Maharashtra Industrial Township Limited

(A Government Undertaking)

NIQ No.: MITL/NIQ/ICT/26-27/008
Date: 07/08/2026

NOTICE INVITING QUOTATION

Subject: Quotations are invited for the Design, development, testing, deployment and 1-year O&M Support for an online lottery solution for the allotment of PAP plots for MITL.

MITL is inviting quotations from competitive bidders for the below-mentioned scope of work: in a sealed envelope within seven (7) working days, i.e., before 15:00 Hrs, dt.-13/08/2026, at Quotation Box, 5th Floor, AURIC Hall Building, AURIC City Shendra, DMIC Area, Chh.Sambhajinagar.
Write the subject on the envelope – "**PAP Lottery portal"**

To,
Joint Managing Director,
Auric City Shendra, Chha. Sambhajinagar- 431154

Price Schedule

Sr.No.	Description	Amount (Rs) Excluding GST
1	**Design, development, testing, deployment and 1-year O&M Support for an online lottery solution for the allotment of PAP plots for MITL.**	

Note:

1. The go-live timeline for this portal shall be 15 days from the date of issuance of the Work Order.
2. The cloud server will be provided by MITL
3. Contractor Scope:
    a. The agency shall design, develop, implement, and commission the Online Lottery Portal for MITL as per the Scope of Work.
    b. The agency shall provide comprehensive Operation and Maintenance (O&M) services for the portal, including on-site technical support throughout the contract period.
    c. The agency shall be responsible for providing and bearing all cloud hosting and related infrastructure charges required for the operation of the portal.
4. MITL shall make payment to the agency on a subscription basis, based on the number of PAP plots successfully allotted to the beneficiaries (farmers) through the Online Lottery Portal

Contact Persons: Mr. Sadashiv Lokhande,
Manager-IT, MITL
Mob-9850535018, email- managerit@mitl.org.in
Thank you.

Sd,
MITL

Lottery Platform for PAP plots

Detailed Scope of Work and Functional Requirement Document

Document Sections

1. Project Overview

The system is a web-based land allotment preference and lottery platform for the MITL / AURIC Bidkin plot allotment process. The platform will allow eligible applicants/customers to log in, view only the plots made available to them, submit plot preferences, receive submission receipts, and later view final allotment confirmation after admin approval.

The backend/admin system will allow MITL/admin users to upload all customer and plot data, define special request and merge request cases, configure lottery rules, execute the lottery engine, review provisional results, confirm final allotments, generate reports, and maintain complete audit records.

The system must be designed to reduce manual intervention while still allowing MITL/admin to control data, rules, result confirmation, communication, and reporting.

2. Core Objective

- Customer login using AURIC ID / AURIC credentials.
- Customer-wise plot visibility based on backend mapping.
- Customer preference submission with final submission lock.
- Automatic submission receipt generation with PDF and email.
- Special request case handling through backend plot mapping.
- Merge request case handling for linked / adjacent / merged plot scenarios.
- General lottery processing for remaining eligible customers.
- Weighted allocation logic using preference rank and loss count.
- Admin-controlled result review, confirmation, and final publishing.
- Final allotment confirmation through portal, email, and PDF.
- Operational reporting, audit reporting, and email logs.
- Relisting / second-round allocation where plots remain unallocated.

3. User Roles

3.1 Customer / Applicant

- Log in using AUR ID/ AURIC credentials.
- View only the plots mapped to them.
- Select plots in order of preference.
- Submit final preference list.
- Receive submission receipt.
- Download preference receipt PDF.
- View allocation status.
- View final allotted plot after admin confirmation.
- Download final allotment confirmation PDF.
- View communication history.

3.2 Admin

- Upload customer data, plot data, customer-wise plot mapping, special request data, and merge request data.
- Validate uploaded data and manually correct records where required.
- Lock and unlock data before lottery with reason capture.
- Configure lottery rules, plot processing order, repeated-loss threshold, exhausted preference handling, and non-submission handling.
- Run or schedule lottery execution.
- Review provisional allocation results.
- Confirm final allocations.
- Trigger final allotment emails and PDF generation.
- Download operational reports and audit reports.
- Initiate cancellation / re-allotment workflow where required.

