

KERALA FOREST DEPARTMENT

**THRISSUR ZOOLOGICAL PARK, WILDLIEF
CONSERVATION & RESEARCH CENTRE (TZP)**

PUTHUR P.O, NEAR KURISUMoola THRISSUR, KERALA -680 014



(EOI)

EXPRESSION OF INTEREST – DOCUMENT

FOR

**END TO END COMPUTERIZATION OF TZP
(eGov-TZP)**

EOI No: <427/24>

Date: <28-01-2025>

Issued by

THRISSUR ZOOLOGICAL PARK (TZP)

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1. Notice Inviting EOI

THRISSUR ZOOLOGICAL PARK (TZP)	
Invites Expression of Interest (Eol) FROM SYSTEM SOLUTION PROVIDERS FOR Implementation of End to End computerization for TZP operations	
Thrissur Zoological Park, Wildlife Conservation & Research Centre (TZP) invites Expression of Interest from Total Solution Provider(TSP) of Government of Kerala for IT/ITeS and experienced Solution providers registered under Kerala Startup Mission(KSUM) for IT/ITeS for carrying out activities related to end-to-end computerization of Zoological Park and Research Centre (TZP) with at least 5 years of support in operation .	
How to get copy of Eol document	Interested Solution providers, who have proven record in Requirement analysis, Customization, Migration, Implementation and Operation & Maintenance of large web based enterprise wide Integrated Enterprise Resource Planning & Management System, may download the Eol document containing relevant details including scope of the project, clear set of requirements, pre-qualification criteria, from the official website of department of Forest , Govt. of Kerala https://forest.kerala.gov.in . Eol fees needs to be submitted along with the proposal, failing which the proposal would be summarily rejected or else document proof for exemption shall be submitted
How to Submit the Proposal for the Eol	The Proposal for Eol and other relevant documents shall be sent by post or e-mail to The Director Thrissur Zoological Park Puthur P.O, Near Kurisumoola Thrissur, Kerala -685 014 Email-thrissurzoologicalpark@gmail.com

1.1.Schedule of Events

S.NO	Details	Particulars
1.	Start date of downloading of Eol Document from https://forest.kerala.gov.in .	28-01-2025
3.	Meeting with prospective Agencies	07-02-2025
6.	Last date of submission of proposal	17-02-2025
7.	Opening date of Eol	24-02-2025
8.	Tentative date of publication of shortlisted agencies	27-02-2025
9	Tentative date of Presentation and discussion	3-03-2025

1.2.Fact Sheet

S. No.	Description	
1.	<i>Mode of Eol submission</i>	The Proposal for Eol and other relevant documents may be sent by post or e-mail to The Director Thrissur Zoological Park Puthur P.O, Near Kurisumoola Thrissur, Kerala -685 014
2.	<i>Type of proposal required</i>	<i>Expression of Interest (Eol) Pre-qualification, Technical (single cover),</i>
3.	<i>Venue of meeting with prospective Agencies</i>	Thrissur Zoological Park, Puthur ,Thrissur -6800014 Kerala state
4.	<i>Eol Fee</i>	Rs.1000 (INR Rupees Thousand Only) Or Document of proof for Exemption
5.	<i>Bank accounts details of Thrissur Zoological Park</i>	<i>Name of Bank: Canara Bank, Puthur Branch A/C No. 3533201000081 Type of A/c Current Account IFS Code CNRB0003533</i>
6.	<i>Date of presentation by bidders</i>	<i>Will be informed after completion of the shortlisting process</i>
7.	<i>Contact Person of the Director Thrissur Zoological Park..</i>	<i>The IT Nodal officer , Thrissur Zoological Park... Puthur ,Thrissur -6800014 Kerala state Mob 8907560275</i>

2. Background of the Thrissur Zoological Park

The Thrissur Zoological Park, located in the Puthur of Thrissur in the state of Kerala, India, is envisaged to be the largest and most advanced wildlife conservation and research centre in India.

Thrissur Zoological Park, the first fully designed zoo in India, designed by world famous zoo designer Jon Coe, is targeted to be commissioned in 2025. The works relating to the Park, having facilities comparable to international zoos, are in the final lap. Facilities for housing all animals in the present Thrissur Zoo which is getting fully relocated to the new site and facilities for animals to be brought from other zoos in India and zoos abroad are being set up over 338 acres for forest land at Puthur in Pattikkad Forest Range. The animal houses are established in the foothills of five interconnected hillocks spreading over a circular distance of 6 kilometers

The park will feature several different habitats, including tropical forests, grasslands, wetlands, and deserts, to provide a natural and authentic environment for the animals.

Driven by the necessity to relocate the century old State Museum and Zoo, Thrissur, to a spacious location befitting the habitat requirements of animals in captivity, State of Kerala decided in 2012 to establish a modern zoological park over 338 acres of forest at Puthur in Thrissur District. Jon Coe, the zoo designer has effectively made use of every element of the undulating forest terrain to create habitats for animals, terrestrial, arboreal and aquatic, both in indoor and outdoor spaces. Great Aviaries, nocturnal houses and open exhibits cover the chain of animal habitats in circular layout at the foot of forested hills over more than four kilometers. Zoo construction started in 2019, following strict environmental safeguards, is in the final lap and slated to be commissioned in early 2014. Rs 360 crore project is funded by State of Kerala through KIFBI including Plan fund of GoK.

It is expected that around 25 lakhs visitors including students per year might be visiting for entertainment and education purpose in the proposed Thrissur zoological Park and Research Centre. It is the policy of Government of Kerala to implement e-Governance and cater citizen centric service to public (G2C service) wherever possible.

This EoI is intended for identify the potential bidders in the market, gather information for automation, duration for the implementation of the project, and get an approximate cost for budgetary purpose and project planning. The outcome of the EOI process will be the publication of RFP for procuring the service including pre-qualification cum Technical cover and financial bid through online tender platform of Kerala Government

3. Intent of EOI

The organization is planning to implement comprehensive solution for end-to-end computerization of Zoological Park and Research Centre, aimed at enhancing operational efficiency, visitor satisfaction, and animal well-being.

The outcome of the EOI process will be the publication of RFP for procuring the service including pre-qualification cum Technical cover and financial bid through online tender platform of Kerala Government

3.1.About Expression of Interest (EOI)

This EOI has been prepared to invite solution providers to submit their best proposals/presentations to implement and maintain the solution for TZP. Information, technical design etc submitted by the solution providers in EOI shall be used for the preparation of RFP by the TZP.

3.2.EOI Process:

The Client will verify the EOI documents submitted by the applicant. Those applicants who are having sufficient experience in the field will be called for a presentation and discussion at Thrissur Zoological Park Office at Puthur, Thrissur.

Please note that the travel expenses and other incidental expenses to attend the meeting will have to be borne by the applicant.

4. PROJECT OBJECTIVES

Need and objectives of the project

The objective of the EoI is to solicit proposal from interested parties for providing solution for End to End computerization of Zoological Park and Research Centre (e-Gov-TZP) with at least 5years of support in operation.

The objective of the project is to develop a integrated solution for TZP operation by leveraging state of art technology and focusing more to the core services, where the management should be able to get more and holistic information regarding the Zoological park and research Centre operations.

Includes management of digital presence enhance, visitor engagement, ticket sales, parking , souvenir shop management logistics, access control, inventory, procurement, surveillance animal records, health monitoring, operational schedules for feeding and cleaning, sustainability initiative, accounting, etc and ensure optimal animal care, leveraging technology for efficiency and conservation.

