सत्यमेव जयते
Department of Land Resources,
Ministry of Rural Development

NAKSHA
NAtional geospatial Knowledge-based land Survey of urban HAbitations
शहरी भूमि की सही पहचान

User Manual of NAKSHA

Desktop Application

Designed and Developed by

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1. Overview

The Madhya Pradesh State Electronics Development Corporation (MPSEDC) has been entrusted with the development of the NAKSHA Project as its technology partner. Launched by the Department of Land Resources (DoLR), NAKSHA is an initiative to modernize urban land records in 152 cities across India. By integrating existing land records with new survey data through advanced geospatial technologies like aerial and satellite mapping, the project aims to improve urban governance, streamline property ownership records, and reduce land disputes. Additionally, NAKSHA supports better infrastructure planning, fair property taxation, and transparent land management, ensuring real-time data access and seamless integration with state land records while maintaining secure, role-based access for different stakeholders.

2. About Desktop Application

The NAKSHA Desktop Application is a tool designed for survey agencies like Survey of India and drone operators to upload, validate, and manage geospatial survey data. It supports the secure upload of Orthorectified Image (ORI) in .tpk format and feature-extracted map files in .gdb format, ensuring that all survey data meets predefined geometry and schema validation standards before integration into the system. The application facilitates seamless data synchronization with the NAKSHA WebGIS Portal, allowing real-time updates and accurate mapping. Access to the application is restricted through role-based authentication, ensuring that only authorized users can upload and manage survey data. Additionally, it includes error reporting and logging mechanisms to track upload issues, providing a transparent record of all processed files. This desktop utility plays a crucial role in ensuring that high-quality, validated geospatial data is efficiently integrated into the NAKSHA system, supporting urban land management and decision-making.

3. Access Desktop Application:

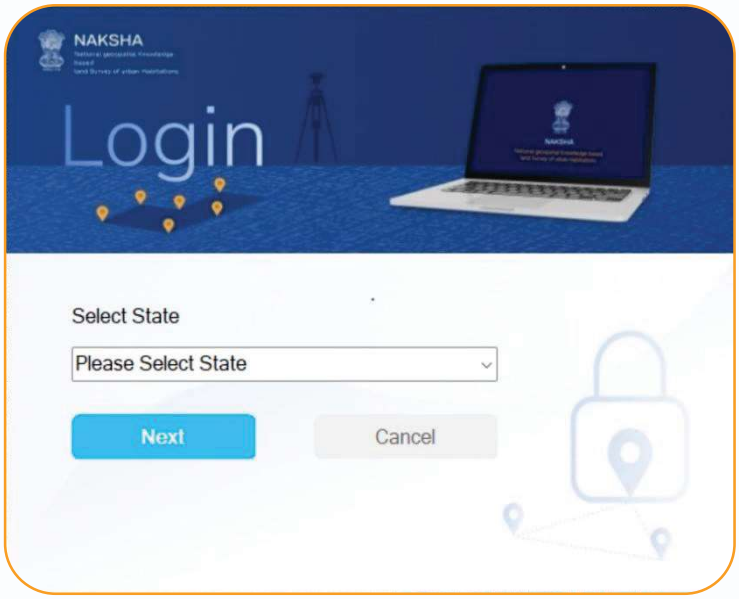
Step 1: Launch the Application

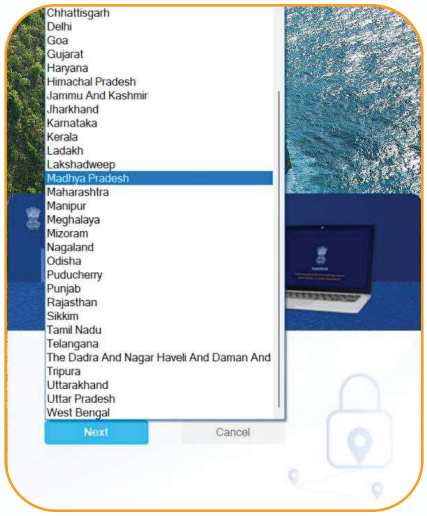
- Locate the NAKSHA Desktop Application icon on your desktop or search for "NAKSHA" in the Start Menu.
- Double-click the icon to open the application