4. Data Inputs Required

Dataset	Expected Fields / Notes
Customer Data	Customer name, AUR ID, AURIC login credential reference, email ID, mobile number, application number, eligibility status, category if applicable, plot size eligibility if applicable, MITL-specific reference ID.
Plot Data	Plot ID, plot number, plot size, category, location/sector/zone if applicable, availability status, eligibility category if applicable, remarks.
Customer-wise Plot Mapping	AUR ID, customer name, plot ID/plot number, plot visibility status, mapping category, remarks. This controls which plots a customer can view and select.
Special Request Data	AUR ID, customer name, requested plot number, request type, approval/reference remarks, status.
Merge Request Data	Primary customer AUR ID, linked customer AUR ID if applicable, plot numbers involved, merge request type, merge group ID, remarks, status.

5. High-Level System Flow

Admin uploads customer, plot, mapping, special request, and merge request data
↓
System validates uploaded data
↓
Admin corrects errors if needed
↓
Admin locks dataset
↓
System separates special request, merge request, and general lottery cases
↓
Customers log in and submit preferences
↓
System generates submission receipt
↓
Admin configures lottery rules
↓
System identifies non-contested and contested plots
↓
Non-contested plots become recommended allocations
↓
Contested plots go through weighted lottery
↓
System generates provisional results
↓
Admin reviews and confirms final results
↓
Customer receives final allotment confirmation
↓
Reports and audit logs are generated
↓
Relisting round is triggered if required

6. Customer Portal Functional Scope

6.1 Customer Login

- Login screen for AUR ID / AURIC credential entry.
- AUR ID / credential validation.
- Error message for invalid login.
- Customer-specific dashboard after successful login.
- No access to other customers' data.

```
Customer enters AUR ID / credentials
↓
System validates customer
↓
System loads customer-specific mapped plots
↓
Customer dashboard opens
```

6.2 Customer Dashboard

- Customer name
- AUR ID
- Application reference
- Current submission status
- Available plots mapped to customer
- Preference submission status
- Receipt download option
- Final allotment status once confirmed
- Final confirmation PDF download option
- Communication history

6.3 Controlled Plot Visibility

The system must ensure that the customer sees only the plots mapped to them. The customer should not be able to view, search, or select plots outside their mapped list.

- Customer cannot view unmapped plots.
- Customer cannot select plots outside their mapped list.
- If only one plot is mapped, customer sees only that one plot.
- For special request cases, the customer sees only the plot specifically blocked/mapped for them.
- General lottery customers see only the plots made available to them by backend mapping.

```
Customer logs in
↓
System reads AUR ID
↓
System checks Customer-Plot Mapping table
↓
System displays only mapped plots
```

6.4 Preference Selection

- Show list of available mapped plots.
- Allow customer to arrange/select preference order.
- Prevent duplicate plot selection.
- Validate minimum and maximum preference count if defined.
- Show confirmation summary before final submission.

Preference 1 - Plot A
Preference 2 - Plot B
Preference 3 - Plot C

6.5 Final Submission Lock

- Show final confirmation prompt before submission.
- Lock submission after confirmation.
- Disable editing after submission.
- Generate unique submission ID.
- Store timestamp.
- Generate receipt.
- Send automatic email receipt.

Customer selects preferences
↓
Customer clicks Submit
↓
System shows final confirmation prompt
↓
Customer confirms
↓
Submission is locked
↓
Receipt is generated

6.6 Preference Submission Receipt

- Submission ID
- Customer name
- AUR ID
- Application reference
- Submitted preference list
- Date and time of submission
- Declaration / acknowledgement
- System confirmation message
- Downloadable PDF receipt
- Email receipt to customer
- Backend record for admin

6.7 Final Allotment View

- Final allotted plot
- Allotment / reservation status
- Date and time of confirmation
- Final confirmation PDF
- Communication history

Customer should not see provisional lottery results before admin confirmation.

