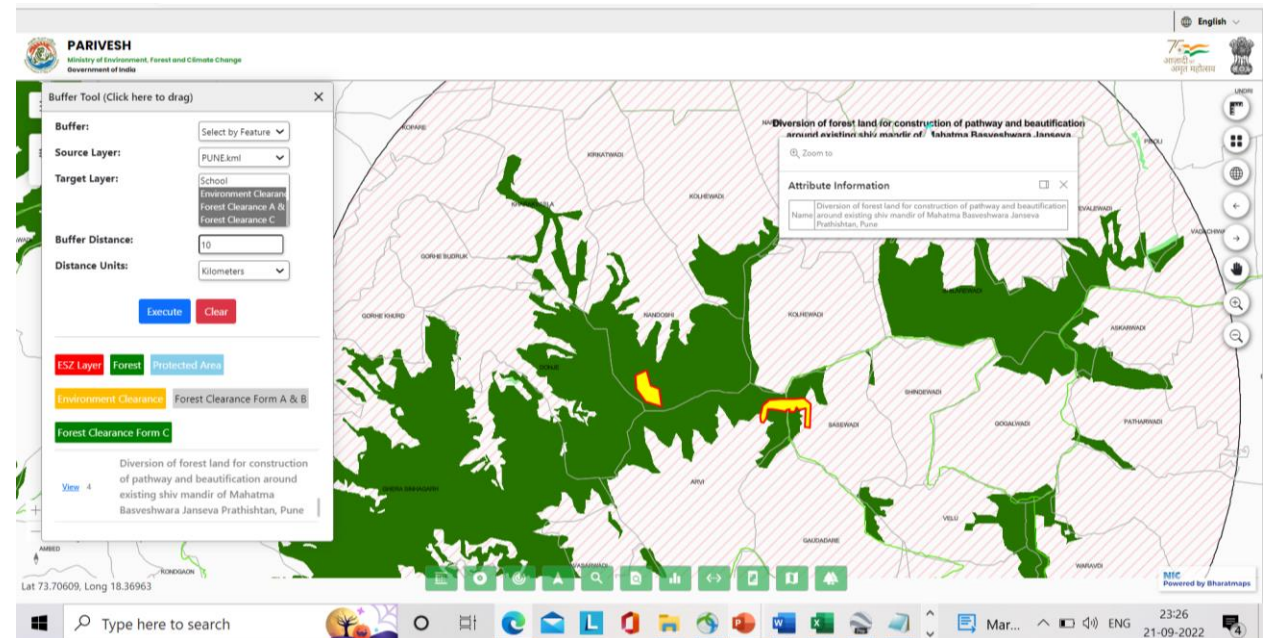
- A web based, role based workflow application which has been developed for online submission and monitoring of the proposals submitted by the proponents for seeking Environment, Forest, Wildlife and CRZ Clearances from Central, State and district level authorities. It automates the entire tracking of proposals which includes online submission of a new proposal, editing/updating the details of proposals and displays status of the proposals at each stage of the workflow. **The core strength of this application is rule-based GIS empowered decision making.**



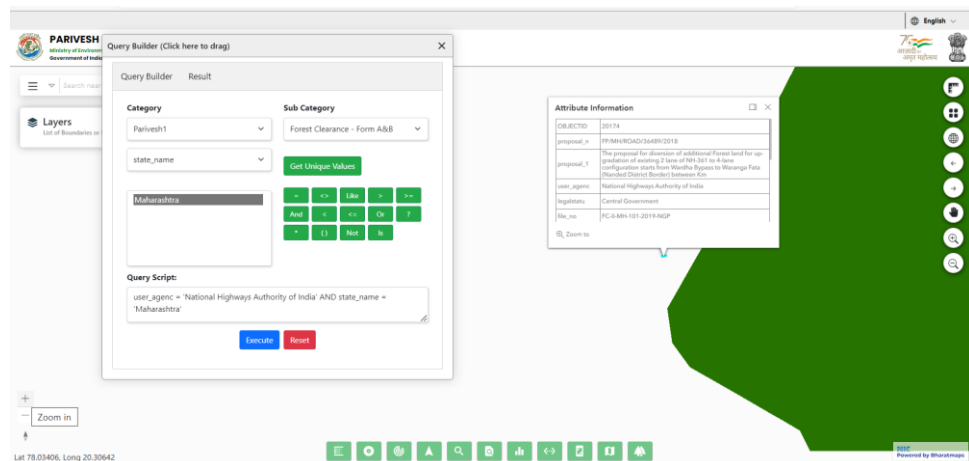
# GIS Based DSS :Analysis Tools



Proximity: Nearest Forest, Eco-sensitive Zone, Protected Area etc



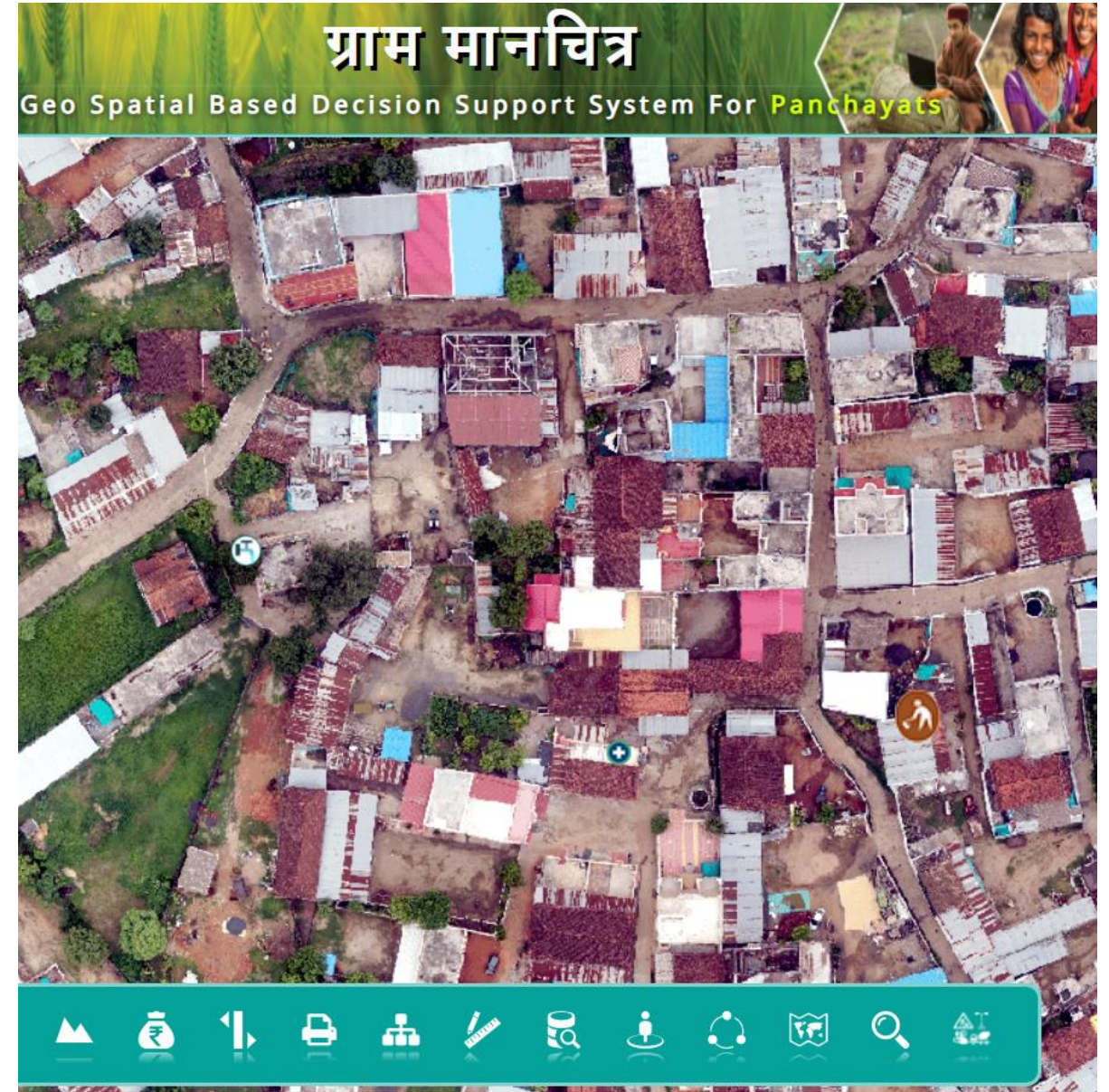
Buffer Tool: Analysis within a fixed distance



