



# PM GatiShakti National Master Plan



# Key features of PM GatiShakti NMP

- “Transformative approach” to infrastructure development for improved logistics efficiency.
- Infrastructure and planning related data layers from Central Ministries and States/UTs.



- GIS based digital platform for planning of multimodal infrastructure connectivity.
- Strategic logistics assets / infrastructure & planning related data layers.
- Master portal and individual portals for central ministries, states/UTs being developed.
- Decision making and planning tools.





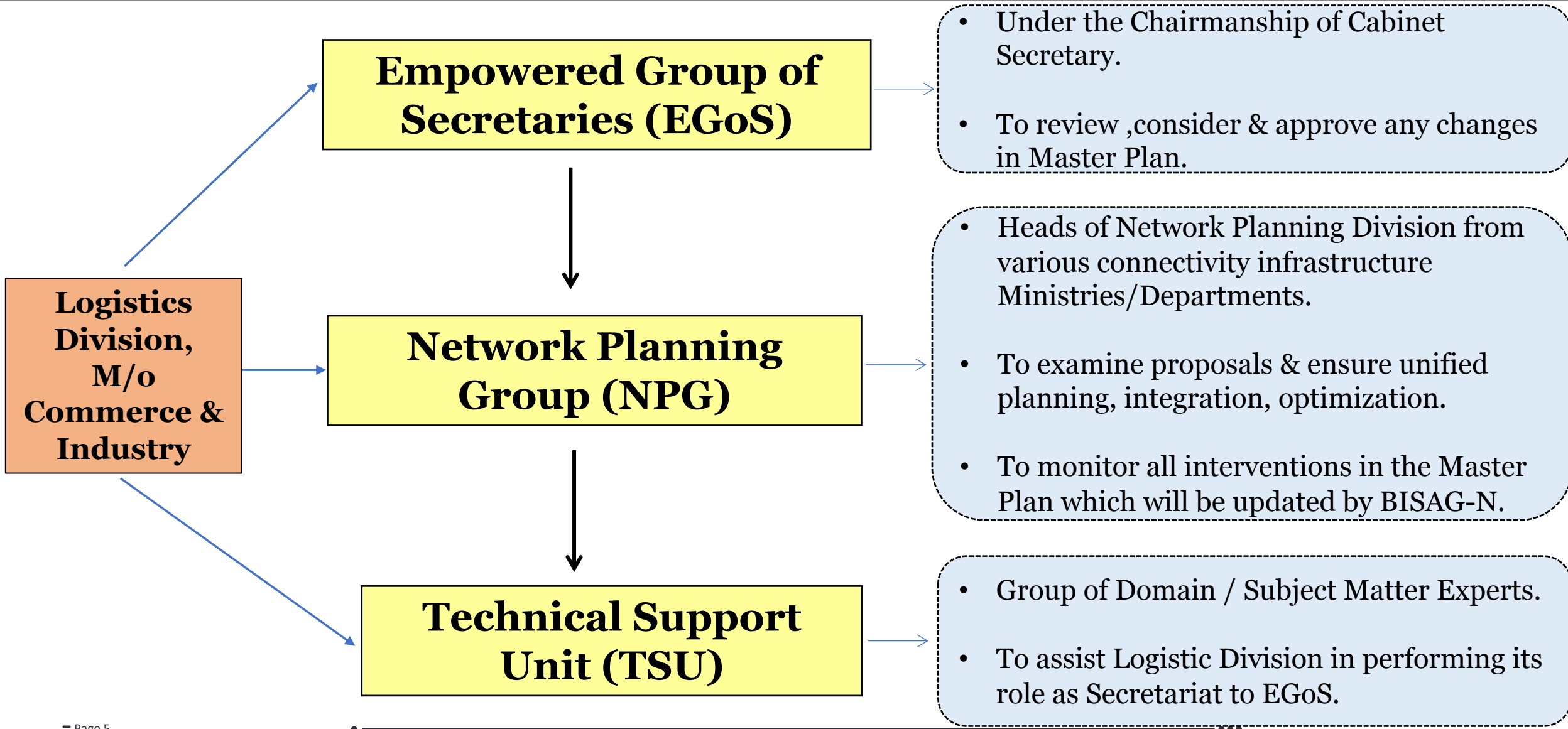
# Uses of PM GatiShakti NMP

- Infrastructure & economic ministries can visualise existing & ongoing projects & identify critical infra gaps.
- Projects can be planned on the platform.
- Decision making/ approvals, cost estimations & NOC through Tools.
- Dynamic Dashboards facilitate monitoring of the projects.





# Governance Framework







# PM GatiShakti National Master Plan



# Login Page

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## National Master Plan



Enter Captcha

LOG IN



# Home Page



National Master Plan



Satellite images  
Administrative Boundaries  
Thematic layers

High Resolution Image

Administrative Boundary

Economic Zones

Infrastructure

Utilities

Multimodal Project

Approval And Clearance

Land Acquisition

Logistics

Forest

Others

Up Comming Project...

500 km





## Navigation

Swipe Tool for Temporal analysis

Add New Project/Data Tool

Go / No Go Tool

NOC - No Objection Certificate module

Proximity Tool

Query Module

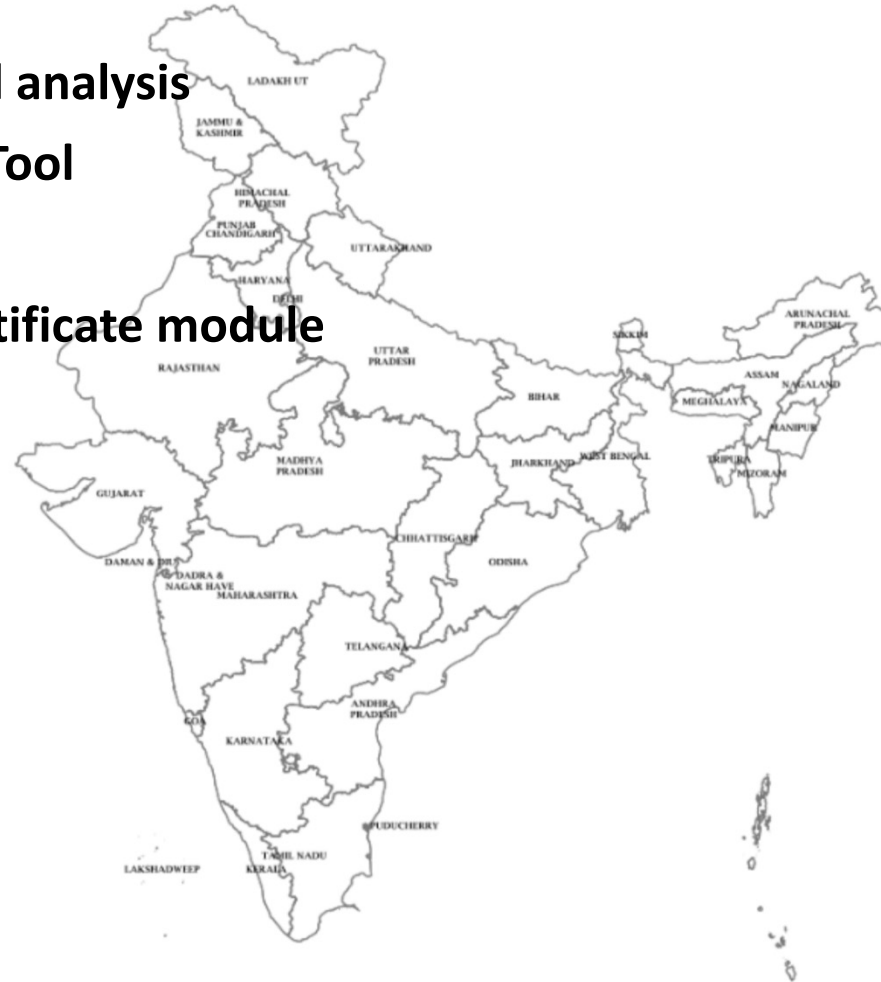
Print Module

Dynamic Dashboard

3D Visualisation

Legend

## Ministries Wise Layers



Telecom

Railways

Power

Tourism

Road Transport and Highway

Petroleum and Natural Gas

New and Renewable Energy

Energy Sector

Commerce & Industries

Consumer Affairs, Food and Public Distribution

Fisheries and Coastal Affairs

Mining & Coal

Food Processing Industries

Electronics and Information Technology

Civil Aviation

Port, Shipping & Waterways

Micro, Small and Medium Enterprises (MSMEs)

500 km



# Infrastructure Planning layers

National Master Plan

Infrastructure

Transportation :8

Road

- Road 2014
- Road 2020
- Road 2024
- Roads
- BhartMala Pariyojana

Legend:

- National Highway
- State Highway
- National Corridors
- Economic Corridor NE

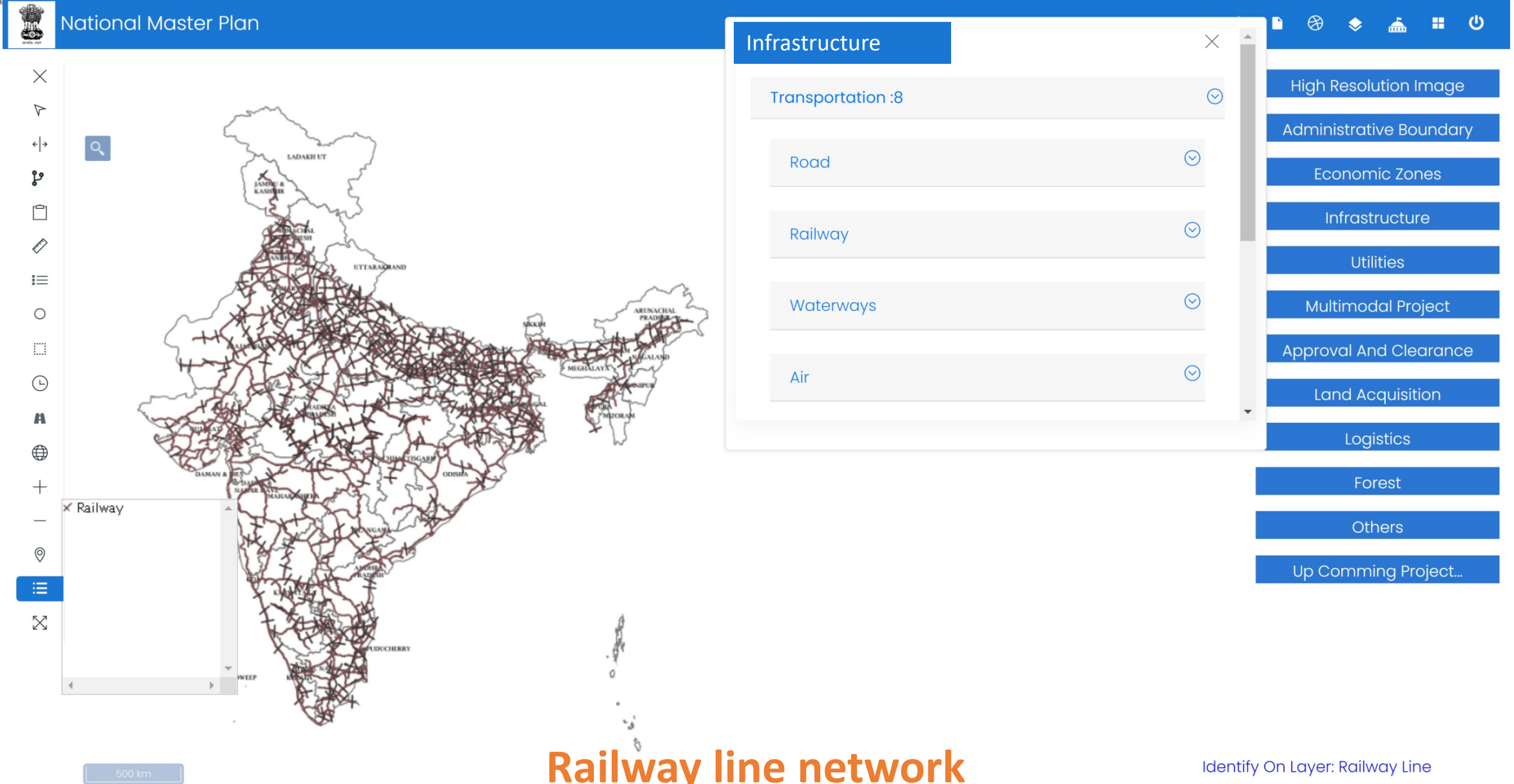
Right-hand menu:

- High Resolution Image
- Administrative Boundary
- Economic Zones
- Infrastructure
- Utilities
- Multimodal Project
- Approval And Clearance
- Land Acquisition
- Logistics
- Forest
- Others
- Up Comming Project...