The system will henceforth help in the activities of TZP. Implementing the system reduces the physical workload and official could keep track on the entire reports of each activities which in turn helps in the empowerment of operation.

4.1. Over all e-governance initiative envisaged in the project

Modules in ERP

- 1.Web portal with Visitors Engagement**
- 2.Ticketing system**
- 3.Wildlife conservation & Habitat management**
- 4.Procurement & Inventory management system**
- 5.Finance and Auditing**
- 6.HR Management and Payroll**
- 7.Asset Management**
- 8.MIS & Data Analytics Reports**
- 9.Seamless IoT Interoperability & Integration:**

Other Independent IT/ITeS Applications

- 1.Digital work flow (eoffice)**
- 2.Surveillance system**
- 3.Fleet Management**
- 4.E health Module**
- 5.Access control module**
- 6.IoT-enabled beacons & sensors and Proximity Alerts**
- 7.4D theatre**
- 8.Emergency Response systems with Drone**
- 9.Solar energy management**
- 10.Integration of Weighing system**

G2G Applications currently is being used in TZP or DDO

- 1 Zoo-MIS
- 2 BAMS
- 3 BIMS
- 4 E treasury
- 5 Spark
- 6 E-tender
- 7 Plan space
- 8 PFMS Gol
- 9 PRICE
- 10 PFMS-Project Finance Management System (KIIFBI)
- 11 Approved WBS (MS project)
- 12 PMAS/Mobile app also available - Project Monitoring Alert System
- 13 Bill Track – for contractor

5. Pre-Qualification (PQ)

Following are the information required from the bidder and to be filled in the following format.

S.N o.	PQ Criteria	Specific Requirements	Documents Required
1	The bidder should be TSPs of Government of Kerala for IT/ITeS or Registered under KSUM for IT/ITeS	Document proof	Copy of the GO or relevant document.
2	Eol Fee	Rs.1000 (INR Rupees Thousand Only)	Bank transaction details or Document proof for Exemption
3	The solution provider should be a IT Solution Provider with experience in the implementation and operation of similar solution ,at least one project	Minimum of one number of successful implementations of similar IT solution/ERP	Copy of the Work order and successful completion certificate from customer/client.
4	Sales Turnover in IT and ITeS services (System integration/ software development)	- Average annual turnover generated from services related to IT/ITES during the last 3 financial years	1. Extracts from the audited Balance sheet and Profit & Loss statement for each of the three years or 2. Certificate from the Statutory auditor
5	Certifications if any	ISO 9001 or ISO 27001 or or CMMi	Copy of all valid certificates

6	Solution Provider with Certification Assurance	In case Bidder is different from the solution provider then bidder should provide the Certificate from Solution Provider with Assurance for supporting the Bidder for this proposal for any third-party products used in the proposal.	Certificate of authorization from the original solution provider from an authorized signatory with contact details.
7	GST details		PAN/TAN/GST Registration Certificates
8	Manpower Strength	Solution provider is required to provide details of no. of professionals proposed for the enhancement activities with TZIP should contain various roles (such as Project Manager,Architect, DB expert etc	Self-certification by the Solution provider
9	Blacklisting	The Solution provider should not have been blacklisted by any Central or state Government, Ministry or Agency for breach of Contractual Conditions as on EOI calling date. The Solution provider should also not be entangled in any legal disputes with any Govt. / PSU body	Declaration from the Solution provider in letterhead.

6. Scope of Work:

The scope of work mentioned herein under specified are minimum requirements and the stake holders may extend the scope further for fulfilling the objectives. Though, of course such extended services shall only be related to smooth execution of the project. If any other activities found essential for the accomplishment of the project, not specified in the detailed scope, participant is free to include that activity also in their action plan. Quality standards applicable to each functional area. Scope is intended to covers a wide range of functionalities that enhance the TZP's efficiency ,cater citizen centric services and operational management.

The Major scope of work includes but not limited to.

Maintenance & Support of a comprehensive solution for a period of minimum 5 years comprising of 2 years of warranty and 3 years of post-warranty AMC.

TZP desired perpetual user license for the proposed solution, no extra license fee will be released in this regard. Preferred technology will be open source with strong active community and ecosystem, non-blocking architecture and if any third party library used, might be having active community backing. Proposed Application architecture based on micro service architecture and loosely coupled, uses modern/latest frame work and libraries which support modular development, scalability and maintainability

Latest/updated Source Code of Application supplied /Customs Build requires to be delivered at time of final closure of the project. **Participants not willing to deliver source code will not be considered.**

The information/ content submitted in the proposal by the participants in the EoI can be reused by TZP for futuristic requirement .Participants who submit the proposal deemed to be accept & agreed the terms condition of the EoI

TZP will give undertaking that proposal will be used by TZP only for its internal requirement.

The proposed system support bi-lingual (English/Malayalam)

6.1. Indicative Functional Scope

1. Web portal with Visitors Engagement
2. Ticketing system
3. Wildlife conservation & Habitat management
4. Procurement & Inventory management system
5. Accounting
6. HR Management and Payroll
7. Asset Management

6.1.1. Web portal with Visitors Experience and Engagement

The following are the key functionalities required in the proposed solution are Indicative not exhaustive

The web portal should be user friendly , informative ,engaging, helping to attract visitors and retain visitors while supporting the TZP mission of education , research ,ensure animal welfare and conservation. A user-friendly section on the TZP's official web portal allows visitors to purchase tickets. This section should be easily navigable, mobile-friendly, and secure

6.1.1.1. User Interface and Experience (UI/UX)

- **Responsive Design:**
Ensures the website is accessible and provides an optimal viewing experience across a wide range of devices (Should have Responsive UI for desktops, laptops, mobiles, Kiosks and other hand held devices).]
- Compliance to security guidelines and policies, accessibility guidelines, GIGW, WCAG guidelines. Support Accessibility Features such as Multilingual Support, features for visitors with disabilities, such as screen reader compatibility, adjustable text sizes, and detailed accessibility information for zoo facilities.

6.1.1.2. Homepage

- **Engaging Visuals:** High-quality images and videos of animals, exhibits etc .
- **Intuitive Navigation:**
Easy-to-use menus and navigation paths that allow users to find information quickly and efficiently and also with links to key sections such as , Animal details, and their geo location , Tickets, Visit, Animals, Conservation, Education, and Support
- Visitor service & Information

Display relevant information on

Services, Animals :

Hours and Admission: Up-to-date information on opening hours, ticket prices, and special discounts.

Directions and Parking: Detailed directions to the zoo, including offline maps and parking information.

Plan Your Visit: Suggested itineraries, tips for first-time visitors, and amenities available and their respective geo location at the zoo (e.g.,cafeteria , gift shops, restrooms).

Information Center:

Essential visitor information, including opening hours, holidays , parking details, services available (e.g., lost and found), and rules and regulations.

- **Support and Volunteer**

- Adopt an Animal: Programs allowing visitors to symbolically adopt animals to support their care.
- Volunteer Opportunities: Information on how to volunteer at the zoo and the benefits of volunteering

- **Announcements:**

- Highlight important news and updates on the homepage.
- Provides waste disposal instructions to visitors via website ,kiosks and mobile apps **etc**

6.1.1.3. Content Management System (CMS)

- **Easy Content Updates:**

Enables staff to update information, events, and news without needing technical skills with maker and checker process .

- **Multimedia Support:**

Allows the integration of various media types, including photos, videos, and audio clips, to enrich the content and to enhance the user experience .