Query Builder: Doing query with legacy data



# SVAMITVA Data Integration





# OneMap (Greater Noida)

Settings up of a Continuous Operated Reference Station for real time control points for GNIDA area for picking up all survey data like manholes, electric poles etc.

Integration of the existing Legacy MIS Property Information by real time web services with Planning Layouts of all properties of GNIDA. Incorporated all types of Plot Reports along with rendering on map dynamically.

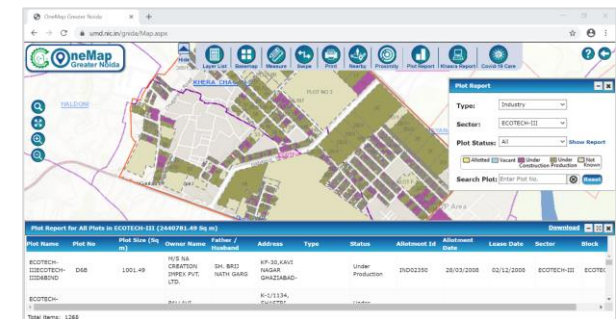
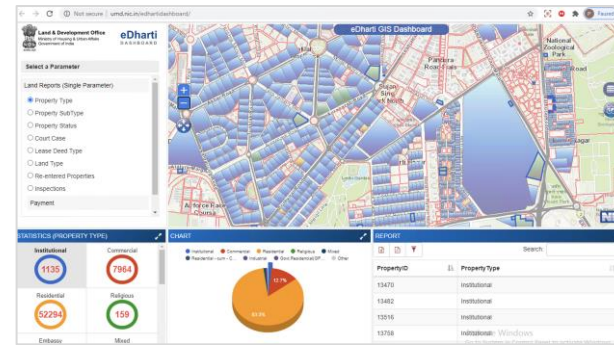
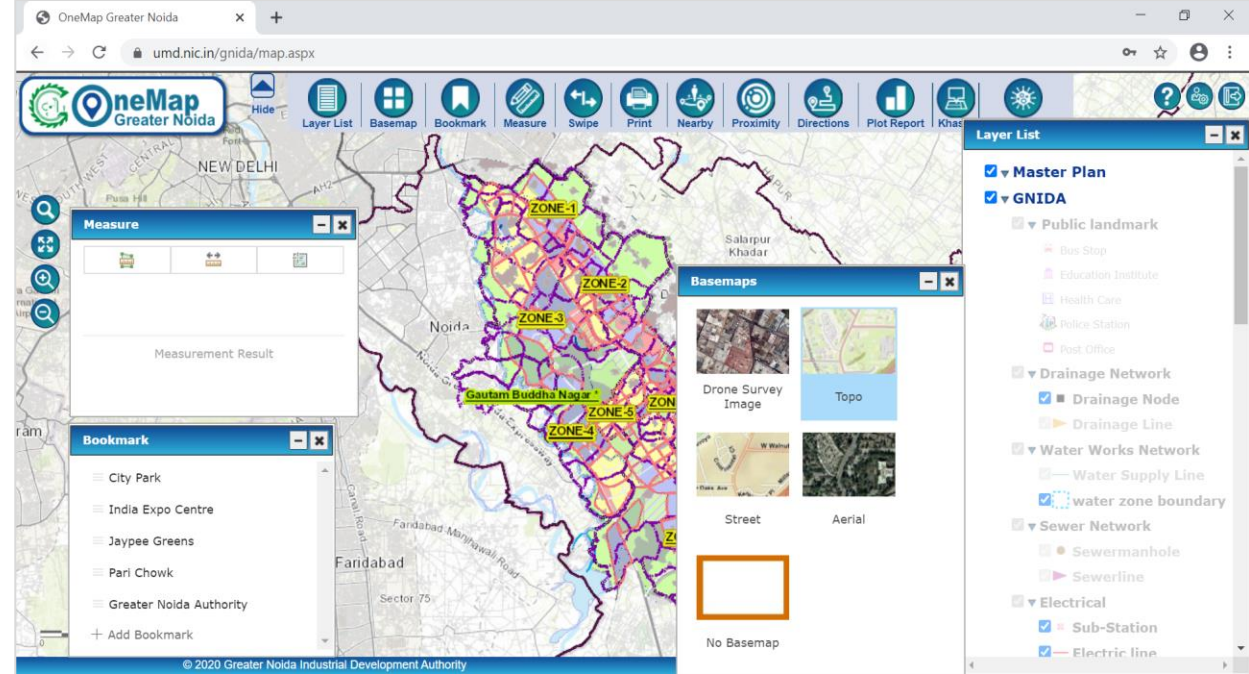
Georeferencing of GNIDA Master Plan (Sector, Plots, Khasra, etc.) on the Portal.

Integration of Utility and Project Information underway.

Geo Tagging of GNIDA assets.

Dash Board applications have been prepared

Vehicle Tracking for Mechanical Sweeping Trucks





**S**PATIAL **P**LANNING FOR **I**NTEGRATED **D**EVELOPMENT OF **G**RAM  
**P**ANCHAYAT **U**TILISING **S**PATIAL **C**ONTEXT FOR  
**P**OLICY **P**LANNING & **I**MPLEMENTATION

**A STEP TOWARDS - SMART VILLAGE**

# Gram Manchitra Overview

The Gram Panchayats prepare annual plan for Gram Panchayat development utilizing the available resources with them for implementing the plan

The main source of development of these plans are the local knowhow of the area by the development officer

In this context it becomes primary requirement to have a plan based on objectivity of the requirements of the Gram Panchayats

**Ministry of Panchayati Raj (MoPR)** has planned the use of spatial data for a sustainable developmental plan. This would increase the quality of GP plans that are being prepared along with openness and accountability in the functioning of the GP's. Spatial datasets along with satellite imagery would provide visual representation of the plan with available conditions

# Gram Manchitra - Key Features



**Unified Geo Spatial Platform for Gram Panchayats covering 29 sectors; providing a decision support system for Gram Panchayat Development Plan (GPDP).**



**Linking relevant data along with geographic data to ascertain objectivity in the planning process.**



**Spatial analysis tools provisioned of identification suitable site for creation of new amenities/ development work like school, Anganwadi centre etc.**



**“Real time” tracking of progress of work undertaken under different schemes. Work status displayed in different colors along with geotagged photos of assets on the map.**