National Highway | State Highway | National Corridors | Economic Corridor

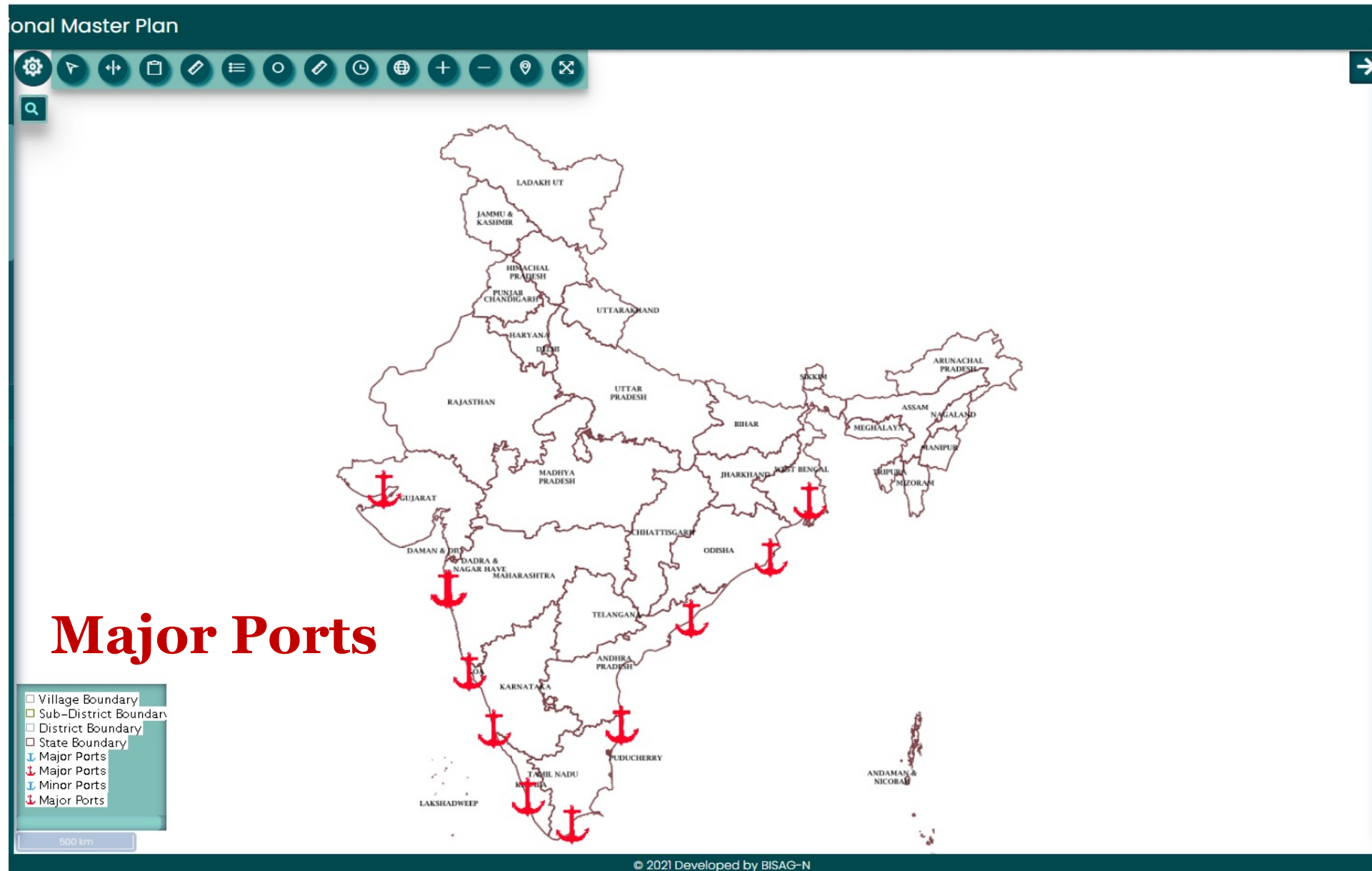


# Infrastructure Planning layers



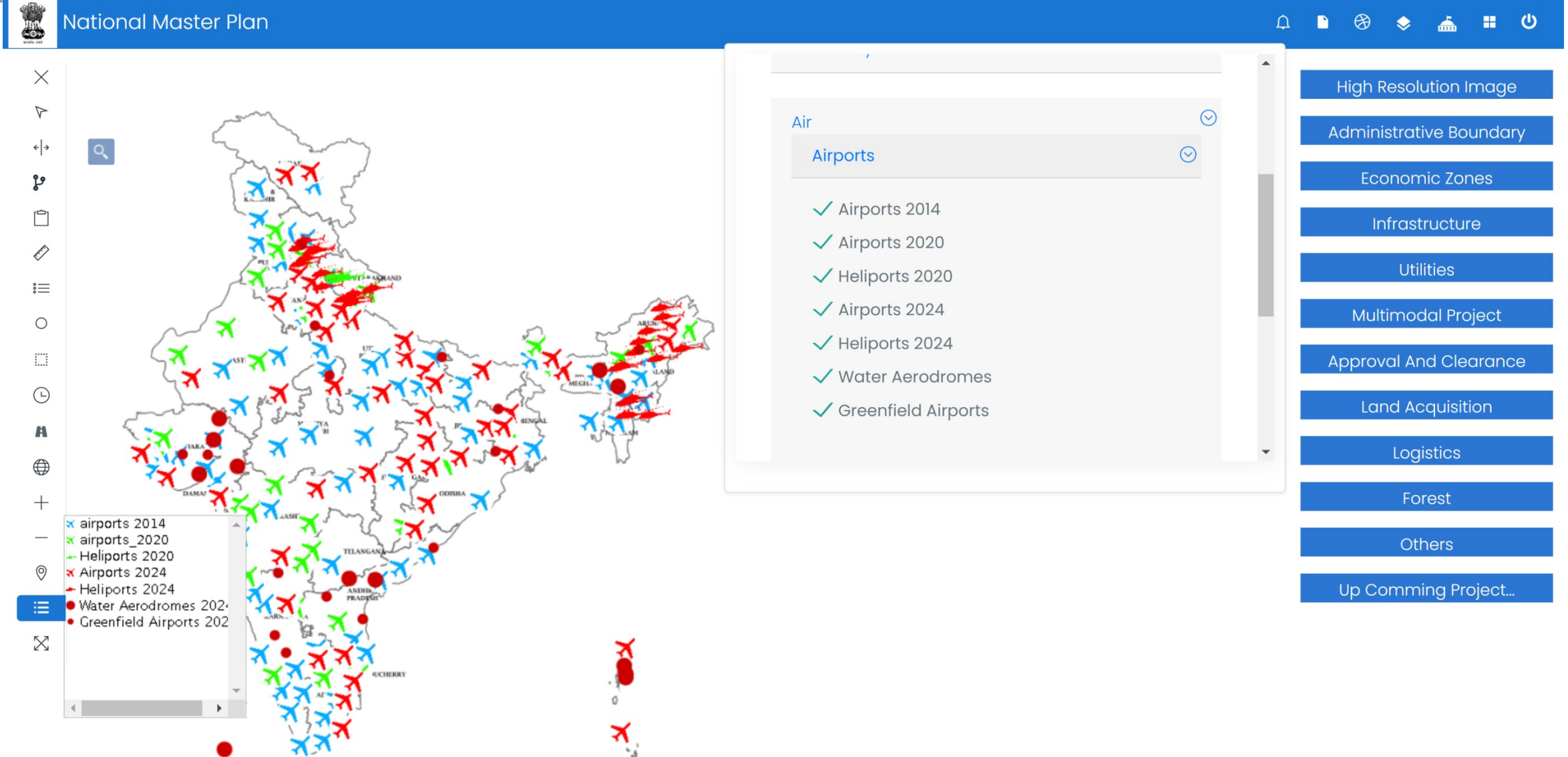


# Infrastructure Planning layers





# Infrastructure Planning layers

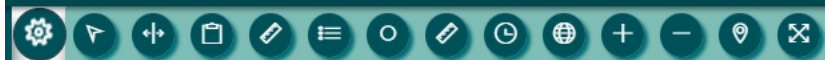


Airports, Heliports 2014-20-24 | Greenfield | Water aerodrome



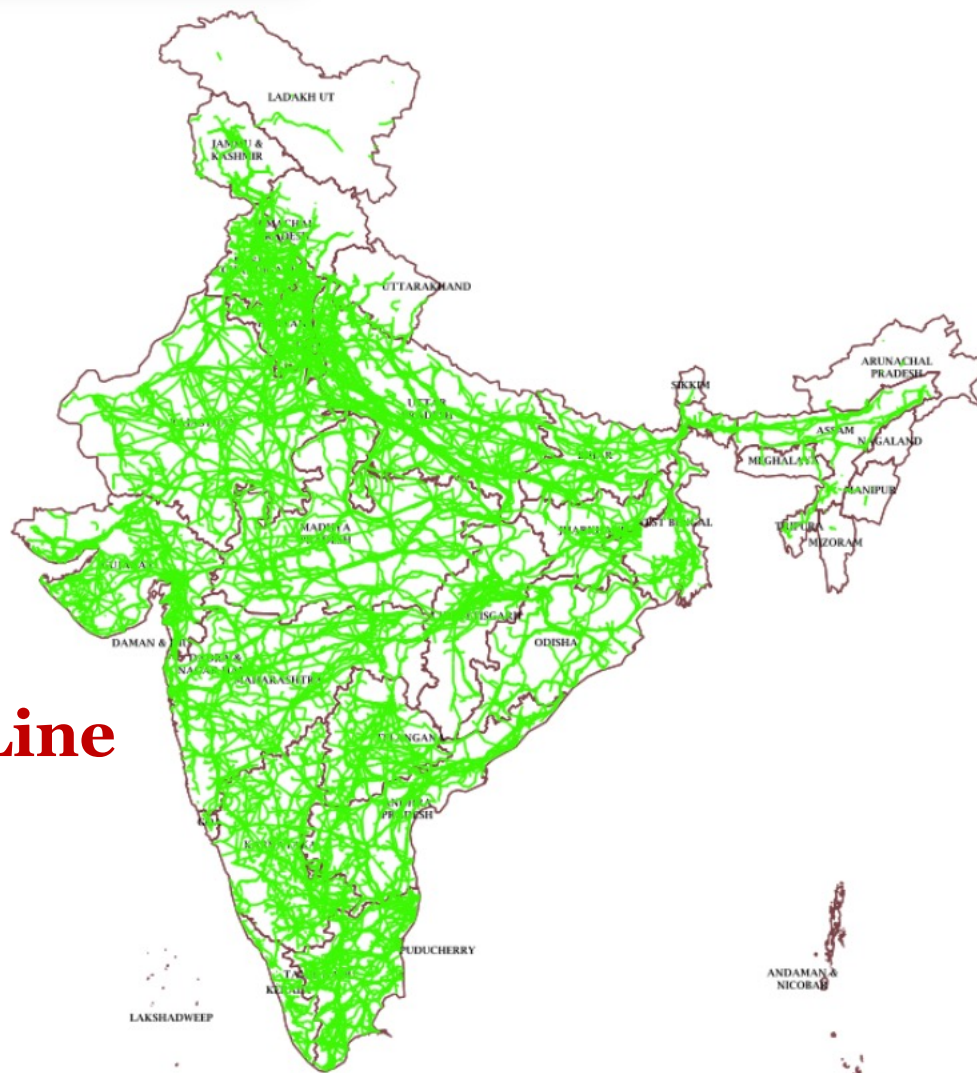
# Infrastructure Planning layers

onal Master Plan



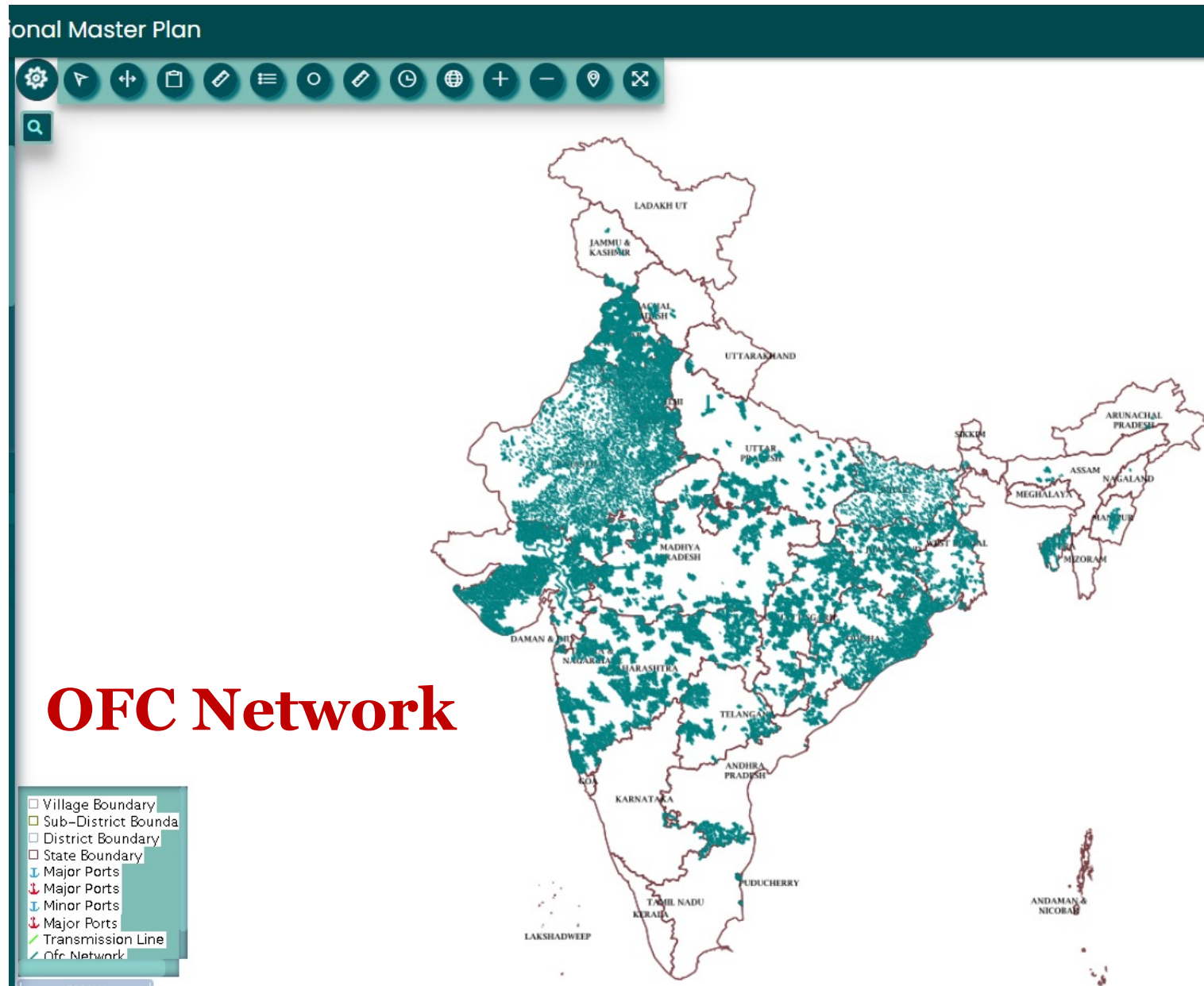
**Transmission Line**

- Village Boundary
- Sub-District Boundary
- District Boundary
- State Boundary
- ⚓ Major Ports
- ⚓ Major Ports
- ⚓ Minor Ports
- ⚓ Major Ports
- Transmission Line