- Provision to Update TZP's timely achievements, Promotions, circulars, promotional activities through social Medias etc.
- Option to submit media by visitors

6.1.1.4. Contact and Feedback

- Contact Information: Easy access to contact details, including phone numbers, email addresses, and a contact form.
- FAQ Section: Answers to common visitor queries, helping to reduce the volume of inquiries to staff.. Comprehensive list of frequently asked questions to assist visitors.
- Feedback System: Online forms for visitor experiences to provide feedback and suggestions.
- QR based animal information at enclosure and feedback facility for Visitors

6.1.1.5. Social Media Integration

- **Social Media Feeds:** Integration of the zoo's social media (face book, intstagram, Thread, X) feeds

directly on the website to showcase latest news, photos, and visitor experiences.

- **Share ability:** Features allowing visitors to easily share content, events, and experiences on their own social media platforms.

6.1.1.6. Digital Customer Relationship Management (CRM)

The following are the key features includes but not limited to

- **Membership Management:** Tools for managing zoo memberships, sign-ups, donation transaction renewals, and benefits.
- **Donation Portal:** Secure donation system to support conservation and research efforts. Enable donation and payment for donation
- **Animal Adoption :** Information on adopting animals and supporting the zoo in upkeep of the animals. Digital forms for animal adoption , enable donation and payment for adoption
- **Feedback Systems:** Collecting and analyzing visitor feedback to improve services and experiences.
- **Help desk :** Provides customer support through chat, email, or phone, with ticketing for issue tracking.
- **Feedback and Surveys:** Managing visitor information, Collect visitor feedback, conduct surveys, analyze data for improving services and experiences.
- **CRM Integration with ticketing system:** Tracks visitor behaviour, preferences, and interactions to improve services and marketing.
- **Visitor Analytics:** Data collection and analysis of visitor age, gender demographics, and preferences.

SEO Optimization Tools :

Features to help optimize content for search engines, improving visibility, and ranking and attract more visitors. Tools to monitor website traffic ,visitors behaviour, and engagement matrices for continuous improvement

6.1.2. Mob Application for Visitors

- The following are the key features includes but not limited to
- Mob application should be native/support native functionality such as Geo location ,camera android and Apple IOS
- **Hours and Admission:** Up-to-date information on opening hours, ticket prices, and special discounts.
- Animal details and their geo location

- Alert missing mechanism
- Facilitate the purchase of Entry, Transportation and parking tickets, theatre ticket .This Ticket includes a unique QR code for entry scanning, along with visit details (date, time, and any special instructions).
- **Membership Management:** Managing memberships, renewals, and benefits
- Provision to donate for supporting conservation and research efforts
- Payment can be made via credit/debit cards, digital wallets like UPI (GPay, Paytm, etc.), ensuring a secure transaction through a reliable payment gateway
- Information on adopting animals and supporting the TZP in upkeep of the animals
- **Location Services:** It provide offline map ,directions and estimated times to reach different exhibits within the TZP
- Geo tagging of important locations, animal enclosure etc to be done and Geo tagged locations of interest within the zoological park on a GIS map, info shall also available on offline. Geo referenced maps to show visitors routes, animal enclosures ,different domains ,other key areas
- The web/mobile application shall plot the user's current location on the GIS map
- **Directions and Parking:** Detailed directions to the zoo, including maps and parking information.
- Facilitate for customer feed back
- Maps with real-time updates on exhibits and facilities, .

6.1.3. Ticketing System:

- Implementing a ticketing solution involves designing a system that efficiently manages tickets sales ie visitor entry, transportation ticket with Anti-pass back functionality and other related processes such as access control etc . The solution shall be Scalable, customizable, faster results, Secure Log On, Single sign on feature, User Management, able to access solution from outside of the organization etc. System shall support both online and offline ticket sales.

6.1.3.1. User Interface (UI)

- The ticketing system should provide intuitive and user interface, which is also user-friendly for anyone to access and control all the functions from the main menu console and application interface to be used by customer, operator and administrator
- The solution should cater to Web based Ticketing, Mobile based ticketing, POS based Ticketing, and KIOSK based ticketing

6.1.3.2. Category of Tickets

- Entry ticket
- Transportation Ticket

6.1.3.3. Types of Ticket

- **Standard Tickets:** General admission tickets for adults, children, and senior citizen
- **Membership Passes:** Annual or seasonal memberships offering unlimited visits and additional perks.
- **Group Tickets:** Special rates for school trips, corporate outings, and other group visits.
- **Real-Time ticketing :** Real-time ticketing through zoo's website or mobile app ,POS machine or onsite or kiosk
- **e-Tickets:** Electronic tickets that can be saved on mobile devices and scanned at the entrance.
- **Coupon Codes:** Promotional codes that can be redeemed online for discounts.
- **Discounts and Promotions:** Offer discounts for certain groups, like children, seniors, or members, and run promotional campaigns
- **Season Passes:** Manage memberships and season passes with integrated benefits and discounts.
- **Dynamic Discounts:** Offer discounts based on visitor demographics, group size, or special promotions.
- **Loyalty Programs:** Implement loyalty programs that reward frequent visitors with discounts and special offers.
- **Membership Discounts:** Reduced rates for members

6.1.3.4. Ticket Management System

- There shall be a handheld Scanner & Printer. This allows for flexibility in addressing potential crowds with easy-to-deploy mobile ticketing stations.
- The system should allow for a compulsory module of online ticketing, which includes product sales on the internet.

- The online module will provide all the visitors to book their tickets in advance and gives the client the ability to manage their reservations, schedules and ticket booking.
- The online ticketing should support the overall seamless visitor experience.
- Handles ticket availability (eg.entry, transportation), types (e.g., adult, child, senior, seasonal), pricing, and discounts etc.
- System shall be able to generate bulk ticketing e.g. tour groups; in particular to provision ticket procurement with pre-defined discount tiers. Single ticket with multiple visitors mandatory
- It should offer various methods of payment for making purchase of tickets, including the ability to accept cash payment over the counter and it should come equipped with point-of-sales cash register system etc.
- System shall provide interface for setting of control limits for sale of online tickets.
- There may be a point-of-Sales (POS) system. This will generate tickets and to support transactional sales of TZIP offering. Able to interface to third party system such as banking system; credit card system, etc. Able to cater for different payment modes preferred by customers.
- Pricing may be fixed at different levels like entry,transportation etc
- There will be a provision to set user role rights.
- System shall comply for Payment Data Security
- Ability to activate pre-printed/ encoded tickets.
- Sales of all type, including the sale and renewal of season passes and memberships
- System shall be able to issue seasonal and annual passes to the Visitors.
- Booking Engine: Manages the entire ticket booking process, including selection, payment, and confirmation.
- Tickets can be allocated based on different time slots and ideal quota for each space.
- Certain ticket details are to be encrypted and this data to be used for generating QR code
- QR Generation: Generates unique codes for each ticket or group check for easy scanning at entry points.
- System shall be able to print QR Code based tickets. Multiple tickets/ Multiple slot entry in same QR is must

- Accounting Systems: Integrate with accounting software for financial tracking and reporting
- Mobile Integration: Tickets to be stored and accessed through mobile
- QR Codes and e-Tickets: Issues digital tickets with QR codes that can be scanned at the entrance for quick access
- Customization: Provision for customization of the ticketing system to fit the unique needs of the zoological park.
- Scalability: Design the system to handle peak times and large numbers of visitors. Ensure the infrastructure can scale up during high-demand periods.
- Ensure seamless data flow and synchronization across all platforms.
- Ticketing solution will have integrated head count mechanism such that at any time a real dashboard will display the total persons available with the TZP. i.e Live Headcount dashboard
- It allows tickets to be accessed through manual location or any ticket scanner, QR reader normally attached to a POS station.
- The design and layout of the printed tickets should be customizable and printed with the necessary details to be provided by the Authority
- Printed ticket should include date, time, price, etc . The TZP name and other layout details such as logos .
- Fraud Detection: Includes mechanisms to detect and prevent fraudulent transaction.
- System shall be able to print system generated receipts.
- QR Codes and e-Tickets: Issues digital tickets with QR codes that can be scanned at the entrance for quick access
- Customization: Provision for customization of the ticketing system to fit the unique needs of the zoological park
- Receipt shall include fields such as cashier/operator ID, workstation, payment terminal ID, location, mode of payments, etc.
- There shall be a provision to provide suitable file for bank reconciliation
- The system shall be able to generate information for GST reporting in format determined by the TZP
- There shall be a provision to reconcile daily cash received by cashier/operator.