# Gram Manchitra - Key Features



**Introducing better accountability and transparency to the process for preparing GPDP through Geographic Information System (GIS) platform.**



**Gram Panchayat profile with details of Sarpanch, Functionaries, Panchayat office address, demographic data etc. are available.**



**Socio-Economic Caste Census (SECC) report, Mission Antyodaya (MA) data and MA gap analysis for the Gram panchayat are available.**



# Spatial Datasets

State Boundaries

District Boundaries

Block Boundaries

GP Boundaries

State HQ

District HQ

Sub-district HQ

Census Villages

Bank

- Bank Branch
- Bank Mitra
- ATM

CSC

Health Centre

- District Hospital
- Sub district Hospital

CHC

PHC

Sub Center

PDS

Post Office

- Head Office
- Sub Office
- Branch Office

School

PES Layers

- National Asset Directory NAD

Work Status

2017-2018

- Work yet to start
- Work in Progress
- Work completed
- Work Suspended

Skill Development Center

Drinking Water Resources

MGNREGA Works

# Spatial Datasets

## Polygon Layer (Svमित्वा Dataset)

- Parcel Boundary of Owner
- Transport - Road Network
- Water Bodies
- Boundary

## Line Layer (Svमित्वा Dataset)

- Road Network
- Railway Line

## Point Layer (Svमित्वा Dataset)

- Landmark
- Wells
- Assets

## Rural Electrical Assets

- Sub-Station
- Transformers
- Electrical Poles

## Waste Management Assets

- Landfill Locations
- TSDF Locations

## Natural Resources

- Landuse/Landcover
- Lithological
- Geomorphological
- Forest Cover

## Imagery

- Drone Images (SOI)
- Realtime Satellite Images (NRSC - BHUVAN)

## Elevation Models

- Digital Elevation Model
- Digital Surface Model

## Planning Indices

- Rainfall Information
- Bhuvan Services



# SPATIAL PLANNING TOOLS

RESOURCE ENVELOPE

PROXIMITY ANALYSIS  
TOOL

QUERY BUILDER TOOL

MULTIPLE BUFFER TOOL

PRINT MAP OPTION

ELEVATION PROFILE

SWIPE TOOL

METADATA

MEASUREMENT TOOL

VARIOUS BASEMAPS

Application Tools

# GRAM MANCHITRA

Ministry of Panchayati Raj  
Government of India

ग्राम मानचित्र  
Geo Spatial Based Decision Support System For Panchayats

VidyoConnect is using the webcam

Layers

- School
- CSC
- Health Center
- District Hospital
- Sub District Hospital
- CHC
- PHC
- Sub Center
- PDS
- Post Office
- Head Office
- Sub Office
- Branch Office
- MGNREGA

Select Area

Gram Panchayat Profile

Scale: 1:18,488,298

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Ministry of Panchayati Raj  
Government of India

ग्राम मानचित्र  
Geo Spatial Based Decision Support System For Panchayats

Layers

Select Area

State  
Jharkhand

District  
Select District

Block

Gram Panchayat

Back Refresh

Gram Panchayat Profile

Scale: 1:2,311,162

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Ministry of Panchayati Raj  
Government of India

ग्राम मानचित्र  
Geo Spatial Based Decision Support System For Panchayats

Layers

Select Area

State  
Jharkhand

District  
Dhanbad

Block  
Ballapur

Gram Panchayat  
Palani

Back Refresh

Gram Panchayat Profile

Gram Panchayat  
Palani(111799)

Scale: 1:38,112

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Ministry of Panchayati Raj  
Government of India

ग्राम मानचित्र  
Geo Spatial Based Decision Support System For Panchayats

Layers

- Census Villages
- Bank
- Bank Branch
- Bank Mitra
- ATM
- School
- CSC
- Health Center
- District Hospital
- Sub District Hospital
- CHC
- PHC
- Sub Center
- PDS

Select Area

Gram Panchayat Profile

MGNREGA Images

MGNREGA

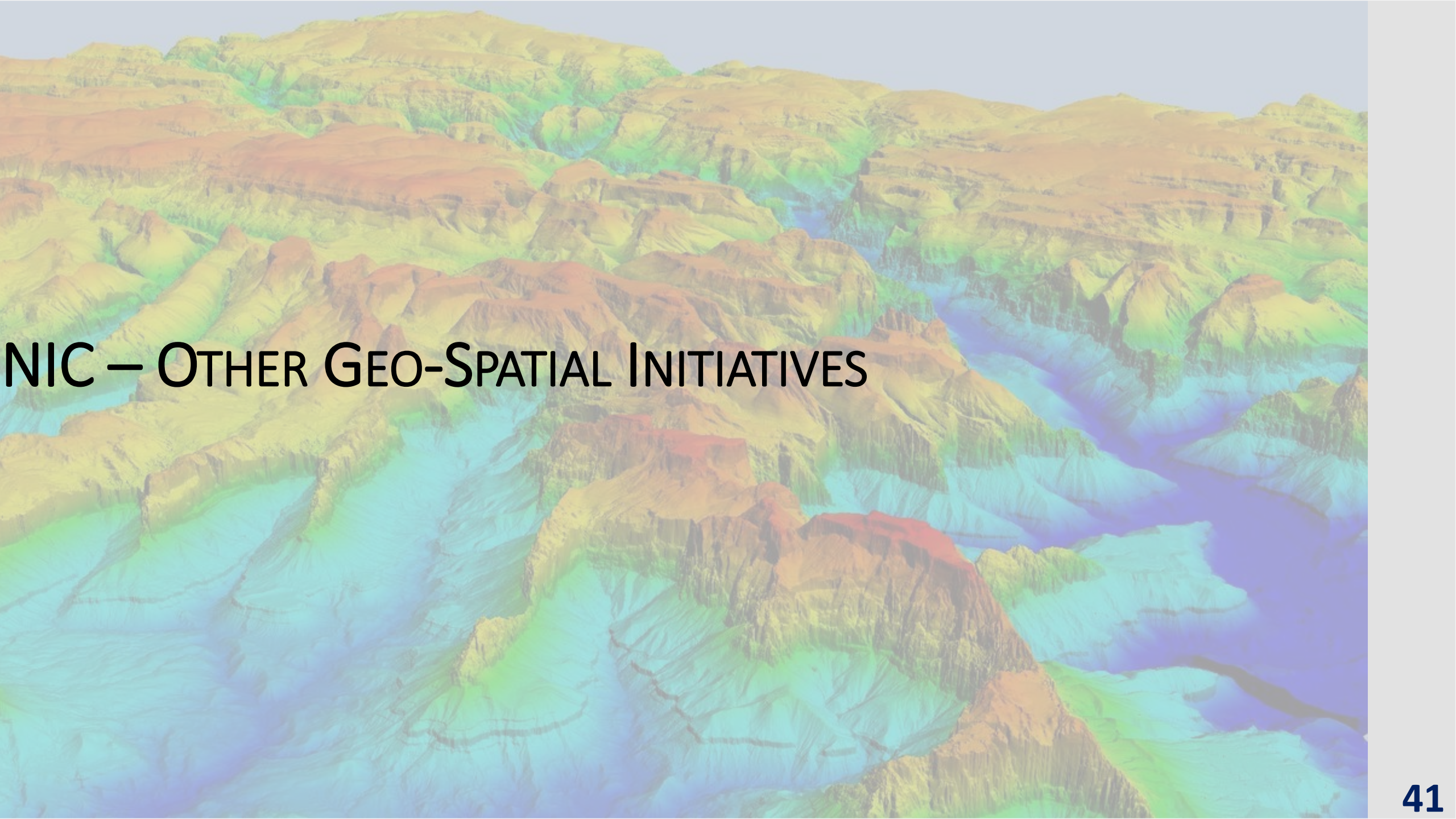
work name	Nimar Mohli ke jamun me kup nirman
Work Category	Works on Individuals Land (Category IV)
Status	Well
Sanctioned Amount	
Financial Year	2013-2014
Images	Show Images