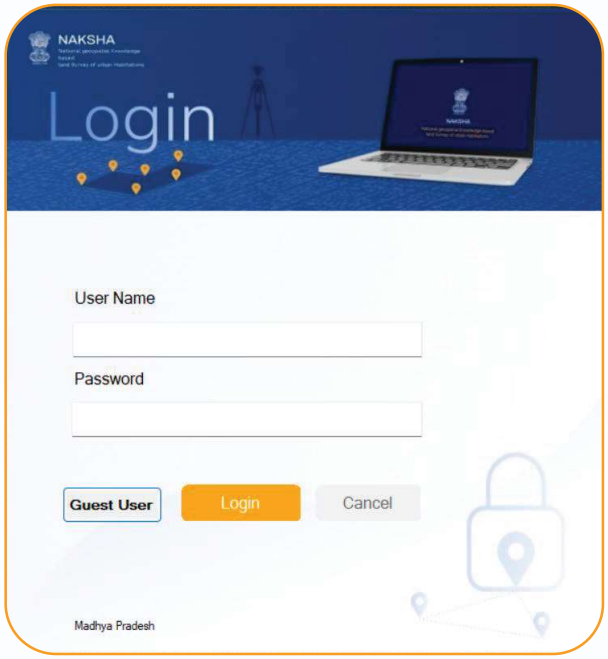
4. Login Page

Step 2: Select State

- On application startup, select the state from dropdown.
- After selecting state click on the Next button to proceed further to login screen.







Step 3: Guest Login

- Click on the Guest Login button to access the modules.
- In this module the user can validate both files without login.
- The upload file mechanism is restricted for the guest users.

Step 4: Login to Your Account

- On the login screen, enter your username and password.
- Click "Login" to proceed.

Verify Access & Connectivity

- Ensure your system is connected to the internet for real-time data synchronization.
- If the application requires server authentication, allow a few moments for it to validate your credentials.

Step 5: Navigate to File Upload Section

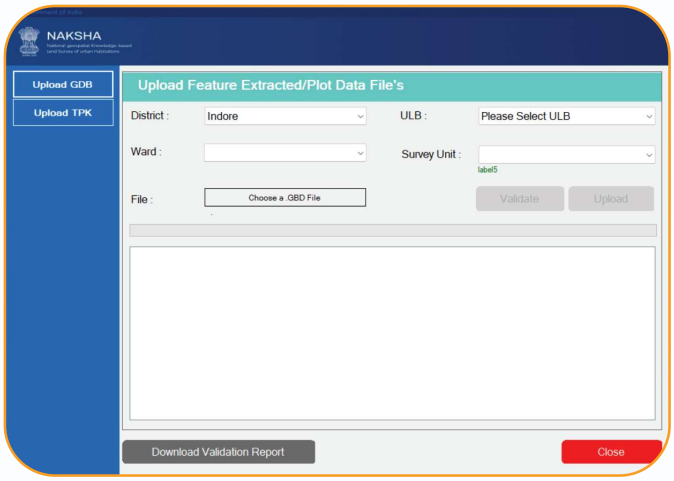
- Click on the Sector ID of the case you need to process.
- The system will redirect you to the next page, where you will see menu options for:
  - Upload GDB File
  - Upload TPK File