- Real-time Dash board for ticketing, entry, pay and park, transportation and shall quickly toggle

6.1.3.5. Online Ticket service

- **Online Ticket Sales:** Allows visitors to purchase various tickets online through a website or mobile etc
 - Online and on-site ticket sales facility for entry ticket and transportation ticket , group bookings, and membership management
 - Online and on-site: ticket sales facility for visitors to book and pay for special events, educational programs, and encounters with animals.
 - Visitors can select the date and time of their visit (if timed entry is implemented), the number of tickets, and any special passes (e.g., for educational tours, special exhibits).
 - System should support Seamless integration with external systems such as payment gateways, social media platforms, and other third-party services through API integration
 - Secure platform for visitors for purchasing various types of tickets, including single-day passes, group rates, and special event tickets.
 - **Mobile Integration:** Tickets to be stored and accessed through mobile

6.1.3.6. Payment Options:

- **Cash and Card Payments:** At manual cashier booths or automated payment machines.
- Payment can be made via credit/debit cards, ensuring a secure transaction through a reliable payment gateway
- **UPI Payments:** Integration with UPI platforms like BHIM, GPay and Paytm etc , enabling users to pay directly through their smartphones at exit points.

6.1.3.7. Digital Ticket Issuance:

Upon payment, a digital ticket is generated can be downloaded by the byer or sent to the buyer via email . This Ticket includes a unique QR code for entry scanning, along with visit details (date, time, and any special instructions.)

6.1.3.8. On-site Ticket Sales:

Ticket Booths:

For visitors who prefer purchasing tickets on-site or those without online access, manned ticket booths can offer another point of sale. These booths should be equipped to accept cash, cards, and digital wallet payments.

Kiosks and Point of sales (POS) : Facilitate the Ticket sales at the zoo entrance by using kiosks or Point of sales (POS)

Instant Ticket Printing:

Once a transaction is completed, the booth prints a physical ticket with similar details to the online version: entry time, date, and a unique QR code or barcode for entry validation.

Membership Management:

Allows users to purchase, renew, and manage memberships, offering benefits like unlimited admissions, discounts, and members-only events.

6.1.3.9. Entry Management

- **Digital Tickets:** QR code generated in visitors' mobile devices, print out are leveraged for validation at entry points
- **Entry Gates:** Equipped with scanners (Station, hand held device) to validate QR codes

6.1.3.10. Scanning Stations:

- At the TZP entrance, set up stations with QR code scanners. These can be manned by staff or automated turnstiles equipped with scanners.

6.1.3.11. Validation and Entry:

Staff or automated systems scan the encrypted QR code (digital or physical) for validating against the system to ensure its valid for the ticket code ,date and time etc . Upon successful validation, visitors are allowed entry.

The QR code should be capable of offline fraud detection from the visitor's ticket

Integration

- Integration with ticketing solution with Hardware devices (scanning station, Hand held device etc)
- **Payment Gate way:** Supports multiple payment methods (UPI, credit/debit cards, digital wallets, etc.) with secure payment processing.
- **APIs:** Facilitates communication between the ticketing system third-party services like travel agencies, hotel booking systems, and tourism platforms.
- Integration with access control system ,Scanning station, hand held device, Kiosks, PoS

The solution shall support Gate access module with the following features

- The Gate access module will comprise of QR & RFID based Ticket authentication mechanism flush mounted on the Tripod/ Flap turnstile barriers and boom barriers.
- The Barriers should have features to allow multiple persons under same ticket – QR. If the ticket is for 5 persons then the barrier should rotate/ drop arm facilities 5 times and in case during the first such

usage only 4 persons have gone then the barrier should allow only 1 person with the same QR during the time slot allotted

- RFID will be used for Facility staff & VIPs
- The barriers should come with drop arm facilities so that in case of any emergency the drop arm feature can be utilized for better evacuation
- Barrier should have provision for code based trouble mapping
- Barrier should have direct interaction with the software dashboard such that any fault can be notified remotely
- Barriers should be motorized ones drop arm facilities.
- Should be able to validate online tickets and also offer mechanism to validate during network outages
- **CRM Integration:** Tracks visitor behaviour, preferences, and interactions to improve services and marketing.
- **Fraud Detection:** Includes mechanisms to detect and prevent fraudulent transaction.
- Notification System
- **Email/SMS Notifications:** Sends confirmation emails, reminders, and promotional messages to visitors.
- **Alerts:** Notifies staff about issues like overbooking or system errors.

6.1.3.12. **MIS Reports**

- System shall be able to generate financial reports e.g. on transactions: dated sales records, ticket volumes, earned revenue, transaction channels, promotions, discounts, etc, with ability for integration to finance module.
- System shall have Comprehensive, real-time reporting and statistical analysis
- Ticketing system should be able to provide reporting features (e.g. sales per day, sales per channel, conversion rates, etc) while providing raw data for TZP Authority
- All the reports must capture sufficient and relevant data for the purpose of MIS Reporting.
- Analytics & Reporting
- Sales Analytics: Provides insights into ticket sales, visitor trends, and financial performance.
- Visitor Flow Analytics: Monitors visitor entry times, peak hours, and crowd management
- There will be provisions of weekly/monthly/yearly web reports on sales.
- The reports must import and export data into CSV or Excel based exports, such that the user can be able to modify in accordance to the various needs for reporting use.
- Reports shall run on a scheduled time-period and generated manually.
- Reports can be generated in readable and printable formats and will be accessible through some easy methods and can be programmed to send via emails to the intended recipients.
- There shall be a dashboard & Reports to show traffic by ticketed building zones.

- Daily Reports
 - Date range wise Entry details
 - Head count report
 - Operator wise Pass issuance report
 - Daily/ Period collection report based on operator & date range with separate columns for Bank and Cash transactions

The system should be able to provide following report but not limited to

1. Overall site activity
2. Operators
3. Workstations
4. Sales station groupings e.g. the sales POS stations at a specific area
5. Tickets sold
6. Payment and reservations activity
7. To be able to track types of visitors and groups e.g. members, schools, VIP's, etc.
8. The system should display POS wise/ User wise ticket sold report with breakup for cash & online payments
9. Each POS should have a live dashboard for the operator with details like category wise tickets sold with Cash & Online breakup and also should generate reports in printed format for that counter alone such that handover between operators is smooth

6.1.4. Wild life conservation & Habitat management

Maintain detailed records of all animals in the PTZ including, habitat, health, feeding, cleaning and waste management etc

The following are the key features includes but not limited to

6.1.4.1. Animal data registering:

- **Species Information:** Common name, scientific name, classification (mammal, bird, reptile, etc.).
- **Individual/Group Animal Records:** Unique ID, name, gender, date of birth, date of acquisition, health status, origin, and current enclosure.