7. Admin Backend Functional Scope

7.1 Admin Login

- Admin login screen.
- Secure authentication.
- Admin dashboard after login.
- One admin role with full access for current scope.

7.2 Admin Dashboard

- Customer data section
- Plot data section
- Customer-plot mapping section
- Special request section
- Merge request section
- Preference submission tracking
- Lottery configuration
- Lottery execution
- Provisional results
- Final confirmation
- Reports
- Audit logs
- Email logs
- Relisting management

8. Data Upload Module

Admin should be able to upload structured Excel / CSV files for each major data category.

- Customer master data
- Plot master data
- Customer-wise plot mapping
- Special request data
- Merge request data
- General lottery applicant data
- File upload interface.
- Format validation.
- Required field validation.
- Duplicate detection.
- Invalid mapping detection.
- Preview imported data.
- Allow manual corrections.
- Save validated records.
- Maintain upload history.

Admin uploads Excel / CSV file
↓
System validates file structure
↓
System validates records
↓
Admin reviews imported data
↓
Admin corrects records if required
↓
Admin confirms upload

9. Data Validation Module

- Customer ID / AUR ID validity.
- Plot ID validity.
- Duplicate customers.
- Duplicate plot mappings.
- Missing required fields.
- Invalid special request mappings.
- Invalid merge request mappings.

- Plot already marked unavailable.
- Customer mapped to wrong category.
- Customer assigned to multiple conflicting special cases.
- Merge request plot conflict.
- General lottery plot conflict.

If validation fails, the system should show an error list to admin, allow admin to correct records, and prevent lottery execution until data passes validation.

10. Data Locking Module

- Admin can lock validated dataset.
- Lottery can run only on locked data.
- Admin can unlock data before lottery only by entering reason.
- Unlock action must be captured in audit log.
- After correction, data must be revalidated and locked again.

Admin validates data
↓
Admin locks dataset
↓
System marks dataset ready for allocation
↓
If correction needed:
  Admin unlocks with reason
  System records audit log
  Admin corrects data
  System revalidates data
  Admin locks again

11. Case Classification Module

Once data is locked, the system must classify records into: special request cases, merge request cases, and general lottery cases.

Case Type	System Behaviour
Special Request Cases	Specific plots are mapped to specific customers. The plot is hidden from all other customers. Customer sees only the special request plot and selects it. System marks it as recommended reservation, then admin confirms.
Merge Request Cases	Linked customers/plots are grouped based on uploaded merge request data. These plots are excluded from normal lottery unless admin releases them. Admin reviews and confirms or releases them.
General Lottery Cases	All remaining eligible customers and plots move into the general preference and lottery workflow.

11.1 Special Request Flow

Admin uploads special request data
↓
System maps Plot A to Customer X
↓
Plot A hidden from others
↓

Customer X logs in
↓
Customer X sees only Plot A
↓
Customer X selects Plot A
↓
System marks recommended reservation
↓
Admin confirms

11.2 Merge Request Flow

Admin uploads merge request data
↓
System identifies linked customers and plots
↓
System marks merge group
↓
Merge plots excluded from normal lottery
↓
Admin reviews
↓
Admin confirms or releases

12. Preference Submission Tracking

Admin should be able to monitor submission status across all customers and categories.

- Total eligible customers
- Submitted customers
- Non-submitted customers
- Special request customers
- Merge request customers
- General lottery customers
- Submission timestamp
- Receipt status
- Email receipt status
- Filters: Submitted, Not submitted, Special request, Merge request, General lottery, Customer name, AUR ID, Plot number.

13. Non-Contested Plot Handling

If only one customer selects a plot, the system should recommend allocation but should not finalize automatically.

- System identifies non-contested plots.
- System marks customer as provisionally allocated.
- Customer is removed from all other lottery pools.
- Admin reviews recommendation.
- Admin confirms final reservation.

