

GOVERNMENT OF MEGHALAYA
PLANNING INVESTMENT PROMOTION & SUSTAINABLE DEVELOPMENT DEPARTMENT

No.PLR.33/2022/Pt – II/378

Dated: Shillong, the 21st November, 2024.

To,

The Commissioner & Secretary to the Government of Meghalaya,
Power Department.

Subject: Model Standard Operating Procedure (SOP) for Mapping Data Layers on the State Master Plan (SMP) portal

Sir,

I am directed to refer to the subject above and to inform you that the PM GatiShakti (PMGS) National Master Plan (NMP) plays a critical role in the integration of economic and infrastructural planning with socio-economic development, improving both Ease of Living and Ease of Doing Business. In order to ensure accurate and integrated planning using the NMP, it is essential for the State Departments to define and upload necessary **data layers / attributes in a standardized manner** along with metadata.

In this connection, a model **Standard Operating Procedure (SOP)** has been developed by DPIIT for the State Master Plan (SMP) portal and the same is enclosed herewith. This SOP includes **data management standards, formats, validation and update frequencies**, serving as a guideline for states / departments in developing their own SOPs to enhance clarity, collaboration, and efficient data management practices.

Based on the Standard Operating Procedure provided by DPIIT, you are hereby requested to kindly provide Spatial data for “**Power Supply Network**” Mandatory layer in Google Earth (.KML or .KMZ) / AutoCAD Drawing (.CADD) / ESRI GIS Shape file (.SHP) format and the feature attributes as per Annexure – I in Microsoft Excel file (.XLSX) format on the e-mail address: meghalayaeodb@gmail.com.

Further, keeping the verification of the spatial data and attached attributes in view, a **Maker-Checker-Approver mechanism** needs to be adopted. You are therefore requested to nominate such officers from each PM GatiShakti Cell under your Department:

- Data Maker –Equivalent to Field Engineer(~ Upto Superintending Engineer)
- Data Checker –Equivalent to Head of the Cell / Branch (~Upto to Chief Engineer)
- Approver –Equivalent to Head of the Directorate / Agency (~Director or above)

For any queries, you may contact EoDB PMU Team members Mr. Navay Gulati (contact number-9911995689) / Mr Akshay S. (contact number-8714348044) / Mr. Lakshman R. (contact number-7073351972).

Yours faithfully,

Enclo: As stated above.


[R.D.H. Kharlukhi]

Senior Monitoring Officer & ex-officio
Deputy Secretary to the Govt. of Meghalaya
Planning, Investment Promotion & Sustainable Development
Department.

Memo No.PLR.33/2022/Pt – II/378-A

Dated: Shillong, the 21st November, 2024.

Copy to:-

1. The P.S. to the Chief Secretary to the Government of Meghalaya, for kind information of the Chief Secretary.
2. The Commissioner & Secretary to the Government of Meghalaya, Planning Investment Promotion & Sustainable Development Department for kind information.
3. The Director, Transmission / Distribution, Me.E.C.L., Lumjingshai, Shillong for kind information and necessary action.