- **Comprehensive Health Records:** Medical history, vaccination records and schedules, treatments, surgeries, medications lab results and scheduled health check-ups.
- Dietary and nutrition requirements: Specific food needs, feeding schedules, special dietary instructions.
- **Breeding Information:** Breeding status, pairing records, genetic information, and offspring details.
- Systems shall have provision to record phenotypic traits, breed, age, weight etc
- **Animal Behavior:** Early detection of potential health issues through behavior changes..

6.1.4.2. Habitat data:

Track and maintain animal habitats and ensuring natural living condition

- **Habitat List:** Details of all habitats/enclosures (type, size, zone, location).
- **Occupant Records:** List of animals in each habitat.
- **Condition and Maintenance:** Condition, cleaning schedules, and repair logs.
- **Environmental Controls:** Information on temperature, humidity, and other environmental controls.
- Enclosure: ID, zone , Name, Dimensions, Occupants, Maintenance/Cleaning Schedule

Other functionalities are

- Adoption and intake management
- Behavioral records : Correlation of behavior with health indicators, Integration with behavioral observation systems
- Online adoption and fund raising

6.1.4.3. IT-enabled feeding and nutrition management

An IT-enabled feeding and nutrition system in a TZP can greatly improve the management and efficiency of feeding schedules, dietary plans, and nutritional tracking for the animals. This system uses technology to automate and optimize feeding processes wherever possible thus ensuring that each animal receives the right type and amount of food at the appropriate/right time.

The following are the key functionalities required in the proposed solution are Indicative not exhaustive

Feeding Schedules:

- Ability for Work order management: Creates, assigns, and tracks feeding tasks.
- Customizable Schedules: Create and manage feeding schedules for different animals or groups of animals based on their dietary needs and staff availability.
- Notifications and Alerts: Provision for Send reminders to animal caregivers for feeding times, ensuring no feeding session is missed.
- Feed Distribution: Provision for monitoring feed distribution to individual animals or groups, ensuring accurate quantities and timing.
- Environmental Control: provision for adjusts feeding conditions based on temperature, humidity, and other factors.
- Provision for supervisors to track the completion of tasks in real-time and authorize

Dietary Management

- Diet Plans: Provision for detailed dietary plans for each species, including types of food, quantities, and feeding frequencies.
- Nutritional Tracking: Provision for Monitor and track the nutritional intake of each animal to ensure balanced diets.
- Special Diets: Manage special dietary/medicine requirements for sick or recovering animals.
- Provision for veterinary official to track the completion of tasks in real-time and authorize

6.1.4.4. Animal e-Health Records:

The following are the key features includes but not limited to.

- Comprehensive digital records for each animal/group like breed, age etc. , including medical history, vaccinations, treatments, surgeries, medications, lab results, and any ongoing health issues.
- Health Monitoring: Integrate with veterinary health records to adjust diets based on health conditions, weight changes, and medical advice.
- Behavioral Observations: Track and record feeding behaviors and any changes in eating patterns that may indicate health issues. Correlation of behavior with health indicators.
- Early detection of potential health issues through behavioral changes.

- Treatment records: Treatments administered to individual animals
- Track diet, and activity levels to monitor overall health.
- Standardized data formats for easy analysis and sharing.

Animal Behavior Monitoring

- Provision for recording Phenotypic behavioral traits
- Early detection of potential health issues through behavior changes.
- Correlation of behavior with health indicators.

Disease Surveillance:

- Early detection of outbreaks or potential epidemics.

Animal Nutrition Tracking:

- Diet plans, nutritional analysis, and feeding schedules.
- Monitoring for dietary-related health issues.

Emergency Response:

- Quick access to animal medical history in critical situations.
- Protocols for handling emergencies and mass casualty events.

Medication Management:

- Automated prescription and dispensing systems.
- Provision for supervisors to track the completion of tasks in real-time and authorize

Integration with Inventory Management:

- Stock Monitoring: Keep track of Medical supplies, in real-time inventory levels and automatically alert staff when supplies are low.
- Inventory control and expiration tracking.
- Order Management: Automate the ordering process for Medical supplies, based on consumption rates and inventory levels.

- Track the inventory of medicines, vaccines, and medical supplies and receive alerts for low stock levels and manage reorders efficiently.
- Integration with pharmacy systems/ Medical Inventory Management for streamlined ordering.
- Expiration Tracking: Monitor the shelf life of Medical supplies items and ensure its quality

Lab and Diagnostic Integration

- Electronic transmission of lab results
- Image storage and management

Scheduling and Reminders:

- Schedule regular health check-ups and vaccinations.
- Send reminders to the veterinary team for upcoming appointments and treatments.
- Provision for supervisors to track the completion of tasks in real-time and authorize

Integration of IoT Devices:

- Integrate appropriate IoT devices and sensors for health monitoring. Ensure the system can process and analyze data from these devices in real-time.
- Integration with Environmental Controls devices : Information on temperature, humidity, and other environmental controls of enclosures
- Integration with Air and Water Quality Sensors

6.1.4.5. Smart Cleaning & Waste Management

Involves leveraging technology to optimize and monitor cleaning operations. This approach enhances efficiency, improves hygiene standards, and ensures that cleaning tasks are performed consistently and effectively. It involves visitors area cleaning, enclosure cleaning, sanitization, waste management, water quality, Pest control, record keeping and automation where ever possible.

The following are the key functionalities required in the proposed solution are Indicative not exhaustive

Ability to schedule the following Cleanings tasks,

- Routine Cleaning: Daily cleaning of high-traffic areas likes visitor pathways, restrooms, and food courts.
- Enclosure Cleaning: Animal enclosures cleaned during times when animals are least active, with coordination from animal care staff.
- Deep Cleaning: Periodic deep cleaning of animal enclosures, quarantine areas, and other sensitive zones.

- Emergency Cleaning: Quick response to unexpected situations such as spills, animal waste, or biohazards etc .
- Disaster Waste Management: Plans and executes waste management strategies during emergencies, such as natural disasters, ensuring quick and safe disposal of debris and hazardous materials
- Optimized cleaning: Adjusts cleaning schedules based on conditions
- Evening Cleanup: Final cleaning of all public areas, trash removal, and preparation for the next day

Ability for Task Scheduling and Automation

- Work order management: Creates, assigns, and tracks cleaning tasks.
- Dynamic Scheduling: Automatically schedules cleaning tasks based on predefined criteria like time of day, visitor traffic, or weather conditions.
- Task Assignment: Automatically assigns tasks to cleaning staff based on availability, expertise, and proximity to the area.
- Ability to adjust cleaning schedules, task assignments through routine schedule or based on real-time data.
- Real-Time Updates: Provides real-time updates to staff via mobile devices about new tasks, changes in schedules, or urgent cleaning needs.
- Provision for digital checklists for different cleaning tasks ensures consistency and completeness.
- Provision for supervisors to track the completion of tasks in real-time and authorize
- Integration with Visitor Management to adjust cleaning schedules based on real-time visitor density data.
- Visitors can provide real-time feedback on cleanliness through the customer mobile app or kiosks for immediate action. Feedback is automatically analyzed and routed to cleaning staff for immediate action.
- Ability to track the quantity and type of materials sent for recycling.
- Provision for the record the amount of waste in each bin.
- Ability to record the bio degradable waste for processing and processed organic waste into compost
- Integrate with kiosks around the TZP that educate visitors on proper waste disposal practices and the importance of recycling.
- Ability for remote inspection to view cleaning logs, and environmental conditions
- Dashboard that consolidates data from, collection schedules, and processing centers.
- Audit Trails: Automatically generates audit trails of cleaning activities, showing when, where, what and by whom each task was completed.