Zoom to

Scale: 1:38,112

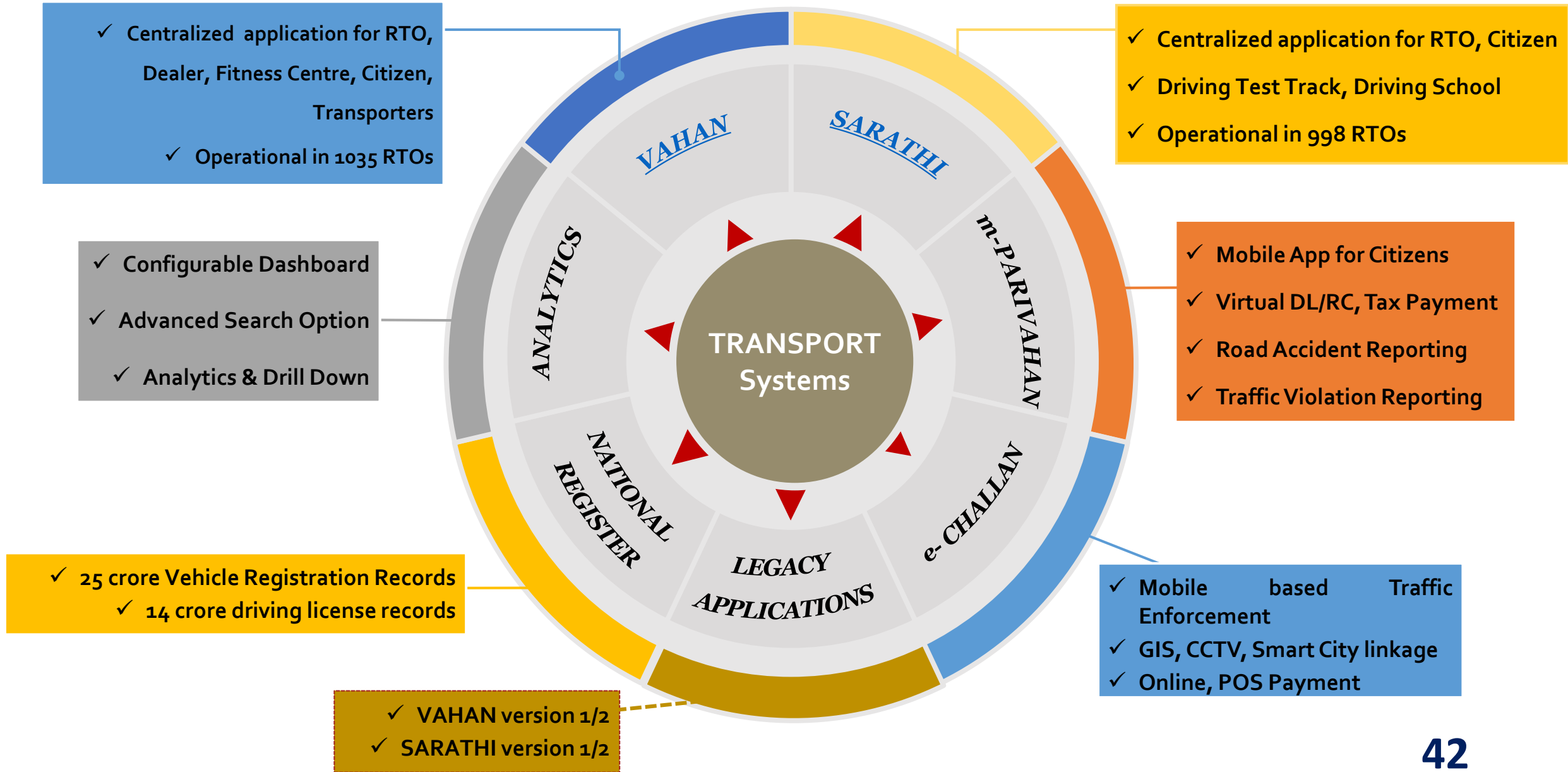
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# NIC – OTHER GEO-SPATIAL INITIATIVES

# Transport Framework

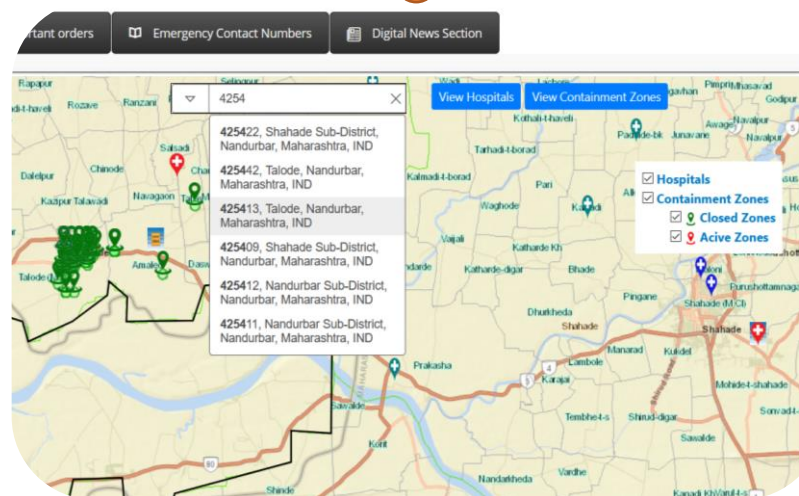
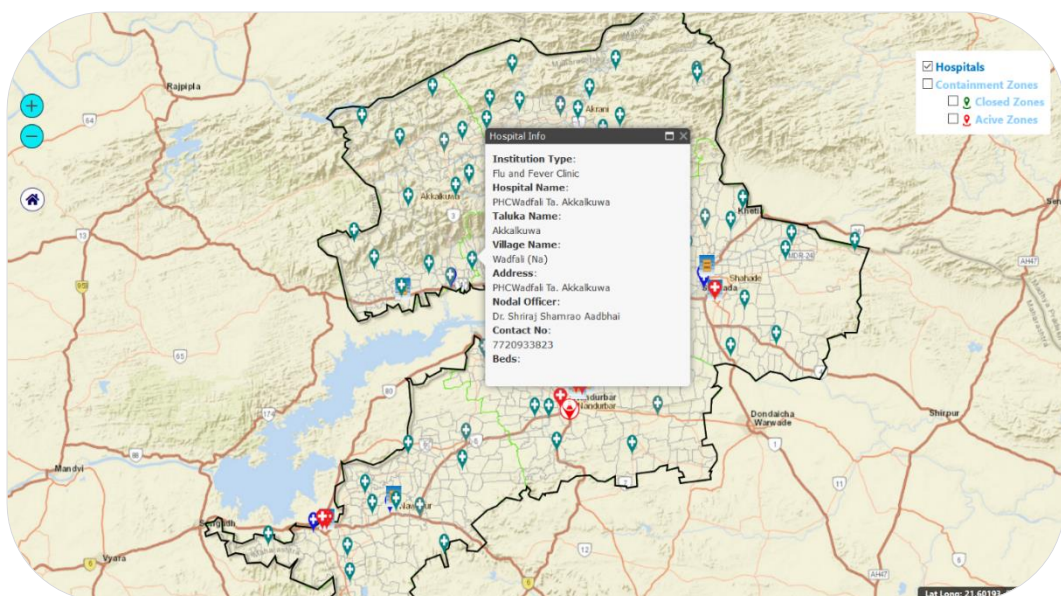