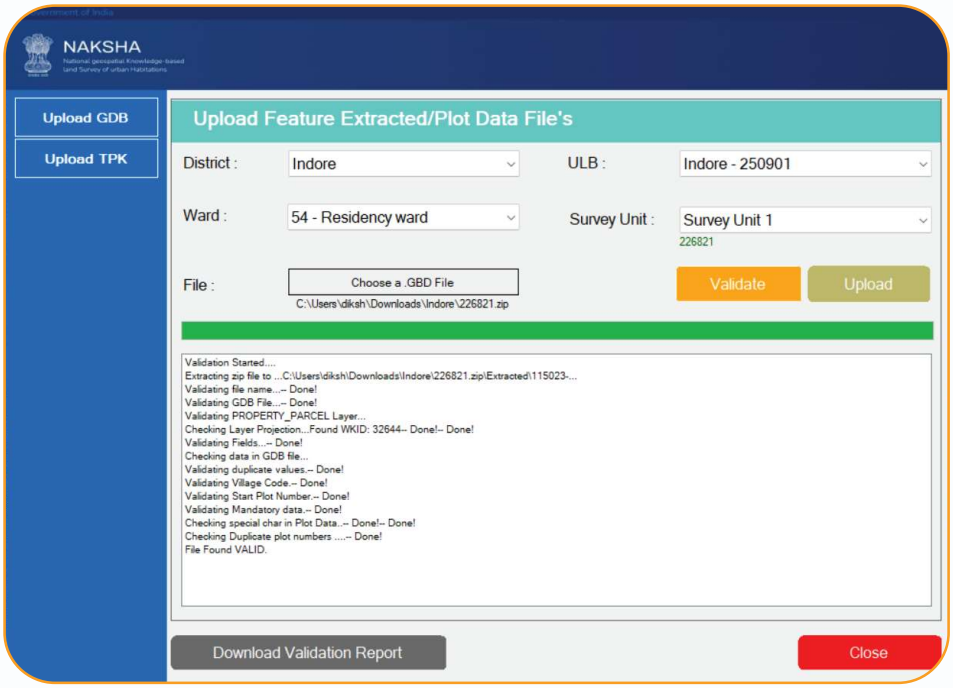
5. Validate & Upload Feature Extraction/Plot Data File's

Step 6: validate & Upload GDB File

- Click on "Upload GDB File" from the menu.
- Select the District, ULB, Ward, and Survey Unit from the dropdown lists.
  - The dropdown will only display jurisdiction assigned to the user.
- Fill in the required form fields.
- Click "Choose File", select the GDB file from your system, and click "Open".
- Click "Validate File" to check for errors.
  - If the file fails validation: Errors will be highlighted, and corrections must be
  - made before proceeding.
  - If the file passes validation: The system will return a success message.
  - Users can download the validation report after the file has been validated.

- Once the file is successfully validated, click "Upload File" to complete the process.
- The system will display the upload status and generate an alert once the upload is successful.