Integration with Inventory Management:

- Stock Monitoring: Keep track of cleaning supplies, PPE (Personal Protective Equipment) in real-time inventory levels and automatically alert staff when supplies are low.
- Order Management: Automate the ordering process for cleaning supplies, PPE supplies based on consumption rates and inventory levels.
- Expiration Tracking: Monitor the shelf life of cleaning supplies items and ensure its quality

6.1.4.6. Compost Management

- Quantity of excreta collected.
- Quantity of Bio waste collected
- Organic manure produced after processing bio degradable waste.
- manure produced after processing excreta
- Dispatched quantity of various type of manure
- Area of Plantation wherein manure deposited/distributed
- Integration with accounting module regarding the transactions related to waste processing, such as compost sales or recycling revenue.
- Provision to Measure the amount of waste in each bin and the consolidated quantity.

6.1.4.7. Data Analytics and reports

- Cleaning schedule assignment of each day and their completion report
- Tracks how effectively cleaning resources (staff, supplies, equipment) are being used. Analyzes visitor patterns to optimize cleaning schedules for high-traffic areas.
- Waste Collection: Uses data from smart bins to optimize waste collection routes, reducing time and fuel usage.
- Reports on waste generated types and quantities
- Reports on the quantity and type of materials sent for recycling.
- Reports on manure produced
- Generates detailed reports on cleaning activities, compliance, and any issues encountered, which can be used for audits and performance reviews.
- **End-of-Day Reporting:** The system generates a report summarizing the day's cleaning activities, equipment usage, and any issues encountered. This report is reviewed by management.
- Report to notify the management when any cleaning task not completed as per the schedule or protocol is not in compliance with standards.

6.1.4.8. Breeding and Plantation management:

Breeding

Automation of breeding shall streamline and improve various aspects of breeding programs.

The following are the key features includes but not limited to.

- Types of breeding
- Pedigree tracking: Record animal lineage for genetic selection
- Systems shall have provision to record phenotypic traits and genetic data to optimize selection decisions.
- Breeding schedules: Plan and track breeding cycles, including artificial insemination and natural mating.

- Resource Allocation: such as, feed, human and facilities etc.
- Breeding history
- Provision to capture health record
- Inventory control
- Generation of reports on breeding performance, genetic diversity, and resource use etc.

Plantation

Types of plants

- No of sapling produced and distributed each batch
- No of sapling planted ,type and locations
- Quantity of manure used in each season.
- Resource allocation no of man-days utilized for planting
- Inventory control

6.1.4.9. Water Treatment Plant

Drinking water management

The proposed solution shall have provision to record information from the Water Treatment Plant the following information are Indicative not exhaustive

- Types of water resources like River, Quarry outside the premise ,internal sump etc
- Capacity of each resource and demand
- Quantity of water taken from each resource
- Quantity of water taken for process
- PH value of water before purification
- Jar test result
- Chemical are used for Water Treatment like Alum, Lime ,chlorine
- Quantity of water purified and after Treatment
- PH value of water before purification

6.1.4.10. Energy management

- Facility to record the consumption of energy from KSEB
- Facility to record Power generated from Solar plant
- Facility to record energy consumed from solar plant for in-house purpose
- Facility to record energy uploaded to Grid

- Daily/ Monthly/Yearly report on energy consumed from KSEB
- Daily /Monthly/Yearly report on energy consumed from solar plant for in-house purpose
- Daily /Monthly/Yearly report on energy generated from solar plant
- Daily /Monthly/Yearly report on energy uploaded to Grid

Generator

There shall be provision to record the following information

- Refilled fuel Quantity
- Quantity Fuel consumption
- Date of refilling
- Running time

6.1.5. Mob App for staff (Feeding, Veterinary, Cleaning ,and trip scheduling etc)

The following are the key features includes but not limited to

- Mob application should be native/support native functionality such as Geo location ,camera android and Apple IOS
- Mobile apps to manage feeding schedules, health check-ups .cleaning and vaccinations record the respective activities, and receive alerts.
- Record feed distribution, diagnostic tests and their results.
- Indenting , Stock Monitoring, GRN on acknowledging the RO
- Task Management: Staff can view, accept, and update the status of feeding/cleaning/ veterinary tasks directly from their smartphones.
- Navigation Assistance: Provides directions to the next feeding/cleaning/ veterinary task location within the TZP and also Incident Reporting.
- To receive real-time alerts and feeding/instructions on veterinary medication and waste collection schedules to staff for ensuring a coordinated effort.
- The web/mobile application shall plot the user's current location on the GIS map
- Geo tagged locations of interest within the zoological park on a GIS map info shall also available on offline.
- Trip scheduling

- Apps integrated with central systems for data synchronization and real-time updates
- Integration with emergency response systems.
- Notifications and Alerts:

6.1.6. Procurement & Inventory management system

The following are the key features includes but not limited to

6.1.6.1. Master Code Generation

➤ **Code Types : The following code types are indicative but not exhaustive**

- Commodity Codes
 - HSN Code
 - Medicine Codes
 - Product Codes
 - Supplier Codes
 - Manufacturer Codes
 - Section/division codes
 - Account Codes (Ledger)
 - Bank Codes
- The system should have provision to request afore mentioned code types from section
- The system should auto generate supplier code/product code. User interface should be intuitive enough so that section should be able to create a supplier (product)code without the help of purchase/IT team
- The system should generate reports regarding registered suppliers and products. Some examples of reports are given below:
- Report of Suppliers registered locally
 - Report of suppliers registered over a period of time

6.1.6.2. Vendor management

- Facility for empanelment/registration of suppliers on the portal with details of Service tax registration, Income tax registration – PAN,TAN and PF registration
- After approval, supplier will be able to get notification for tenders, purchase order etc to collaborate with purchaser
- Vendors will be able to login through vendor portal and see open purchase orders
- Vendor will be able to register shipping notification through its portal which will directly be reflected in company's system
- Vendor will be able to get notification from purchaser
- Vendor will be able to see delivery confirmation at purchaser site once confirmed by the purchaser.

6.1.6.3. Indent and sourcing

- Commodity Types: Food and Medical etc
- Visibility of inventory of the items.

- Auto and Manual Indent generation
- Ability to generate a unique indent number.
- Review & Approve Specifications
- Ability to raise auto indent to items whose stock levels are at or below RO level or in safety stock levels
- Ability to track indent status at every approval stage
- Ability of the purchase section to reject a Indent if required with appropriate comments
- Ability for senior officers/approvers to evaluate the indent online and reject / suggest modification / approve indent with detailed comments / notes
- Ability to access information on past purchase details, current inventory status, pending orders, etc against a particular item
- Indent Consolidation
- Ability to merge/demerge indents
- Ability to raise alerts when items reach the re--order level and generate indents automatically.
- Ability to differentiate between approved, pending for approval and rejected indents
- Ability to link the Purchase indent with the respective Cost centre
- Ability to suggest vendors with justifications while raising the draft indent
- Ability to forward the indent to the respective approving authority through a defined workflow for clearance.
- Ability to evaluate the indent online and reject / suggest modification / approve indent with detailed comments / notes.
- Ability to access information on past purchase details, current inventory status, pending orders, etc required to evaluate an indent and sorting of approved approval hierarchy.
- Approval
- Auto creation of section Indents based on current stock and reorder level. Section/Division should be able to define “stock required” and “reorder quantity” for each item. When the stock comes below “reorder quantity”, system should include that item in the next Indent.
- Auto generated indent should be visible to each section at every point of time. Submission frequency of indents should be pre-defined.
- Urgent Indent: section should be able to generate an urgent indent to address any emergency situations.
- Section manager should be able to
 - Add more items to auto generated indent.
 - Delete Items from auto generated indent
 - Edit quantity of items in auto generated indent
- Log/History of changes to auto generated indent should be tracked.
- Auto consolidate indents from various sections
- Ability to trace the indent to the indenter, department, etc. with the audit trail with regard to date
- Ability to track on indents raised per user section / cost centre , /person
- Ability to track the status of an indent from indent raising to approval, placement of order, material in transit, receipt at sections, inspection, stock charging and payment
- Ability to raise indent for missing item / reject item with appropriate auto generated reason code affixed with indent.
- Ability to classify indents such as Emergence / normal, substitution, etc.
- Ability to rework and resubmit the indent for approval after necessary modifications (edit after submission).
- Ability to track items critical to Operation, critical to quality, having shelf life, etc for stock level and raise alarm for indenting.
- Ability to convert indent to a final stage by indenter, after this further modifications by indenter is restricted.
- Intended value need to be cross verified by Purchase division
- If required Purchase division need to reconcile the stock by comparing available and requested stock
- Edit section Indent. Purchase division should be able to :
 - Add more items to section indent
 - Delete Items from generated indent