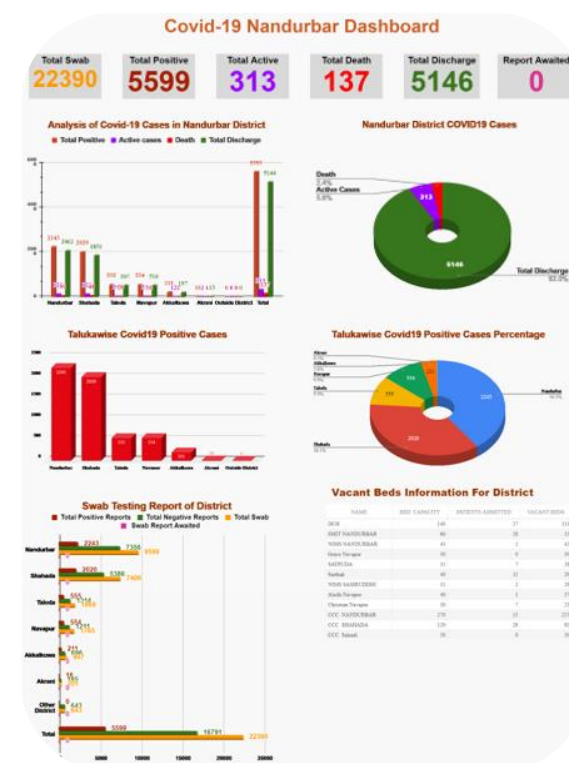
# Outbreak Framework For Service Delivery

Application Shared with

- ✓ Prime Ministry Office (PMO)
- ✓ Ministry of Health & Family Welfare
- ✓ Indian Council of Medical Research (ICMR)



Application portal provides detailed insight of the COVID-19 status of Nandurbar District. It provides users with details on Swab tests performed, total number of positive cases, total number of active cases, total deaths occurred, number of people discharged and number of awaited reports for whom test was done.



# Landuse Framework

Land and Development Office  
Ministry of Housing and Urban Affairs  
Government of India

eDharti Geo Portal

Welcome! Indo

Find address or place

Change Password Logout

Properties

View Property Card!  
Property ID : 13901  
GIS Area (Sq m): 4932.520

View MIS Info!  
View Geo-Tagged Image  
Feedback  
Zoom to

Property Details

Property ID - 13901

Property Details			
Land Type	NAZUL	Property Status	FREE HOLD
Property Type	COMMERCIAL	Property Sub-Type	SHOPPING CENTER
Type of Lease Deed	NOT APPLICABLE	Plot Area	1.286 ACRE
Date of Allotment	05-May-1933	Date of Deed Execution	11-Jul-2019
Property Address Details			
Plot No	11	Block No	G
Colony		CONNAUGHT PLACE	
***			
Present Lessee/Allottee		Shareholding	
1	MOHD HAROON JAPANWALA	***	
2	ABIDA SULEMAN JAPANWALA THROUGH GPA AFSHAN JAPANWALA IQBAL	***	
3	AFSHAN JAPANWALA IQBAL	***	
4	ANIS MOHAMMAD OMER THROUGH GPA MOHAMMAD RIAZ UMAR	***	
5	MOHAMMAD RIAZ UMAR	***	

Activate Windows  
Go to System in Control Panel to activate Windows.