Only one customer selects Plot A
↓
System marks Plot A as non-contested
↓

System recommends Plot A for that customer
↓
Customer marked provisionally allocated
↓
Customer removed from other pools
↓
Admin confirms final reservation

14. Customer Exit Rule

Once a customer receives a recommended allocation, they must exit all remaining allocation cycles to prevent double allocation.

Customer receives recommended allocation
↓
Customer marked provisionally allocated
↓
Customer removed from all other contested plot pools
↓
Remaining cycles continue without that customer

15. Contested Plot Lottery Module

A plot becomes contested if more than one customer selects it. For contested plots, the system must run weighted lottery logic.

Input to Lottery Engine	Description
Plot ID	The plot being processed.
Claimant Customers	List of customers contesting the plot.
Preference Rank	Rank at which each customer selected the plot.
Loss Count	Number of previous lottery losses for each customer.
Weight Model	Admin-configured preference and loss weighting.
Plot Processing Order	Configured order for processing plots.
Repeated-Loss Threshold	Optional forced priority rule based on repeated losses.

Contested plot identified
↓
System checks each claimant
↓
System calculates weighted score
↓
Lottery winner is selected
↓
Winner marked provisionally allocated
↓
Losers move to next eligible preference
↓
Loss count updated

16. Lottery Configuration Module

Admin should configure lottery rules before running. All configuration must be locked before lottery execution and stored in audit logs.

- Lottery trigger mode
- Plot processing order
- Preference rank weight
- Loss count weight
- Repeated-loss threshold
- Exhausted preference handling
- Non-submission handling
- Relisting eligibility

17. Lottery Trigger

- Manual Run: Admin clicks Run Lottery.
- Scheduled Run: Admin sets a date and time for execution.

Preference submissions locked
↓
Admin reviews submitted data
↓
Admin chooses manual or scheduled run
↓
System executes lottery
↓
Provisional results generated

18. Weighted Lottery Logic

The lottery should consider both preference rank and loss count. The scoring values below are suggested defaults and should be configurable by admin before execution.

Component	Suggested Default
Preference 1	100 points
Preference 2	80 points
Preference 3	60 points
Preference 4	40 points
Preference 5 onwards	20 points
Each prior loss	+20 points

Example:
Customer selected Plot A as Preference 1
Customer has 2 prior losses

Preference score = 100
Loss score = 40
Total weighted score = 140

Once locked, the selected weight model must be stored in the audit trail.

19. Repeated-Loss Threshold

System should support configurable repeated-loss priority.

- No forced priority.
- Forced priority after 4 losses.
- Forced priority after 5 losses.
- Forced priority after 6 losses.
- Loss count increases when customer loses a contested lottery.
- If configured threshold is reached, customer gets highest priority consideration.
- Allocation still depends on eligible inventory availability.

```
Customer loses lottery cycle
↓
Loss count increases
↓
System checks threshold
↓
If threshold not reached:
  Customer continues with weighted leverage
↓
If threshold reached:
  Customer moves to highest priority consideration
```

20. Plot Processing Order

Admin should configure plot processing order before lottery.

- Smallest to largest plot number.
- Highest to lowest plot size.
- Lowest to highest plot size.
- Custom admin-defined order.

```
Admin selects processing order
↓
System locks order
↓
Lottery cycles process plots in selected order
↓
Processing order stored in audit log
```

21. Exhausted Preference Handling

If a customer loses all selected preferences, system should apply the configured rule.

- Move customer to manual review.
- Auto-assign remaining eligible plot.
- Ask customer to submit new preferences.

- Keep customer pending / waitlisted.

Customer loses all preferences
↓
System checks configured rule
↓
Configured action applied
↓
Customer status updated
↓
Admin can review exception list

22. Non-Submission Handling

If customer does not submit preferences before deadline, system applies the configured rule.

- Exclude from allotment.
- Move to manual review.
- Auto-assign from remaining eligible plots.
- Keep pending / waitlisted.

Submission deadline closes
↓
System identifies non-submitters
↓
System checks configured rule
↓
Action is applied
↓
Customer status updated

23. Provisional Results Module

After lottery execution, system generates provisional results. Provisional results must not be visible to customers.