- Edit the quantity of items in auto generated section Indent
- Log/History of changes to consolidated indent should be tracked.
- Business logic be developed to modify the final quantity for which the procurement to be conducted. Eg: Quantity of tender will be +/-10% of consolidated indent quantity
- Notifications and alerts
- Generate reports of Indents in various formats
 - Item wise
 - Section wise
 - Date wise
 - Various combinations of above parameters
- Admin level at various hierarchical levels i.e., Section Manager/officer should be able to edit entries only under his section Similarly, Purchase should have consolidated view and ability to edit data at every levels
- Date and user name wise tracking is needed for every changes made.

6.1.6.4. Purchase Order Management

- Ability to convert the indents to orders (Purchase / Work) with updated terms and conditions as captured in the negotiation phase
- Ability to track Purchase requisitions at various stages of approval hierarchy and consolidate the requirements based on material groups or other relevant criteria.
- Ability to prepare a Purchase proposal for Purchase committee based on the recommendation made by evaluators
- Ability to generate PO with a unique number
- Ability to generate Purchase order without a quotation / offer (emergency PO / RC / Repeat Order)
- Ability to amend / cancel a Purchase Order, item wise
- Ability to generate dummy Purchase Orders
- Ability to query on Purchase order history by vendor, item code, PO number, indent no. etc.
- Ability to revise proposal after negotiation with the vendors
- Ability to generate multiple Purchase orders against one contract and track them
- System should have the capability to generate Purchase Order to corresponding procurement
- Ability to retrieve the details of Goods ordered and received with the Purchase order number
- Ability to generate Goods Arrival Note (GAN)-- information captured to also include (delivery challen details, invoice information)
- Ability to notify Purchase department of excess / shortfall in Goods received
- Ability to integrate with QC Testing Department functions / QA functions for input Goods purchased
- Provision for Goods/item for Rejection
- Ability to generate Goods Receipt Note to acknowledge accepted quantity of Goods
- Handling credit notes from Purchase section to inventory for shortages, quality complaints etc
- Supplier Management: Maintain detailed records of suppliers and order history.

- Purchase receipt
 - Ability to crosscheck delivery challan against the corresponding purchase order
 - Ability to identify duplicate items and send alerts
 - Provision for Goods Arrival Note (GAN)
 - Ability to generate Goods Received Report only after the clearance from the QC
 - The system should allow the custodian to fetch auto generated GRN with the help of PO number
 - Receipt of item on delivery GRN by supplier (based on PO)
 - Ability to value GRN raised as per defined business rules

- The system should auto calculate delay cut and short supply cut based on date of receipt and quantity entered by custodian
 - The system should allow the custodian to edit date of receipt and quantity in the GRN
 - Ability to record goods / service receipts fully / partially against open purchase / work orders in appropriate formats
 - The system should automatically generate debit note if the actual quantity supplied is less than that in the supplier invoice
 - Ability to verify vendor invoices online in terms of goods specification / quality requirements, quantity, delivery schedules, payment terms, other conditions
 - Provision for Goods Returned to Party (GRP)
 - Ability to create return orders for other purposes
- Receipt Authorize
 - Receipt can be authorized only after Quality Assurance clearance.
 - Ability to send alerts and reminders for delivery failure
 - List of rejected Goods , the system should automatically generate debit note and returned to the party

6.1.6.5. Quality Assurance.

- Quality Reports should be prepared in QA/QC system and submitted for approval.
- Items for Rejection and Destroyable
- Based on the QC's report Goods Received Note/ Goods rejection Note to be acknowledged by the Purchase section or custodians
- QA system should have an alert mechanism to inform quality rejection, If any quality rejection happens, alert mail or notification should go to concerned section
- Ability to automatically generate a debit note and purchase return in case of quality rejection and this should be authorized by the Purchase section
- Ability to notify Purchase / Accounts departments about the rejected Goods. (Ability to generate Goods Rejected Note)
- Ability to receive notifications from Purchase department on approvals for returning rejected Goods

6.1.6.6. SD/EMD/BG Management

- Ability to handle EMD received in the form of cheque, BG, DD etc
- Ability to record collection of EMD from vendors/service providers against the related PO/WO/ Agreement/ Contract and to keep a track of it.
- Ability to refund/adjust deposits with age-wise analysis.
- Ability to convert EMD into Security Deposit for successful vendors and to keep link between the EMD and PO/WO/ Agreement/Contract
- Ability to maintain data of Bank Guarantees received from vendors/contractors etc., including full particulars about vendor code with a link to related PO/WO/ Agreement/Contract reference, Bank name with ability to link with Bank Master, BG
- Ability to generate request letters for extension/invocation of bank guarantees.
- Automatically interface accounting entries to the GL module
- Ability to implement approval of PO/WO/Agreement/Invoice subject to receipt /confirmation of BG

6.1.6.7. Inventory Management

The following are the key functionalities required in the proposed solution are Indicative not exhaustive

Food and Medical Supplies Management:

➤ Food Supplies:

- Food Types: List of all food types required (e.g., meat, fish, fruits, vegetables, millet grains, grass, palm leaves etc).
- Stock Levels: Current stock levels, minimum stock thresholds, reorder levels.
- Expiry Dates: Track expiry dates to manage food quality.
- Minimum Attributes: ID, Food Type, Quantity, Expiry Date, Minimum Stock Level , Reorder Level, Supplier.

➤ Medical Supplies:

- Supply List: Inventory of all medical supplies and medications.
- Stock Levels: Current stock levels, minimum stock thresholds, reorder levels.
- Expiry Dates: Track expiry dates for medications
- Minimum Attributes: ID, Name, Quantity, Expiry Date, Minimum Stock Level, Reorder Level, Supplier.
- Inventory Tracking: Ability to monitor stock levels, track usage, and manage reorder points.
- View item information
- Stock Update
- Ability to identify duplicate items and send alerts
- **Auto Receipt Generation From Indent**
 - The system should allow the custodian to fetch auto generated GRN with the help of Indent order number
 - The system should auto generate a Goods Receipt Note with Indent details
 - Receipt of item on delivery GRN by custodian (based on Indent)
 - Ability to value GRN raised as per defined business rules
 - The system should allow the custodian to edit date of receipt and quantity in the GRN
 - The system should automatically generate debit note if the actual quantity supplied is less than that in the approved indent or damaged or if any quality rejection happens.
 - Release Order should be issued only against the indent requested by section
 - Section should be able to edit only quantity in the section indent to generate RO
 - Section should not be able to add items in RO.
 - This will help to avoid Section being forced to take items sent from Inventory
 - Section will not able to make a last minute call and request for an extra item.
 - GRN creation at Section should also be against the corresponding RO
 - The system should allow the section to enter RO number/select latest RO to the section and details should be auto populated
 - The system should allow the section to edit only quantity against each item
 - The system should ensure automatic creation of GRN on acknowledging the RO
- **Return of Goods**
 - The system should maintain the record of goods returned and to be returned.