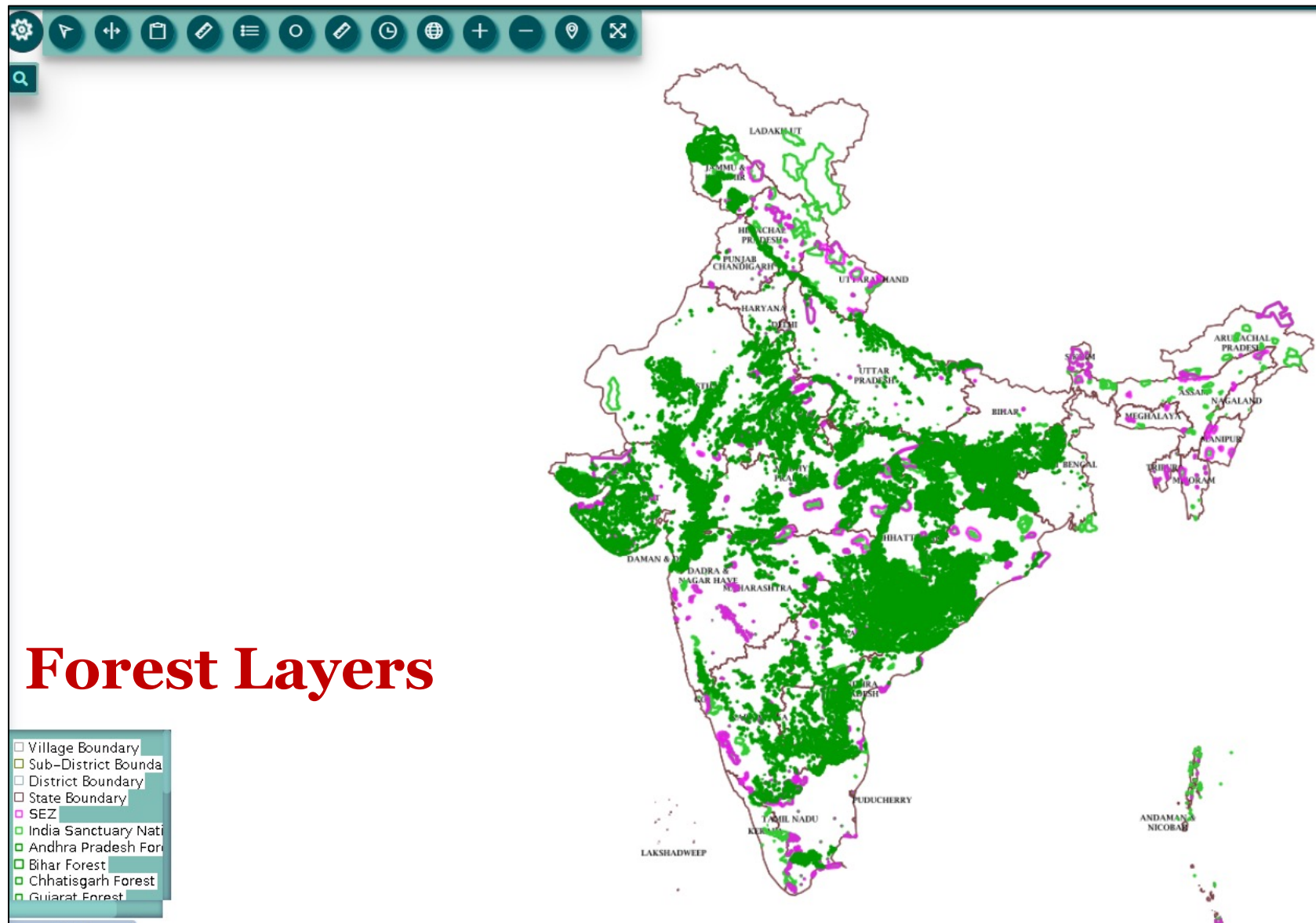


# Infrastructure Planning layers



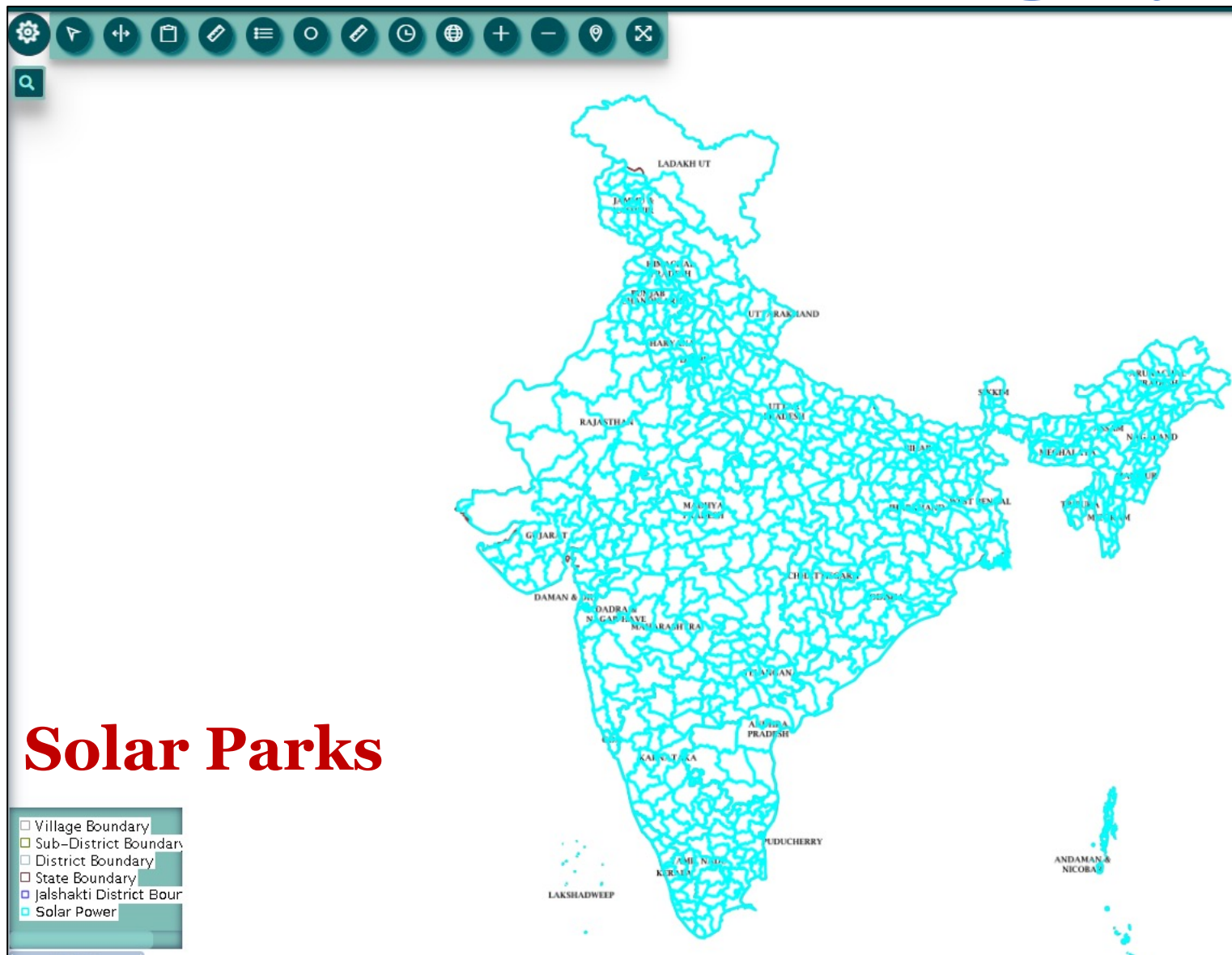


# Infrastructure Planning layers



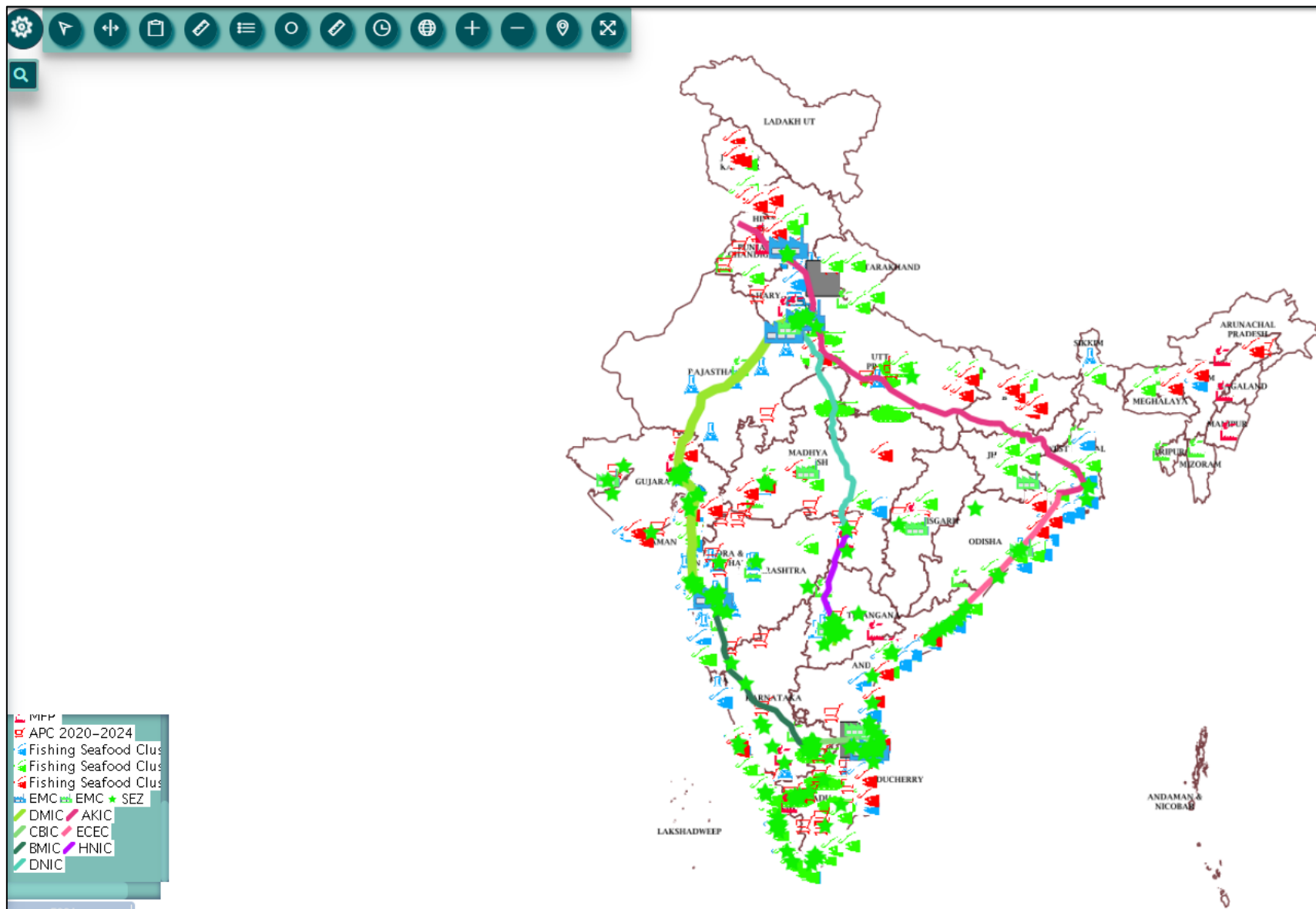


# Infrastructure Planning layers





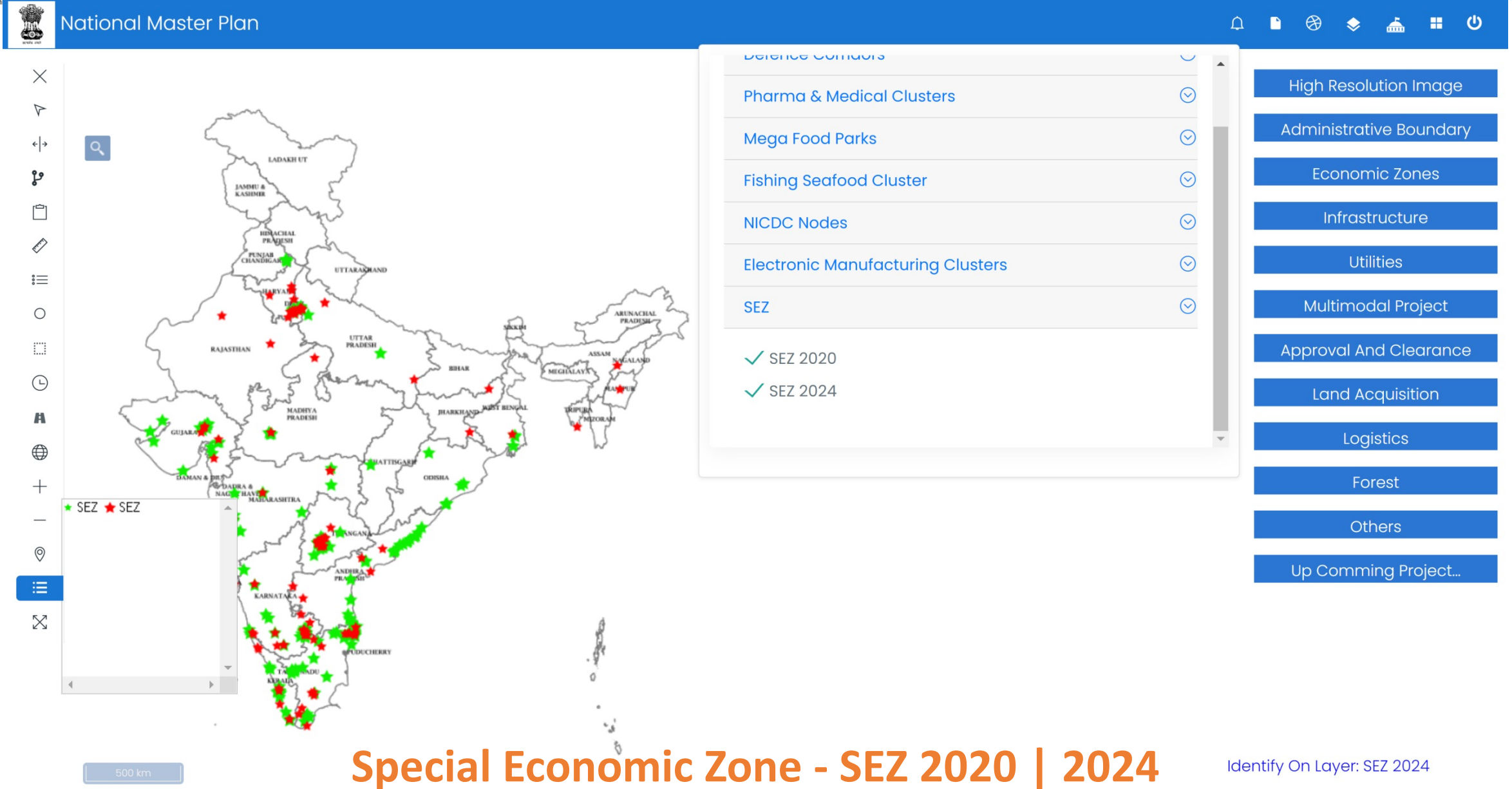
# Economic Planning layers



**Industrial Parks, Clusters, Economic Zones**



# Economic Planning layers



Special Economic Zone - SEZ 2020 | 2024

Identify On Layer: SEZ 2024





# PM GatiShakti NMP- Tools





# Portal Tools



## National Master Plan

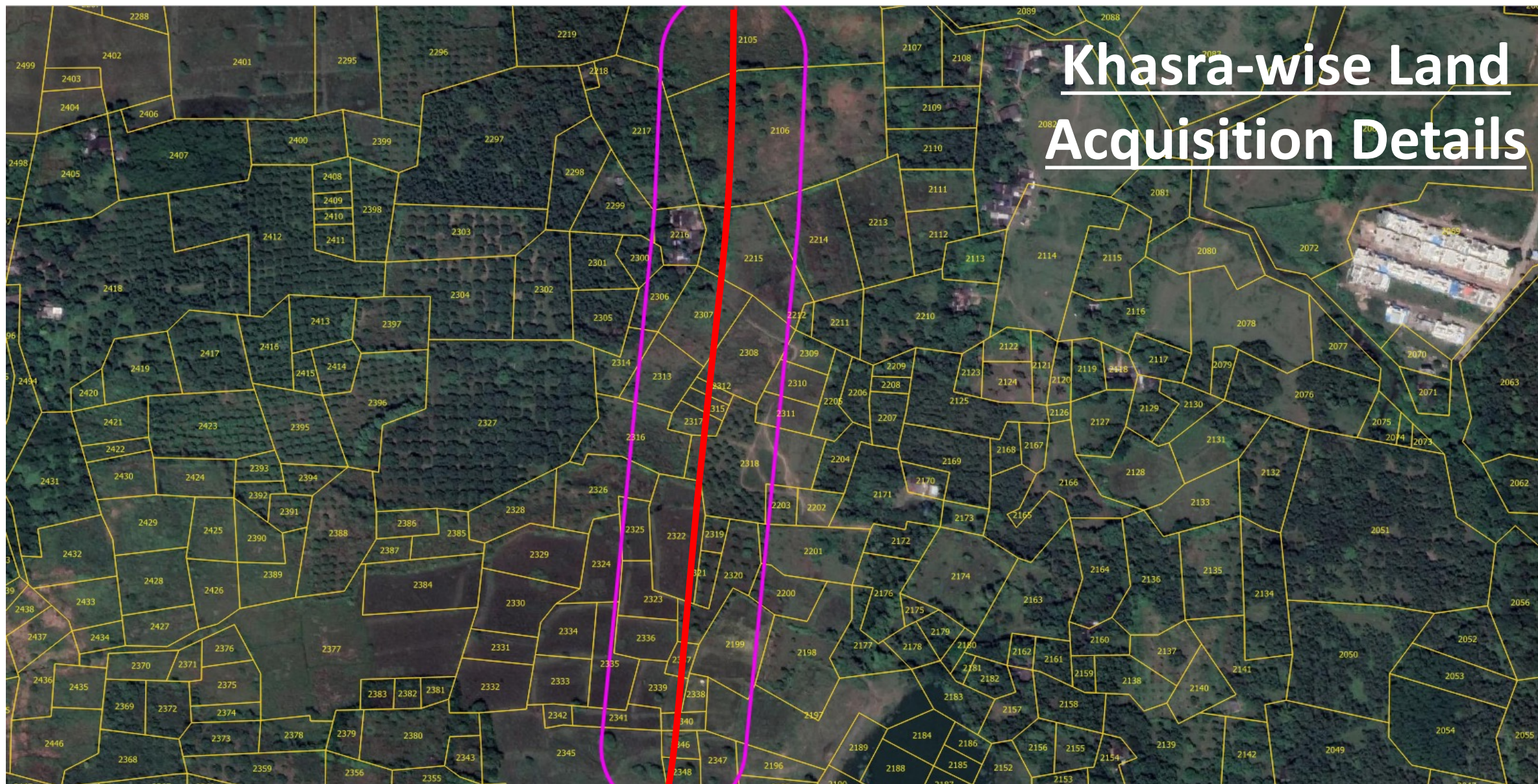


500 km





# Geo-spatial Digital Platform for NMP: Coastal Corridor Proposal

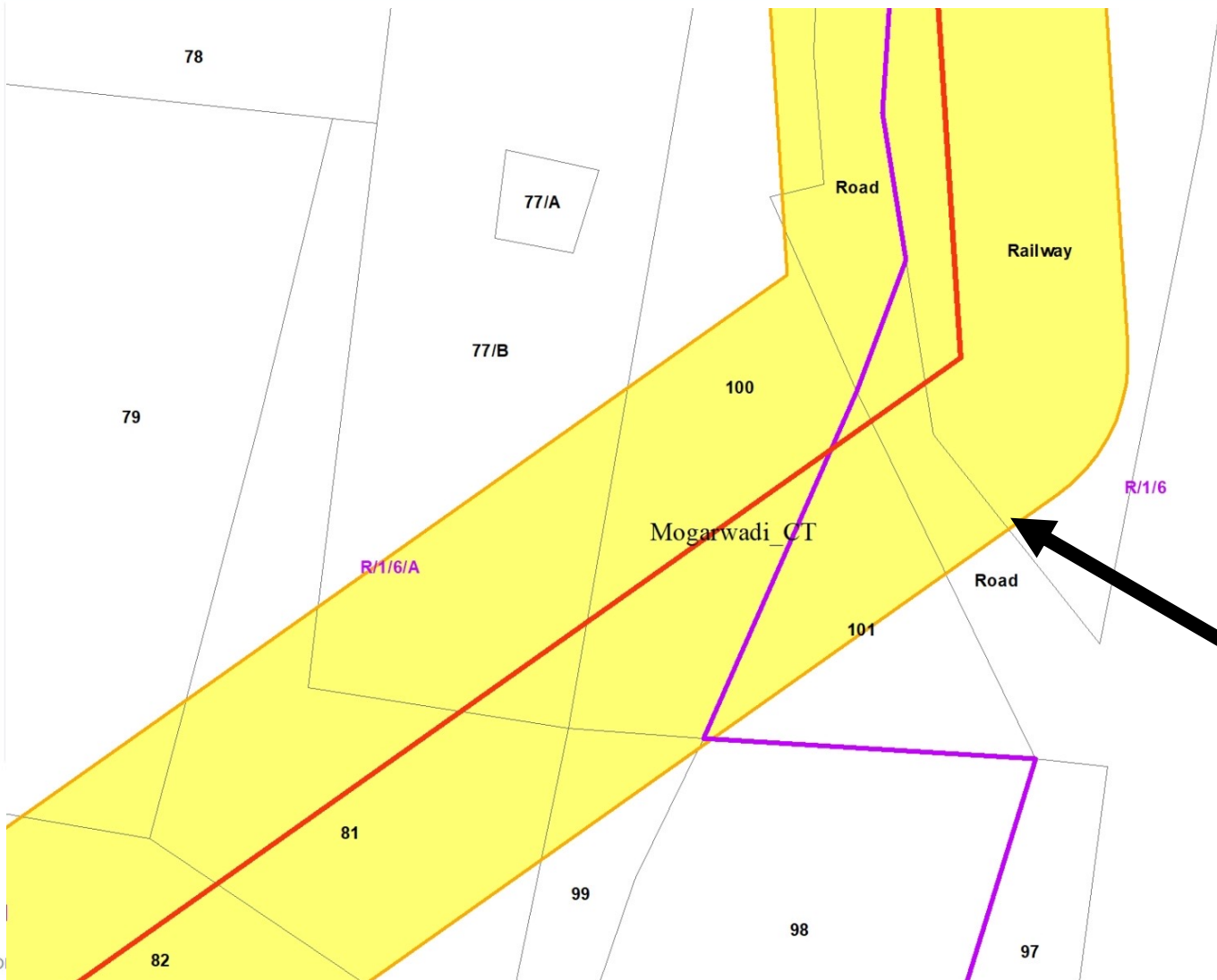