By order etc.,



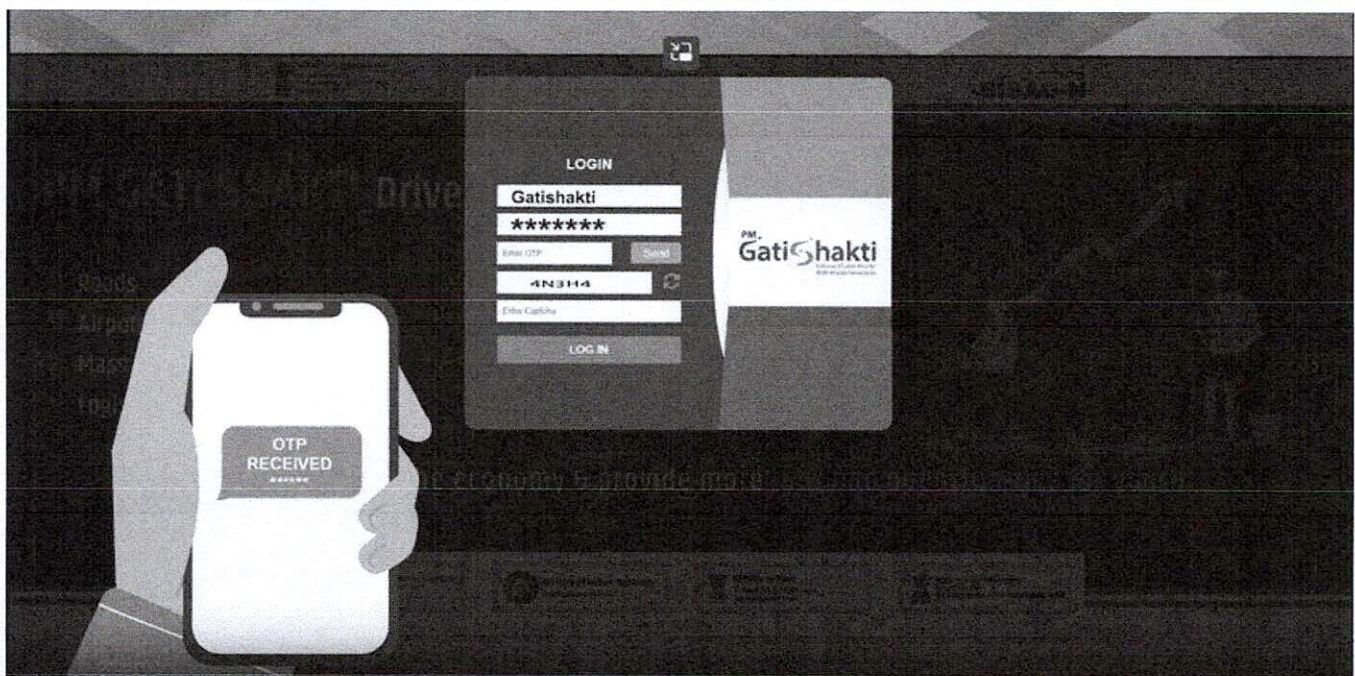
Senior Monitoring Officer & *ex-officio*
Deputy Secretary to the Govt. of Meghalaya
Planning, Investment Promotion & Sustainable Development
Department.

1. Meghalaya instance of PM GatiShakti - National Master Plan can be accessed at <https://meghalaya.pmgatishakti.gov.in/stategatishakti/login>

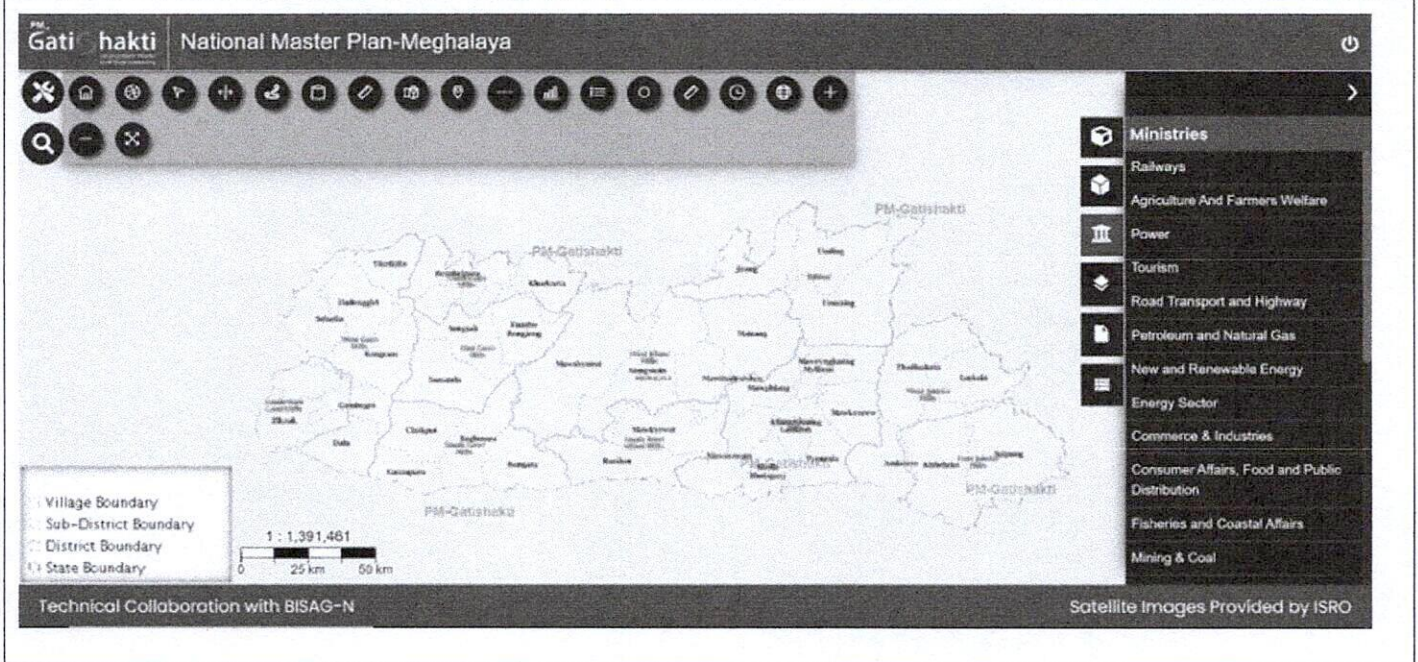
Login page for National Master Plan and State Master Plan