# Slum Rehabilitation Framework

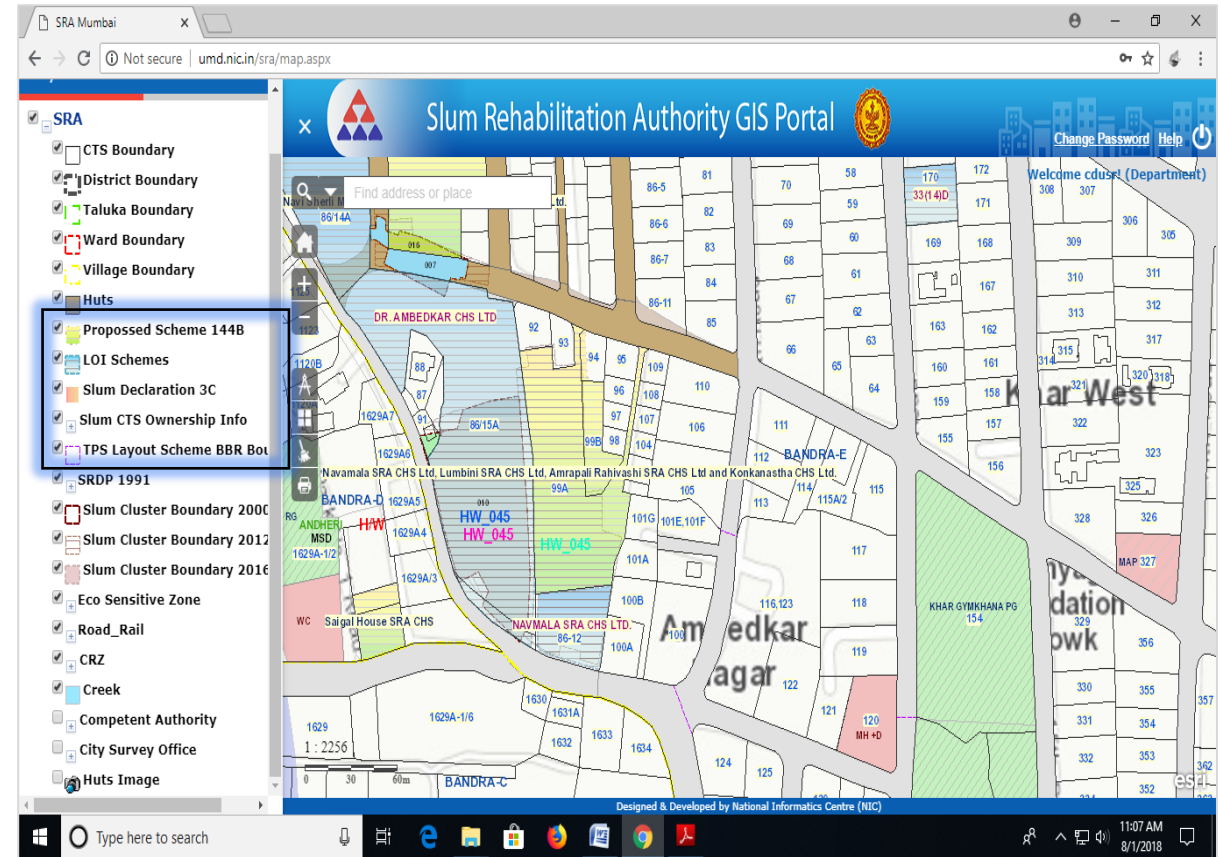
Well Integrated and centralized

Proactive approach towards in sector-wise micro-planning of slum cluster

Speedy implementation of SRA schemes

Publishing data in public domain to help relevant stakeholders

Removal of bogus and duplicate beneficiaries



# Spatial Digital Transformation – Vehicle Tracking

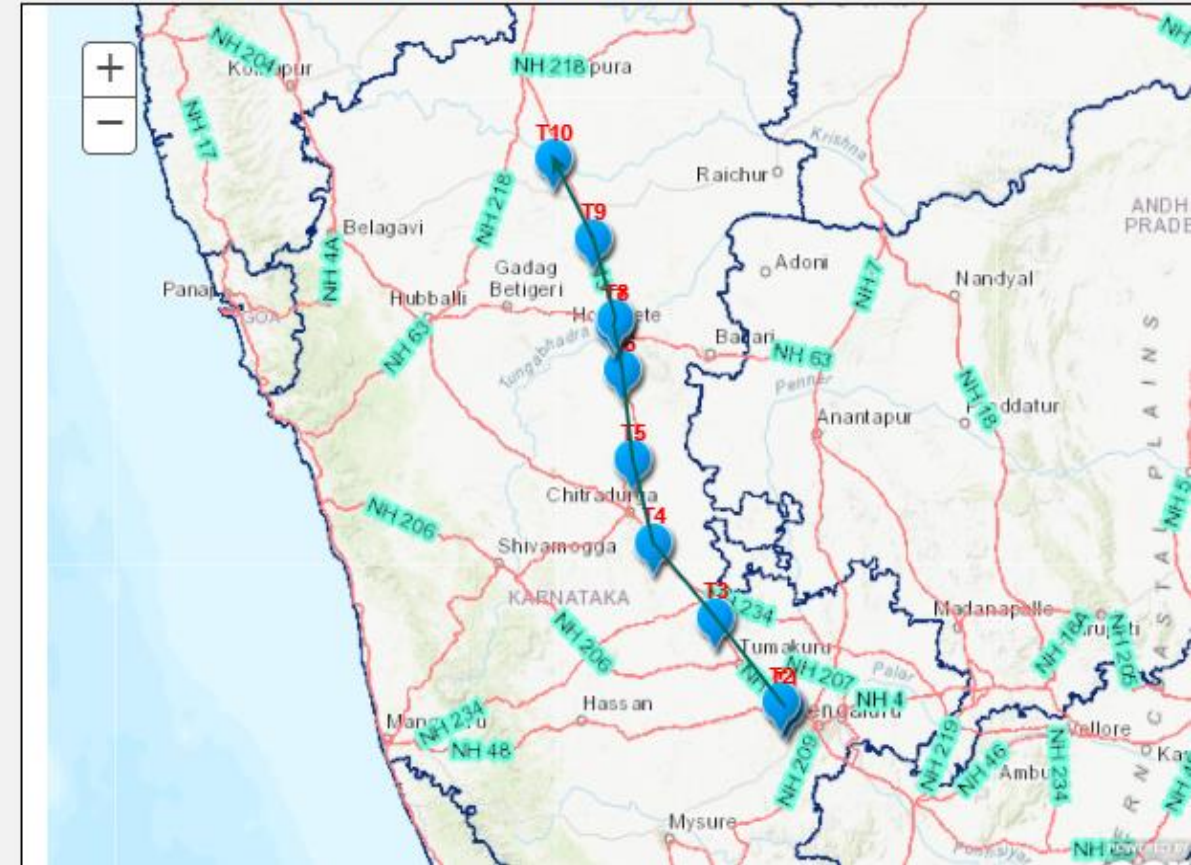
Latest tolls passed by Vehicle (Latest time reported from the Fastag system : 09-06-2021 11:39:18 )

Vehicle No.

## Latest Toll List

Sl no	Toll Plaza	Direction	Date/Time
T1	Navayuga Bangalooru Tollway	South	09-06-2021 11:25:50
T2	Kulumapalya toll plaza	South	04-06-2021 22:53:32
T3	Karjeevanhally Toll Plaza	North	04-06-2021 19:40:14
T4	Guilalu Toll Plaza	North	04-06-2021 18:07:36
T5	Kananakatte	South	04-06-2021 14:34:45
T6	Thimmalapura	South	04-06-2021 11:16:18
T7	Hitnal	North	04-06-2021 10:28:30
T8	Shahapur	North	04-06-2021 10:22:00
T9	Vanagiri	North	04-06-2021 09:21:24
T10	Nagarhalla Toll Plaza	North	04-06-2021 07:41:06

## Details of Tolls Passed by Vehicle in Bharath Map





# Spatial Digital Transformation – Vehicle Tracking

Tax evasion case detected using this system, one e-Way Bill (EWB) is generated from Tamilnadu to Pune but associated vehicle was intercepted by officer in Karnataka near Chitradurga. From this report it has been found that vehicle was travelling from Karnataka - > Pune, and was never in Tamandu .Tamilnadu GSTN was fake actually and goods were supplied by Karnataka person only.

Details of Eway-bill

E-Way Bill Details			Seller Place & Pincode	Buyer Place & Pincode	HSN Code & Description	Assessable Value and Tax Value (Rs)
EWB No.	EWB Date	Valid Till				
591264944060	17-05-2021 12:18:00	24-05-2021 23:59:00	PANRUTI 607105	NASHIK 422001	1202 - GROUND- NUTS, NOT ROASTED	624000.00 & 31200.00