# Analytical - Land Acquisition Module

Government of Gujarat



High Resolution Image  
Administrative Boundary  
Revenue Boundary  
Forest

## Land Parcel Valuation Based on STR Value Zone, Mogarwadi (District : Valsad)

Proximity Analysis for Industrial Park	
Survey No.	81
Total Area (Ha)	1.2937 Ha
Area to be Acquired (Ha)	0.7827 Ha
Purpose of Acquisition	Road Widening
STR Zone	R/1/6/A
Estimated total compensation (INR)	20,00,00,000/-



# Add New Data / Project Module



National Master Plan



## Permission to be required (Forest Gujarat)

Distance From:

Road: 10891.52 Railway: 28805.24 River: 9818.37 Economic Zone: 9796.59 National Park 0.00 Canal: 20455.34

State

Gujarat

District

Kachchh

Taluka

---select---

Village

---select---

Name of Project

TEST999

Forward to:

\* Mining Lease \* Revenue Department

Latitude

71.12383182255884

Longitude

23.30262244576788

Add Project

Information Department

Labour and Employment Department

Mining Lease

Narmada and Water Resources, Water Supply and Kalpsar  
Department

Panchayats and Rural Housing Department

Project will be created with Reference ID.



National Master Plan

Add NOC

Project Name

---select---

Department Name

---select---

Type

Annexure

gatihakti.ncog.gov.in says

Project has been successfully created! your Project Id is null and Project  
name is TEST999. Thank you.