- Customer name
- AUR ID
- Allocated plot
- Allocation type
- Preference rank
- Contested / non-contested flag
- Lottery score
- Loss count
- Status
- Remarks

24. Admin Result Review and Confirmation

- View provisional result list.
- Filter by allocation type.
- Review special request results.
- Review merge request results.
- Review general lottery results.
- Confirm final allocation.
- Trigger final notification.

- Generate final report.

```
Lottery completed
↓
System generates provisional results
↓
Admin reviews
↓
Admin confirms
↓
System publishes final result
↓
Customer notified
```

25. Final Allotment Confirmation

After admin confirmation, customer receives final allotment confirmation.

- Customer name
- AUR ID
- Confirmed plot number
- Reservation / allotment status
- Date and time of confirmation
- Admin confirmation reference
- Downloadable PDF
- Email confirmation
- Portal status update

```
Admin confirms final allocation
↓
System updates status as Reserved / Allotted
↓
System generates final confirmation PDF
↓
Admin triggers email
↓
Customer receives confirmation
↓
Customer dashboard updates
```

26. Relisting / Second-Round Allocation

If plots remain unallocated after first cycle, admin can trigger relisting.

- Show unallocated plots.
- Show pending customers.
- Allow admin to configure relisting eligibility.
- Allow eligible customers to submit fresh preferences.
- Run allocation engine again for relisting round.
- Generate separate relisting report.

First allocation cycle completes
↓
System identifies unallocated plots
↓
System identifies pending customers
↓
Admin configures relisting eligibility
↓
Eligible customers submit fresh preferences
↓
System runs next allocation cycle

27. Relisting Eligibility

- Customers not allotted any plot.
- Customers who exhausted all preferences.
- Pending customers.
- Non-submitters.
- Special cases moved to review.
- Other admin-approved eligible customers.

28. Email Notification Module

28.1 Automatic Emails

Preference submission receipt email should be sent automatically.

28.2 Admin-Triggered Emails

Final allotment confirmation email should be sent only after admin confirmation. Email logs must be maintained.

- Customer name
- AUR ID
- Email ID
- Email type
- Sent timestamp
- Delivery status if available
- Attachment reference
- Error message if failed

29. PDF Generation Module

PDF Type	Required Content
Preference Submission Receipt PDF	Submission ID, customer name, AUR ID, preference list, timestamp, declaration, confirmation message.
Final Allotment Confirmation PDF	Customer name, AUR ID, final allotted plot, confirmation status, confirmation date, reference number, admin confirmation reference.

30. Reports Module

Report	Fields / Purpose

Submission Report	Customer name, AUR ID, submission status, submitted preferences, submission timestamp, receipt generated status.
Allocation Report	Customer name, AUR ID, allotted plot, allocation status, preference rank, contested/non-contested flag, lottery result status.
Special Request Report	Customer name, AUR ID, requested plot, status, admin remarks.
Merge Request Report	Merge group ID, linked customers, linked plots, status, admin remarks.
Pending / Unallocated Report	Pending customers, exhausted preference customers, non-submitters, unallocated plots, relisting eligibility.
Audit Report	Admin actions, customer actions, lottery configurations, lottery execution timestamps, weight settings used, plot processing order, result confirmation history.

31. Audit Trail Module

Every important action must be logged.

- User type
- User ID
- Action performed
- Timestamp
- Old value
- New value
- IP address if available
- Remarks/reason where applicable
- Customer login
- Customer preference submission
- Admin login
- Data upload
- Data edit
- Data lock
- Data unlock
- Lottery configuration update
- Lottery run
- Result generation
- Result confirmation
- Email trigger
- PDF generation
- Relisting trigger
- Cancellation / re-allotment action

32. Cancellation / Re-Allotment Workflow

Once final result is published, admin cannot casually edit allotment. A formal workflow is required.