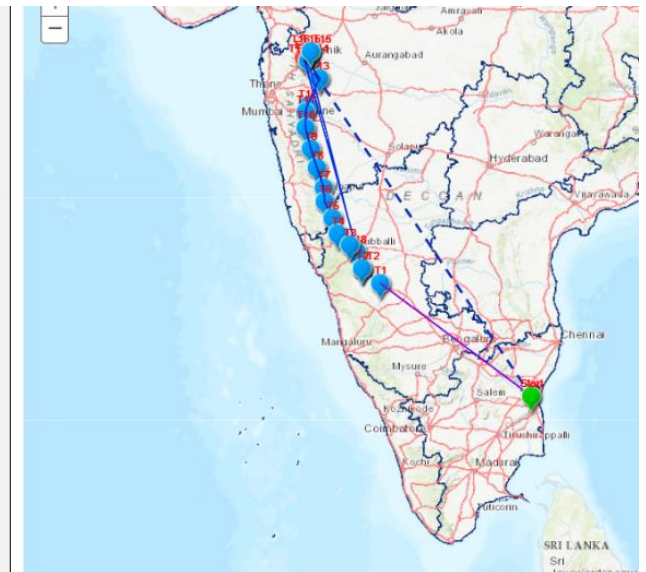
  

Vehicles entered for the E-way bill

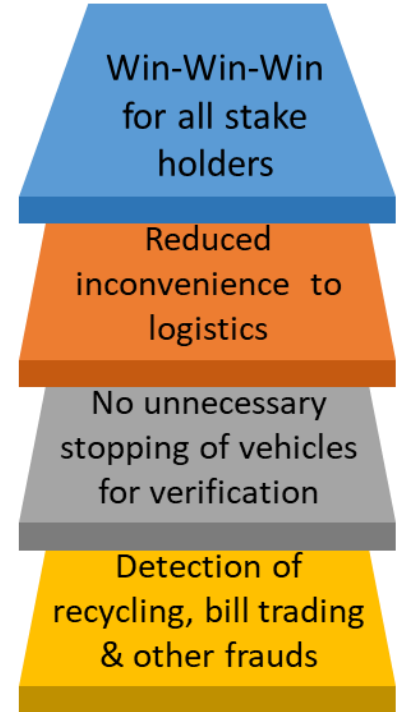
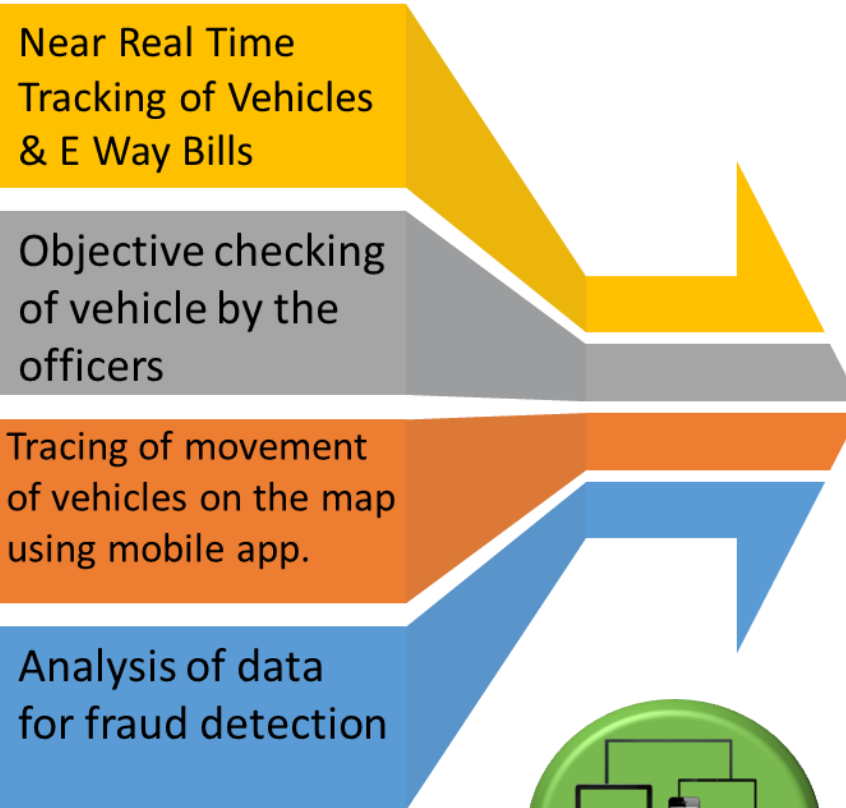
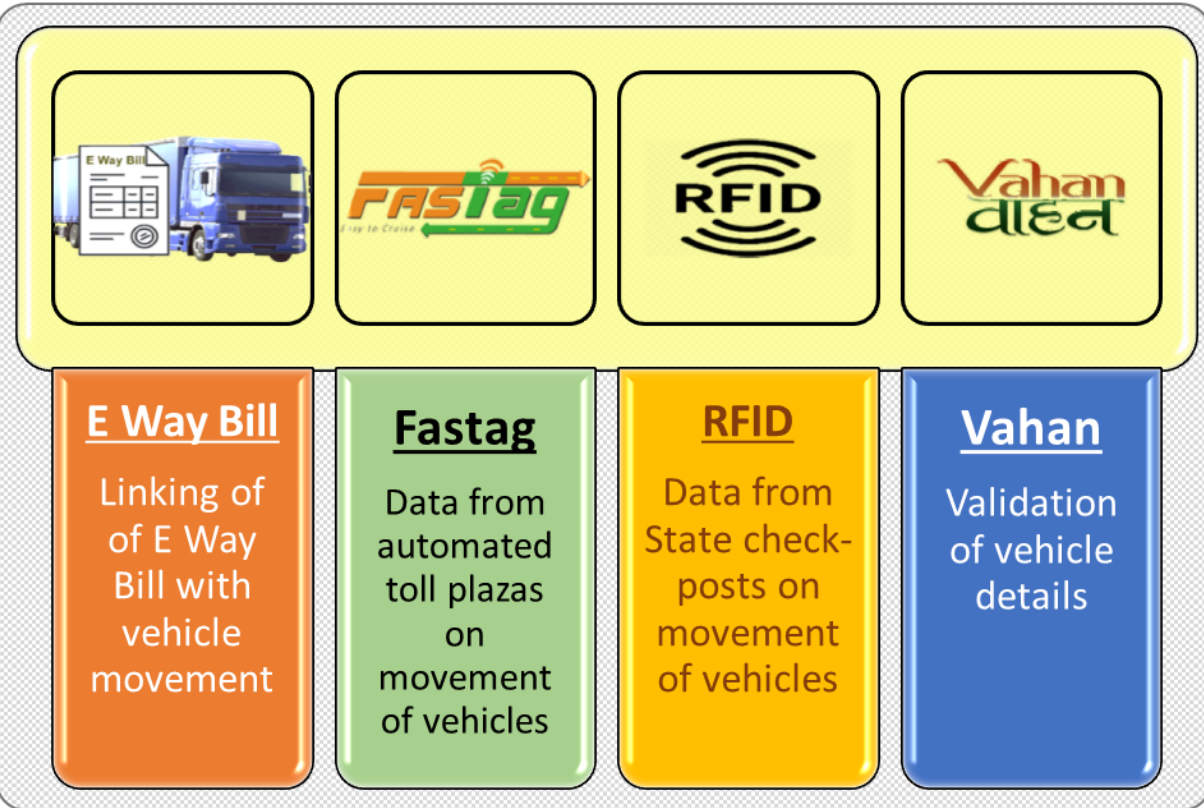
Vehicle No.	Vehicle details entry date in EWB	Next vehicle details entry date in EWB(if any)
KA529362	17/05/2021 12:18:00	NA

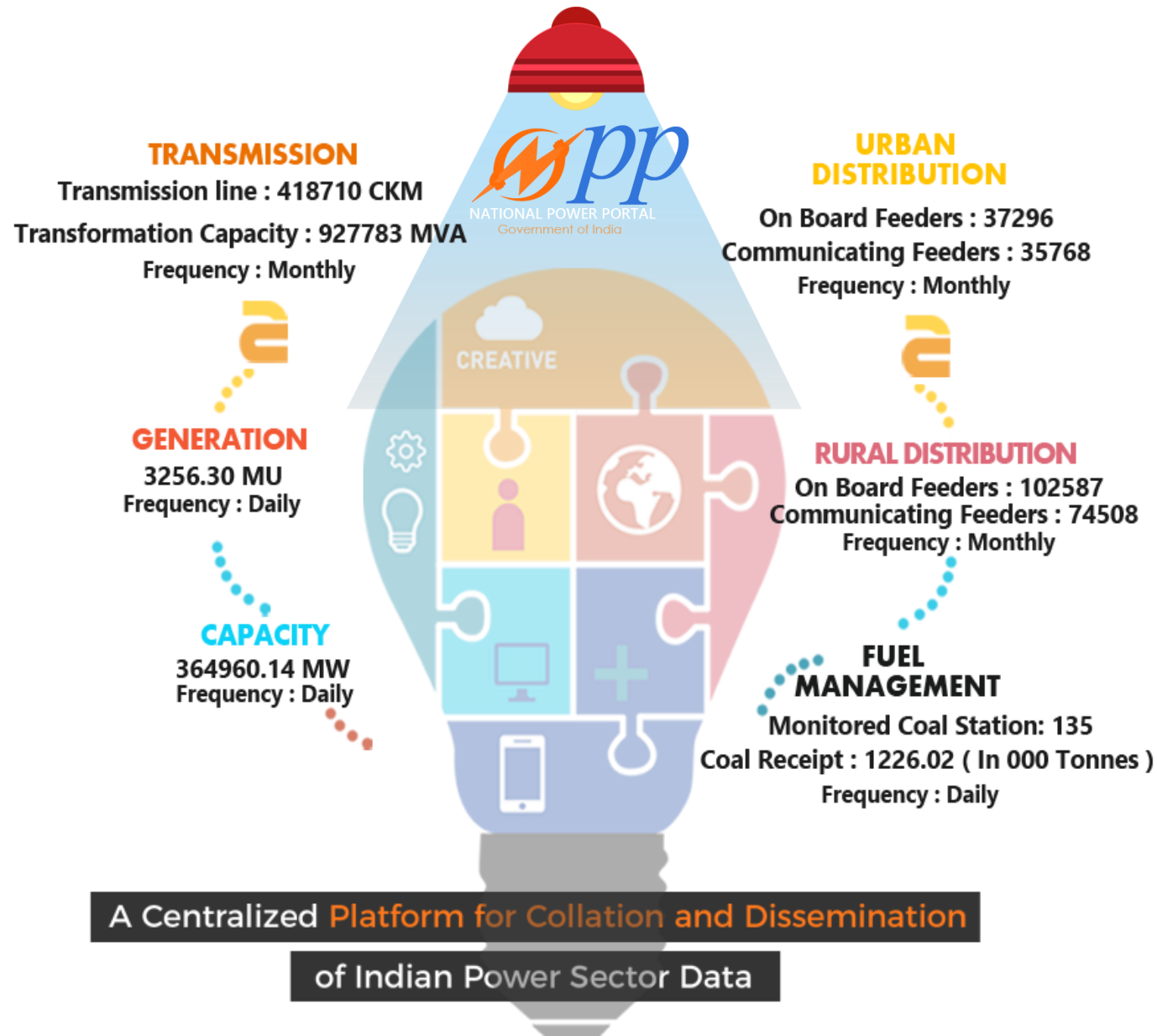
Toll Details passed by Vehicle (Click on vehicle no. for route details)