OK



## NOC Tool: Select start point and End Point

Ministry of Communications

3D Dashboard Report Logout

Navigate

Navigate by City

Default

Reset

Proximity

Line Buffer

OFC TO Railway Track

Measure

Query Module

Draw OFC Line

Mark Tower Location

Mapping By Road

Drag & Drop Kml

Draw Line

Legend

Print

Search...

Legend:

District Boundary

State Boundary

Gis Roads India Processed

Select Offset For Road

Select Existing Offset

Shortest Feasible Route

Mark Your Own Path

Source

Destination

Select Offset

Left

Right

Distance(mtr.)

20

Depth(mtr.)

5

Seeking Approval From Department::

☒ Railway

☒ River

☒ Road

☒ Forest

☐ Irrigation

☐ Energy

Ok

500 m

outside

Ministry of Telecommunications



## Tool 2: Select start point and End Point

←

Q

Search...

📍 Navigate

📍 Navigate by City

🌐 Default

✖ Reset

adj Proximity

adj Line Buffer

🎯 OFC TO Railway Track

📏 Measure

🔍 Query Module

🎯 Draw OFC Line

🎯 Mark Tower Location

🎯 Mapping By Road

☰ Drag & Drop Kml

☰ Draw Line

📄 Legend

🖨 Print

Legend:

□ District Boundary

□ State Boundary

🟡 Gis Roads India Processed

Ministry of Communications

3D 🗺 Dashboard 📄 Report 🚪 Logout

Select Offset For Road

☐ Select Existing Offset

☒ Shortest Feasible Route

☐ Mark Your Own Path

Source

Destination

Select Offset

☒ Left

☐ Right

Distance(mtr.)

Depth(mtr.)

20

5

Seeking Approval From Department::

☒ Railway

☒ River

☒ Road

☒ Forest

☐ Irrigation

☐ Energy

Ok

Ministry of Telecommunications

23° 22' 24" N 78° 7' 38" E

100 m



# NOC Tool: Mark Your Own Path



## NOC Tool: Mark the path as per the requirement

Navigate

Navigate by City

Default

Reset

Proximity

Line Buffer

OFC TO Railway Track

Measure

Query Module

Draw OFC Line

Mark Tower Location

Mapping By Road

Drag & Drop Kml

Draw Line

Legend

Print

←

Search...

Legend:

☐ District Boundary

☐ State Boundary

Ministry of Communications

3D

Dashboard

Report

Logout

Select Offset For Road

☐ Select Existing Offset

☐ Shortest Feasible Route

☒ Mark Your Own Path

Start

End

Select Offset

☒ Left

☐ Right

Distance(mtr.)

Depth(mtr.)

20

5

Seeking Approval From Department::

☒ Railway

☒ River

☒ Road

☒ Forest

☐ Irrigation

☐ Energy

Ok

Save Data

Ministry of Telecommunications

Design and Developed by BISAG(N). Ministry of Electronics & Information Technology.

Map not to scale



## NOC Tool: Add the OFC Path for NOC Permission

Ministry of Communications

3D Dashboard Report Logout

Navigate

Navigate by City

Default

Reset

Proximity

Line Buffer

OFC TO Railway Track

Measure

Query Module

Draw OFC Line

Mark Tower Location

Mapping By Road

Drag & Drop Kml

Draw Line

Legend

Print

Search...

Legend:

- District Boundary
- State Boundary

Base Layer

Mobile Tower

Bihar (OFC)

Telecom

Ministry of Telecommunications

Design and Developed by BISAG(N). Ministry of Electronics & Information Technology.

22° 13' 31" N 76° 56' 54" E

5 km

Map not to scale



## NOC Tool: Report generated for approval

Ministry of Communications						HOME
Sr.No	Application No.	Approval Department	Approval Department Status	Length in mtr.	Updated On	
1	OFC/01022022111503/76	RIVER	pending	249.71832167258515	2022-02-01 11:15:03.0	
2	OFC/01022022111503/76	ROAD	pending	0.0	2022-02-01 11:15:03.0	

Ministry of Telecommunications





Department of Commerce  
Ministry of Commerce and Industry  
Government of India

# Permission Tool



National Master Plan



## Geom



Location:

- ✓ Road
- ✓ Railway
- ✓ River
- ✓ Forest
- ✓ EcoSensitive Zone
- ✓ Sanctuary National Park
- ✓ Canal

High Resolution Image

Revenue Boundary

Forest

Infrastructure

Railway

Agriculture

Water Resource

Energy Sector

Food and Civil

Roads and Buildings

Tourism

Fisheries

Civil Aviation

Quietest Ecology Commission

20 km

Lonlat:71.42882,39.22392 23°05'N 71°26'47"E





Department of Commerce  
Ministry of Commerce and Industry  
Government of India

# Permission Tool



National Master Plan for  
Multi-Modal connectivity



National Master Plan

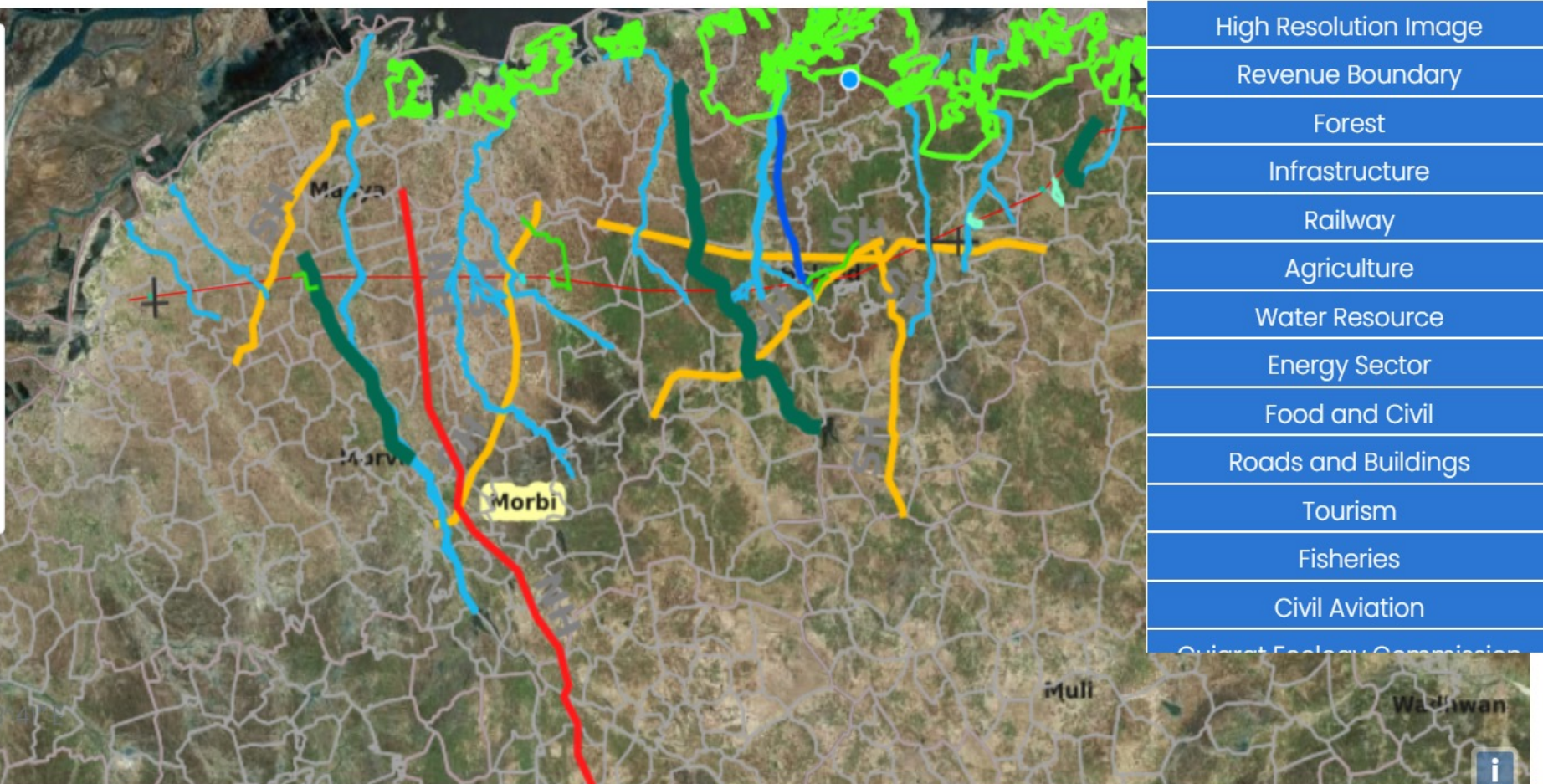


## Geom



Location:

- ✓ Road
- ✓ Railway
- ✓ River
- ✓ Forest
- ✓ EcoSensitive Zone
- ✓ Sanctuary National Park
- ✓ Canal