- Admin initiates cancellation / re-allotment.
- Admin enters reason.
- System records remarks.
- System stores old and revised status.
- Audit log captures action.
- Revised result published only after confirmation.

Final result published ↓

Change required
↓
Admin initiates cancellation / re-allotment
↓
Reason entered
↓
System records change
↓
Admin confirms revised output
↓
Customer notified if required

33. Suggested Statuses

Entity	Statuses
Customer Statuses	Not Submitted; Submitted; Provisionally Allocated; Allotted / Reserved; Pending; Waitlisted; Manual Review; Re-Allotment Initiated; Cancelled.
Plot Statuses	Available; Mapped; Special Request Reserved; Merge Request Reserved; Contested; Non-Contested; Provisionally Allocated; Allotted / Reserved; Unallocated; Released for Relisting.
Lottery Statuses	Not Started; Configured; Scheduled; Running; Completed; Under Admin Review; Confirmed; Published; Relisting Required.

34. Suggested Database Entities

- AdminUsers
- Customers
- Plots
- CustomerPlotMappings
- SpecialRequests
- MergeRequests
- PreferenceSubmissions
- PreferenceSubmissionItems
- LotteryConfigurations
- LotteryRuns
- LotteryRunResults
- LossCounts
- RelistingRounds
- RelistingEligibility
- EmailLogs
- GeneratedDocuments
- AuditLogs
- CancellationReallotmentRequests

35. Suggested Screens

Customer Screens	Admin Screens
Customer login screen	Admin login screen
Customer dashboard	Admin dashboard
Available plots screen	Customer data upload screen
Preference selection screen	Plot data upload screen

Preference confirmation screen Submission receipt screen Final allotment status screen Document download screen	Mapping upload screen Special request management screen Merge request management screen Data validation screen Data lock/unlock screen Preference submission tracking screen Lottery configuration screen Lottery execution screen Provisional results screen Final confirmation screen Relisting management screen Reports screen Email logs screen Audit logs screen Cancellation / re-allotment screen

36. Non-Functional Requirements

Area	Requirement
Security	Secure login for admin and customers. Customer should access only their own data. Admin access should be protected. Sensitive data should not be exposed publicly.
Performance	System should handle approximately 1,000 customers and multiple lottery cycles. Reports should be downloadable without major delay.
Auditability	Every major action must be logged. Lottery configuration and results must be traceable. Result changes must be auditable.
Reliability	Data should not be lost after submission. Lottery should run only on locked and validated data. PDF and email records should be stored.
Flexibility	Lottery weights, plot processing order, non-submission handling, exhausted preference handling, and relisting eligibility should be configurable.

37. Current Scope Exclusions

- GIS/map-based plot visualization.
- Mobile application.
- Payment gateway.
- SMS / WhatsApp gateway.
- Third-party ERP integration.
- Multi-role department-wise access control.
- AI recommendation engine.
- Public broadcast/live lottery presentation interface.
- Advanced analytics beyond agreed reports.
- Any functionality not directly linked to allotment workflow.

38. Development Priority

The platform should be developed on priority. The core MVP should focus first on the following modules:

17. Admin data upload
18. Customer login
19. Customer-wise plot visibility
20. Preference submission

21. Receipt generation
22. Special request handling
23. Merge request handling
24. General lottery engine
25. Provisional results
26. Admin confirmation
27. Final customer confirmation
28. Reports and audit logs

Secondary items such as enhanced dashboards, advanced filters, additional report formats, and extended re-allotment controls can be refined after the core workflow is stable.

39. Final Engineering Summary

The system should work as a complete allotment workflow engine. Admin will upload the data and configure the rules. Customers will log in and submit preferences. The system will separate special request, merge request, and general lottery cases. Non-contested plots will be recommended for allocation. Contested plots will be processed through weighted lottery logic. Admin will review and confirm results before customers are notified. The system will generate receipts, final confirmation PDFs, reports, email logs, and audit trails.

Admin controls the data and rules.
Customer submits preferences.
Engine performs allocation.
Admin confirms final result.
System generates proof, reports, and audit trail.