Sl no	Toll Plaza	Direction	Date/Time
Vehicle No - KA529362			
T1	Chalageri Toll Plaza	North	18/05/2021 00:06:37
T2	Bankapur	South	18/05/2021 01:38:20
T3	Narendra	South	18/05/2021 03:59:26
T4	Hirebgewadi toll plaza	East	18/05/2021 06:56:13
T5	Hattargi Toll Plaza	North	18/05/2021 08:40:55
T6	Kognoli Toll Plaza	North	18/05/2021 09:48:55
T7	Kini Toll Plaza	East	18/05/2021 10:56:56
T8	TASAWADE TOLL PLAZA	West	18/05/2021 12:10:17
T9	Anewadi Toll Plaza	East	18/05/2021 13:28:10
T10	Khed-Shivapur Toll Plaza	East	18/05/2021 15:53:04



# Spatial Digital Transformation – Vahan & Fasttag





## IMPACT

- ❖ Single authentic source of power sector data to provide various kind of analytical reports and charts to power apex monitoring agencies w.r.t generation, transmission and distribution data across the country

## CONTRIBUTION

- ❖ Reduction in AT&C Losses
- ❖ Improvement in Power Supply Position
- ❖ Monitoring of Agriculture, Rural and Urban 11kV Feeders
- ❖ Daily/Monthly/Yearly Monitoring of Capacity & Generation at All India/Zone/States level
- ❖ Monitoring of Growth of Transmission Lines and Transformation Capacity



# Policy on Geo-Spatial Technology for Future



## LAND ACQUISITION

The acquisition of private land by the government, state or central for the purpose of industrialization or any GIS can be used for the assessment of land and property.



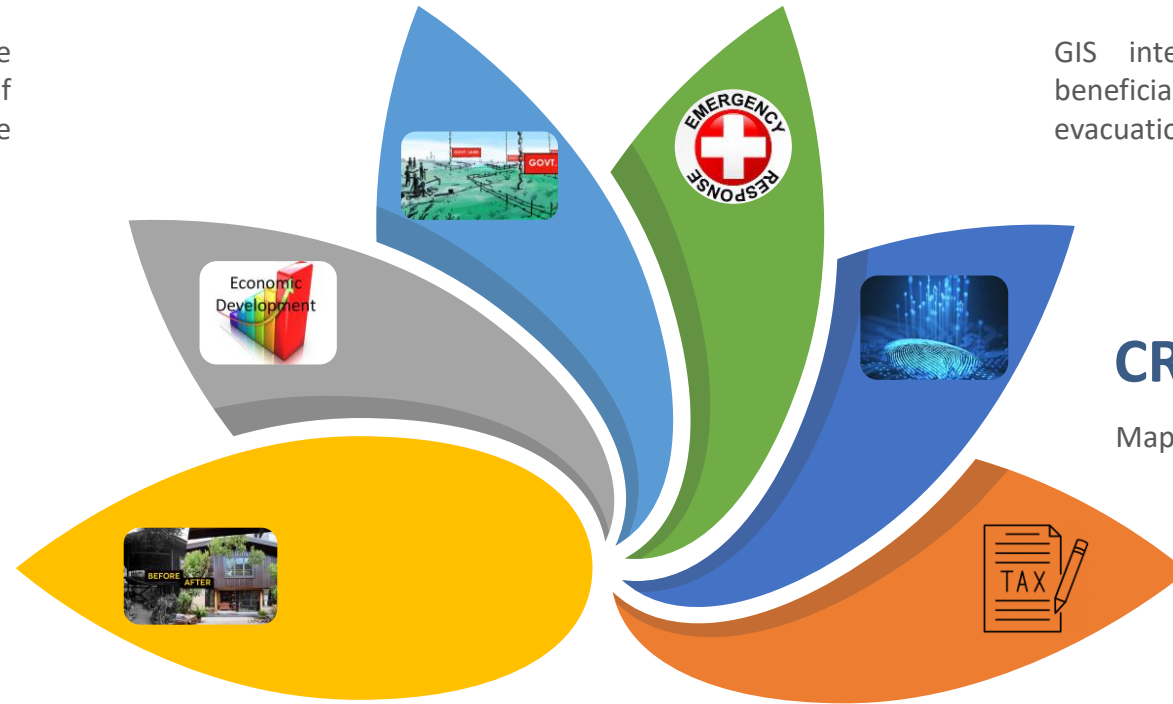
## ECONOMIC DEVELOPMENT

To make informed decisions about where to locate new businesses or grow existing ones, economic developers need effective decision-making tools that help them conduct analysis. To display and disseminate results, GIS tools can provide the necessary platform for visualization, modeling, analysis and collaboration.



## HOUSING RENOVATION PROGRAMS

Society planners can implement geo-spatial analysis in renovating housing and surroundings.



## EMERGENCY RESPONSE



GIS integration into disaster management is beneficial for prediction which can help in planning evacuation and minimizes the effect of destruction

## CRIME ANALYSIS



Mapping the crime pattern and cluster



## TAX ASSESSMENT



Property tax assessment for commercial and non-commercial buildings and apartments. This has reduced the human involvement and property frauds and increasing transparency in the system.



DANKSCHEEN  
 TASHAKKUR ATU  
 GRACIAS  
 ARIGATO  
 SHUKURIA  
 SHUKURIA  
 GOZAIMASHITA  
 EFCHARISTO  
 JUSPAXAR  
 KOMAPSUNHIDA  
 GRAZIE  
 MEHRBANI  
 PALLDIES  
 YAQHANYELAY  
 SUKSAMA  
 EKHMET  
 SHUKRIYA  
 TINGKI  
**THANK**  
**YOU**  
 BOLZIN  
 MERCI