- High Resolution Image
- Revenue Boundary
- Forest
- Infrastructure
- Railway
- Agriculture
- Water Resource
- Energy Sector
- Food and Civil
- Roads and Buildings
- Tourism
- Fisheries
- Civil Aviation
- Quietest Ecology Commission

10 km  
Lonlat:71.1613,23.2254 23.9177,71.0947



# Permission Tool

## Village Report

CSV

Search: \_\_\_\_\_

District ▲	Taluka ◆	Village ◆
Morbi	Halvad	Juna_Devaliya
Morbi	Morvi	Jetpar
Morbi	Morvi	Chakampar
Morbi	Morvi	Vaghpar
Morbi	Morvi	Gala
Morbi	Morvi	Juna_Nagdavas
Morbi	Morvi	Sapar



# Permission Tool

## Forest Report

CSV

Search: \_\_\_\_\_

District ^	Taluka ⇅	Village ⇅	Range ⇅	Division ⇅	S.No. ⇅	Area in Hector ⇅
Morbi	Halvad	Chandragadh	Morbi	Morbi Forest Division	239/1	36.82
SURENDRANAGAR	DHRANGADHRA	KANKAVATI	Dhrangadhra	Surendranagar Forest Division		87.42

Showing 1 to 2 of 2 entries

River Report

Previous

1

Next

CSV

Search: \_\_\_\_\_



# Permission Tool

## River Report

CSV

Search:

Name ▲	Lenght ▼
Bambhan River	173.0004309325863
Godadharoi River	257.0263614485678
Godra River	63.88265635381669
Kankavati River	118.29991793888692
Machchhu River	333.5426519383547
Mithi River	104.83625479141263



# Permission Tool

## Road Report

CSV

Search:

Name ^	Category ^	Surface ^	XY ^
Ahmedabad Bavla Bagodara Limbdi Rajkot Kandla Road	NH	BT	POINT Z (70.8183119769843 22.9911816897474 0)
Ahmedabad Viramgam Dhrangadra Halvad Malia Road	SH	BT	POINT Z (71.2179865208576 23.0128170127552 0)
Cahradva to Iswarnagar App road	VR P	BT	POINT Z (71.060801949655 22.9819581709907 0)
Chakampar Jetpar Road	ODR	BT	POINT Z (70.9381734785325 22.9889854164986 0)
Chulli Pipla Gopalgadh Road	VR P	BT	POINT Z (71.3124991304529 23.0478076106663 0)
Halvad Sara Muli Sayla Sudamada Paliyad Road Upto District Limit	SH	BT	POINT Z (71.1866945027847 23.0005335501445 0)
Kankaqvati Jasmatpar Road	VR P	BT	POINT Z (71.3756613498974 23.0916865118485 0)
...	...	...	...

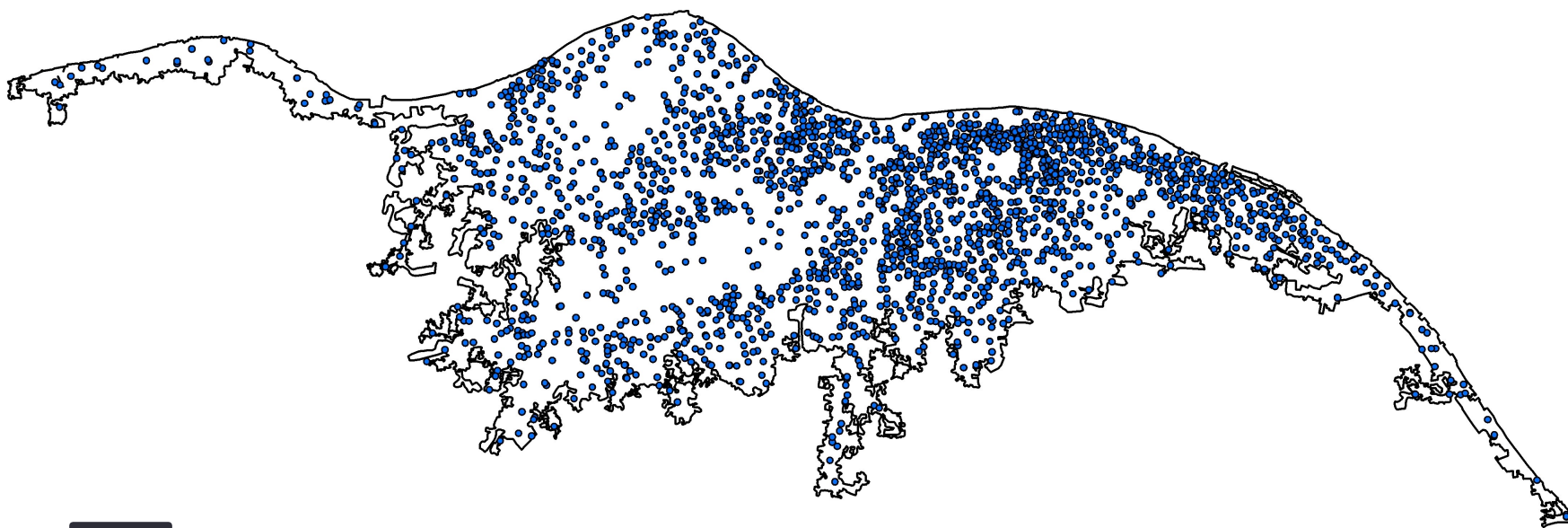




## Existing Tower location: Patna City.

### STATUS AS OF NOW:

- Under National Broadband Mission, one of the objective is 5G roll out facilitation.
- To serve the above purpose all the existing towers coverage will be analyzed and entire city will be covered with 5G Connectivity.



Patna City Boundary

Existing Mobile Towers

Total Existing Mobile Tower: **2333 Nos.**

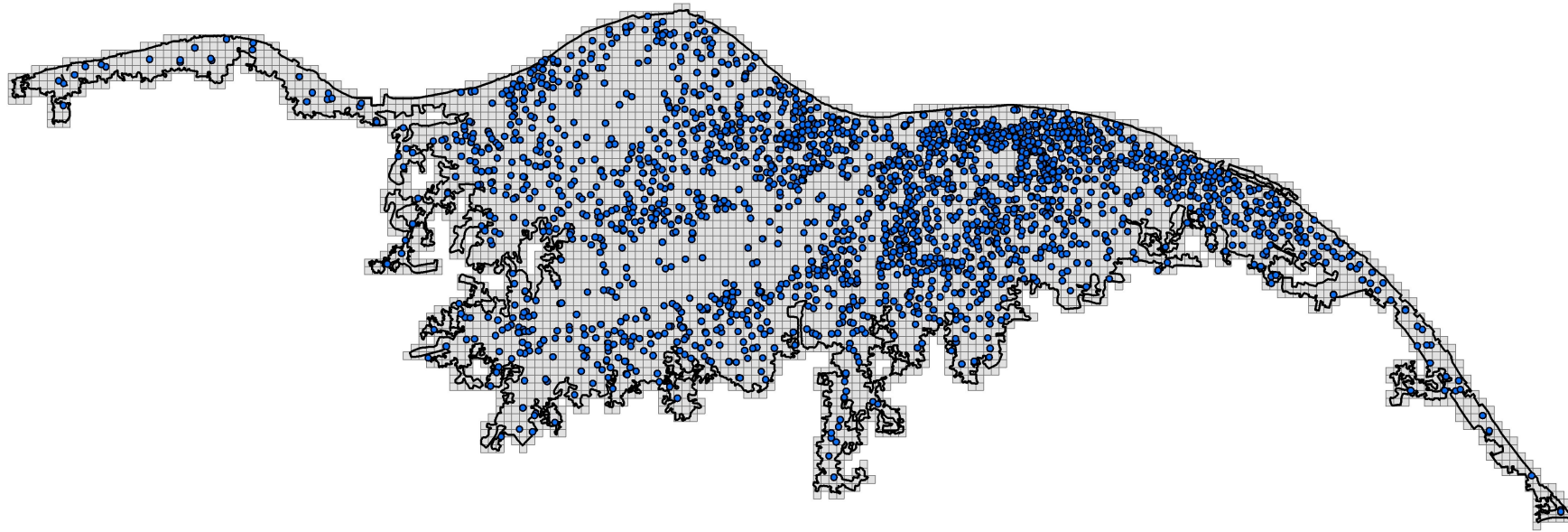







# How usage of National Master Plan has improved the situation



## Providing 5G Connectivity to Potential Areas : Patna City.



-  Patna City Boundary
-  Existing Mobile Towers
-  200 Sq. m. Grid for Coverage

### IMPROVEMENTS MADE:

- Existing towers are mapped on the Department of Telecommunication GatiShakti Portal and to provide 5G Connectivity, entire city divided by 200 Sq.m. Grid.
- Based on the area covered by 200 sq.m grid, remaining potential areas are analyzed to erect 5G Towers.

Total Grid covered by Existing Tower: **1517 Nos.**  
Total Uncovered grid: **3098 Nos.**





# Thank you