One-Time Password (OTP) based sign-in for Government officials



PM GatiShakti State Master Plan Interface



Nominated Makers, Checkers and Approvers are requested to submit the following credentials to the e-mail address meghalayaeodb@gmail.com to obtain a distinct login ID for PM GatiShakti Master Plan:

Name	as per Government records
Phone	+91 12345 67890 (required for OTP-based login)
e-mail	Official Government e-mail ID only (.gov.in or .nic.in)
Department	Power Department.
Designation	Please mention Directorate / cell as applicable
Access Rights	Notified Maker / Notified Checker / Notified Approver

The above information will be utilized to create a distinct login instance from BISAG-N

2. Sample Format for mapping of “Power Transmission and Distribution” Mandatory layer (Point and Polyline geometry) for integration on PM GatiShakti National Master Plan:

Mapping of Layer Geometry: Point (Power Transmission Towers)

Sl. No.	Name of the line, kV Level	Tower Location Number / ID	Height of Tower structure (m)	Latitude (Y)	Longitude (X)	Tower type	Special Foundation, if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
sample	220 kV D/C Mawngap – New Shillong line	AP-1	23	25°34'00.7"N Or 25.566862	91°53'25.1"E Or 91.890296	Tension	No
1							
2							
3							
.							
.							

Reference for filling the data requirement:

- A. Options for “Latitude (5)” Y-coordinate and “Longitude (6)” X-coordinate, please provide either:
- i. Accurate reading of coordinates in Degree Minute Seconds (DMS) format.
 - ii. Accurate reading of coordinates in Decimal Degree (DD) format.
- B. Options for “Tower Type(7)”, please mention:
- i. Tension
 - ii. Suspension
 - iii. Others, please specify
- C. Procedure to manually capture geographic co-ordinates (Latitude and Longitude) is as follows:
- i. Open an internet browser (Google Chrome/Microsoft Internet Explorer/Microsoft Edge/Mozilla Firefox) and go to Google Maps website-www.maps.google.com/
 - ii. Pan and Zoom to the location. Place the mouse cursor at the location of Tower and click the right mouse button.
 - iii. As the side menu opens, use the left mouse button to click on the first option denoted with the co-ordinates. These co-ordinates are decimal numbers and will automatically be copied to the system.
 - iv. Use the right mouse button to paste the copied co-ordinates to the soft copy table within respective rows for Latitude and Longitude. Number format and range of co-ordinates is given below:

- | | |
|---------------------|---|
| a) Latitude | from: 25.02253375416164 (25°01'21.12151") |
| | to 26.12109622477314 (26°07'15.94641") |
| b) Longitude | from: 89.80590801378818 (89°48'21.26885") |
| | to 92.80377633093802 (92°48'13.59479") |

While capturing, it is to be ensured that latitude and longitudinal values are accurately mentioned up to 5 decimal places and height of the asset to 2 decimal places.

Reference for filling the data requirement:

- A. Options for "Latitude (4)" Y-coordinate and "Longitude (5)" X-coordinate, please provide either:
- Accurate reading of coordinates in Degree Minute Seconds (DMS) format.
 - Accurate reading of coordinates in Decimal Degree (DD) format.
- B. Options for "Type of Sub-Station (7)", please mention:
- AIS
 - GIS
 - Hybrid
 - Others, please specify
- C. For "Nature of Sub-Station (9)", please mention:
- ISTS
 - Generation Switchyard
 - Others, please specify
- D. For "Mode of Implementation (10)", please mention:
- TBCB
 - RTM
 - Name of Funding Scheme
 - Others, please specify
- E. For "Owner (12)", please mention:
- POWERGRID
 - Adani
 - DVC
 - NTPC
 - TATA
 - ReNew
 - GMR
 - Avaada
 - JSW
 - Others, please specify
- F. For "Status (13)", please mention:
- Commissioned
 - Under Construction
 - Under Bidding
 - Planned
 - Others, please specify
- G. For "Transformation Capacity (15)", please mention in the format - x c 2x1500 MVA, 765/400 kV or 3x500 MVA, 400/220 kV or 1x160 MVA, 220/132 kV etc.
- H. Procedure to manually capture geographic co-ordinates (Latitude and Longitude) is as follows:
- Open an internet browser (Google Chrome/Microsoft Internet Explorer/Microsoft Edge/Mozilla Firefox) and go to Google Maps website- www.maps.google.com/
 - Pan and Zoom to the location. Place the mouse cursor at the location of Sub-station and click the right mouse button.
 - As the side menu opens, use the left mouse button to click on the first option denoted with the co-ordinates. These co-ordinates are decimal numbers and will automatically be copied to the system.
 - Use the right mouse button to paste the copied co-ordinates to the soft copy table within respective rows for Latitude and Longitude. Number format and range of co-ordinates is given below:
 - Latitude** from: 25.02253375416164 (25°01'21.12151") to 26.12109622477314 (26°07'15.94641")
 - Longitude** from: 89.80590801378818 (89°48'21.26885") to 92.80377633093802 (92°48'13.59479")
 - While capturing, it is to be ensured that latitude and longitudinal values are accurately mentioned up to 5 decimal places and height of the asset to 2 decimal places.

Reference for filling the data requirement:

A. Options for “Conductor Type (6)”, please provide:

- i. Moose
- ii. Zebra
- iii. HTLS
- iv. Panther
- v. Others, please specify.

B. Options for “Bundling Type (7)”, please mention:

- i. Single
- ii. Twin
- iii. Triple
- iv. Quad
- v. Hexa
- vi. Others, please specify

C. For “Nature of the line (8)”, please mention:

- i. ISTS
- ii. Dedicated Transmission line
- iii. Others, please specify

D. For “Owner (9)”, please mention:

- i. POWERGRID
- ii. Adani
- iii. DVC
- iv. NTPC
- v. TATA
- vi. ReNew
- vii. GMR
- viii. Avaada
- ix. JSW
- x. Others, please specify

E. For “Status (10)”, please mention:

- i. Commissioned
- ii. Under Construction
- iii. Under Bidding
- iv. Planned
- v. Others, please specify

F. For “Mode of Implementation (12)”, please mention:

- i. TBCB
- ii. RTM
- iii. Name of Funding Scheme
- iv. Others, please specify

G. For “OPGW (14)”, please mention - Yes / No.

H. For “OPGW Circuit (16)”, please mention:

- i. 1st Circuit
- ii. 2nd Circuit
- iii. Both Circuit
- iv. Others, please specify

- I. For “OPGW Ownership (17)”, please mention:
 - i. POWERGRID
 - ii. Adani
 - iii. Sterlite
 - iv. Others, please specify
- J. For “Total Fibers (18)”, please mention - 12 / 24 / 48 etc.
- K. For “Number of Fibers for Power applications (19)”, please mention - 2 / 4 / 6 etc.
- L. For “Number of Fibers for Telecom Services (20)”, please mention - 10 / 20 / 38 etc.
- M. Procedure to create a polyline shape in Google Earth software:
 - i. Open Google Earth software on desktop / laptop computer (Visit <https://www.google.com/earth/about/versions/#earth-pro> for download instructions) or open Google Earth on web from an internet explorer (Google Chrome/Microsoft Internet Explorer/Microsoft Edge/Mozilla Firefox) at <https://earth.google.com/> and sign in.
 - ii. Pan and Zoom to the desired location (location of the start point of the transmission line) on Google Earth platform.
 - iii. On the sidebar, go to “Places” tab. Right-click on “My Places” icon. Within the pop-up, click on “Add” and then click on “Folder” to add a new folder. Rename the newly created folder to the name of the layer to be mapped “Transmission Lines network”.
 - iv. Right-click on the newly created folder. From the pop-up, click on “add” and then click on “path” to start creating a polyline shape.
 - v. Start creating the shape by marking the centre line of the transmission line by clicking / placing the points on the median of the line.
 - vi. Use the double left-click to complete marking the path shape. Rename the path to the name of the transmission line mapped.
 - vii. Once the path shape for the power line is mapped, right-click on the master folder created in step (iii) and click on “Save place as”.
 - viii. On the prompt, save the file with appropriate name and date of mapping. The file will be saved in a “.KML” or a “.KMZ” format, which is compatible with PM GatiShakti National Master Plan.