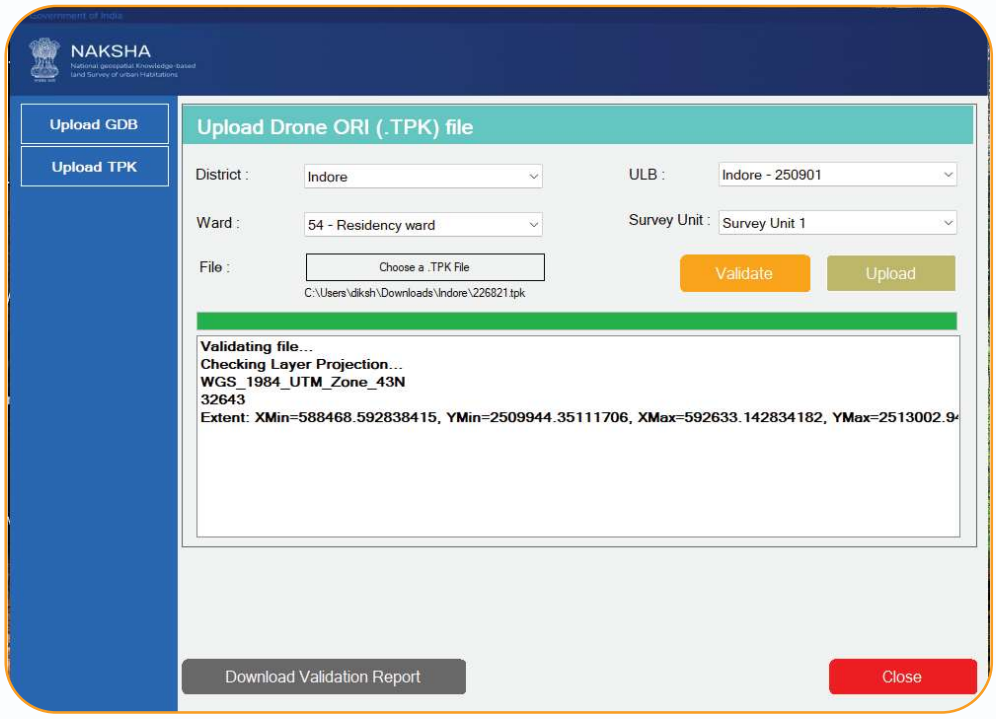


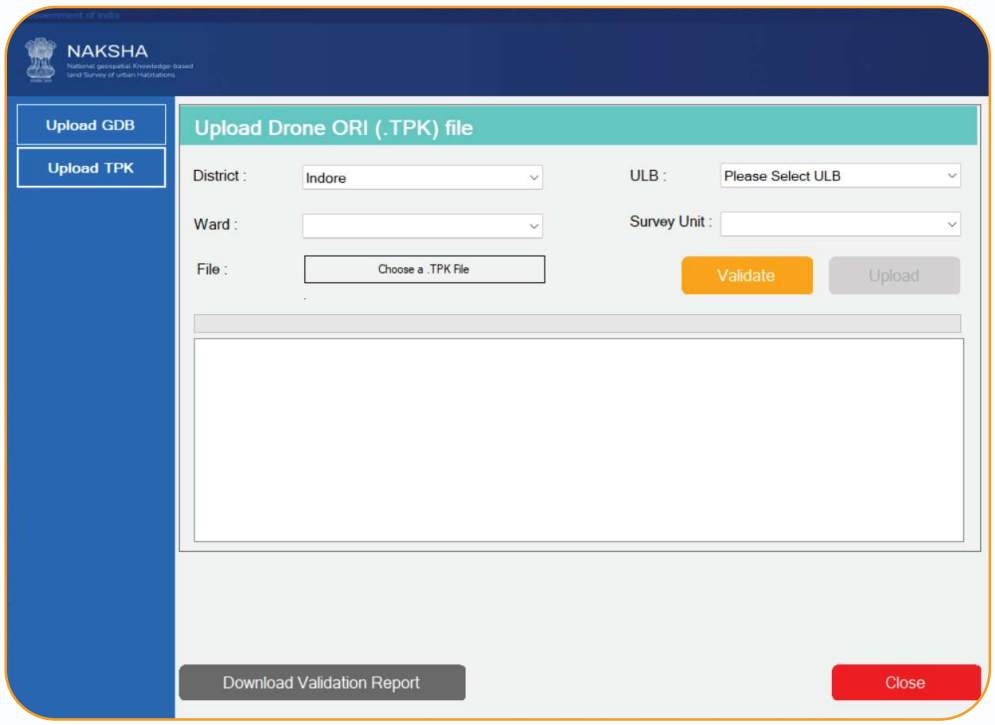


6. Validate & Upload Drone Orthorectified Image (ORI) (.tpk) file

Step 7: Validate & Upload TPK File

- Click on "Upload ORI File" from the menu.
- Select the District, ULB, Ward, and Survey Unit from the dropdown lists.
  - The dropdown will only display the jurisdiction assigned to the user.
- Fill in the required form fields.
- Click "Choose File", select the TPK file from your system, and click "Open".
- Click "Validate File" to check for errors.
  - If the file fails validation: Errors will be highlighted, and corrections must be made before proceeding.
  - If the file passes validation: The system will return a success message.
  - Users can download the validation report after the file has been validated.
- Once the file is successfully validated, click "Upload File" to complete the process.
- The system will display the upload status and generate an alert once the upload is successful.





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