- Handling debit notes to inventory Custodian from the section on for shortages, quality complaints .Section should be able to edit only the quantity in debit note
 - Provision to check the status of the return goods.
 - Provision to group the return items from each section, view as whole and take actions accordingly.
 - The details of the goods that are returned will be present in the records, such as commodity type, quantity, indent no, supplier etc.
 - Handling credit notes from inventory to section for shortages, quality complaints etc
 - For goods return from section to inventory has to create a debit note and submit. This should be available to inventory custodian
 - The records will be maintained in the system as return history.
 - Admin will be able to generate the report on the basis of preference and export the same.
- Ability to account/adjust for transit loss to inventory
 - Expiry level inventory Management: Ensure timely usage of supplies before expiration.
 - Ability to create necessary provisions for slow moving/nonmoving inventory as per business rules
 - Ability to value Stock Adjustment/Stock Transfer Vouchers/Goods Return Note etc as per defined business rules (Maker-Checker)
 - Ability to do quantity reconciliation between procurement, consumption, dispatch, shortages and closing stocks
 - Ability to obtain details of book balances of inventory to facilitate physical verification
 - Ability to update physical verification details in case of inventories for the system to list out excess/shortage report
 - Ability to value shortages/excess inventory as per defined business rules
 - Supplier Management: Maintain detailed records of suppliers and order history.
 - Ability to support online valuation of Inventory
 - Inventory valuation in the system is based on first in first out.
 - Ability to value inventory as per accounting policy i.e. FIFO etc
 - Inventory by section/Central
 - Multiple Unit of Measurement
 - Physical stock verification option (Periodic/Annual Stock take/Random Inventory check)
 - Search for inventory items by product line, item number, serial number, batch number and description
 - Automatically compute min-max inventory level based on consumption history
 - Track offline inventory (expiry/damage)
 - Manual update of inventory quantities with proper approval
 - Audit trail of inventory adjustments for reporting with security

- Inventory status by item number, product and serial number
- Need to verify expiry date and batch number associated PO number
- Notifications and alerts
- Shelf/Rack Management
- Inventory adjustment(Stock dump/Contamination)
- Admissible shortage calculation
- Inventory to section reconciliation

Stock maintained at Section and reported via sync to Centralized Inventory

- The system will be able to view the stock available at each section and of the entire network as a whole.
- The system will be able to view the entire history of the stocks and filter on the basis of date, item, store/section code etc.
- **Stock Planning & Analysis**
 - Ability to analyze inventory, age-wise , location--wise , class code wise, area code wise,
 - Ability to maintain and run the section's Ledger detailing the opening and closing stock, receipts, issues, price and quantity
 - Ability to value inventory on various methods like average, weighted average, current, etc.
 - Ability to track stocks at sub--section after it issued from main store/section as "consumed (consumption posting)" for concerned department.
 - Ability to perform various kinds of inventory analysis like, Fast/Slow/Non--moving analysis, Min-Max analysis, etc. with alert.
 - Ability to post stock adjustment transactions (positive and negative adjustments) to adjust quantity and / or value after approval (Maker-Checker)
 - Ability to do Stock Verification based on perpetual / cycle / physical counting or any other defined method and periodicity

Automated Alerts and notification

- Low Stock Alerts: Notify staff when stock levels are low
- Expiry Alerts: Notify staff when food or medical supplies are nearing expiry.

6.1.6.8. MIS Reports

- Real-time Dashboards: Provide real-time visibility into inventory status and key metrics.
 - Stock management reports
 - Stock Position/Stock Value/Stock reconciliation etc
 - List of total debit note details for a given period
 - Stored Rejection Report (SRR)
 - List of SRRs against which the goods is returned back to the party

- List of pending SRRs
- Stock available statement
- Waste generated statement
- Ability to have inventory ageing report
- Stock Position/Stock Value as on a particular date
- Stock Register
- Trend Analysis report on expiry of item, rejected goods
- Non--moving Items report
- Aging analysis report
- Report of expiry of non--moving items
- Total SRRs raised for a given period
- List of rejected goods lying with stores/section
- Scrap sales report
- Indent/ Purchase order based reports
- Purchase return Management Report
 - Summary/Detail
 - Debit Note based
 - Credit Note based
 - Company/Medicine/section wise
- Issue management Reports
 - RO/Details
 - Medicine/item/Section
 - Issue
- Item/Medicine return reports
 - Summary/Detail
 - Debit Note based
 - Credit Note based
 - Company/Medicine/section wise
- Opening Stock Report
- Closing Stock Report
- Master data Reports

Payment to Supplier (link to Account Module)

6.1.7. Accounting

The following are the key functionalities required in the proposed solution are Indicative not *exhaustive*

- Ability to support "Double Entry System of Accounting" on Accrual Basis

6.1.7.1. General Ledger

- Option to have same or different chart of account structure across the organization
- Account Group creation option
- Account Head creation option
- Sub Account creation option
- Master Entry : Ledger code, Sub-ledger code etc.
(Code on the basis of nature of accounts is compulsory)

- Ability to record asset, liability, equity, expense and revenue against each dimension in the chart of account structure.
- Maintain Parent-child hierarchy in chart of account values

6.1.7.2. Journals

- Support manual entry of journal vouchers
- Facilitate entry and approval of Journal vouchers (maker-checker)
- Ability to have automatic journal numbering identifiable with section / department etc.
- Journals to have unlimited number of lines including narration for the journal as well as each line
- Look up account numbers and descriptions during journal entry
- Use codes to default account combinations
- Facilitate Journal Voucher Printing
- Automatically create journal entries from allocation schedule
- Facility to link reversed journal to original journal
- Ability to support provisional journal entries

6.1.7.3. Vouchers

- Voucher Mode : Cash / Bank
- Voucher Type : Payment/Receipt/Journal/Contra
- Voucher Authorise
- Voucher-Payment : Cheque, Cash, RTGS, NEFT
- Voucher-Payment Authorise
- Voucher printing

6.1.7.4. Bank Reconciliation.

- Bank Maintenance --Maintain list of approved banks
- Ability to reconcile payments and collections to eliminate any duplicate data entry
- Ability to reconcile with General Ledger to consider any bank related journal entries such as those for bank transfers etc
- Ability to reconcile bank statement with payments, collections, adjustments etc recorded in the system based on the cheque number or such other reference number
- Ability to generate bank reconciliation statement listing un-reconciled transactions

6.1.7.5. Provision for

- Day Book
- Financial Particulars
- Accounts Receivable
- Accounts Payable
- Payments and Reconciliation

- Bank transactions including reconciliation
- Taxation, duties and levies
- Fund Management
- Tracking of funds Utilization
- Trail Balance Review(with/without zero balance)
- Profit & Loss account
- Balance Sheet.
- Manage Financial Year
- OB & Account Number Entries for Ledgers/Sub-ledgers
- Auto CB to OB on year close
- Ability to carry forward assets and liabilities to following accounting year
- Option for marking Provision and reserve
- Year Finalize.
- Cash Management, Cash Flow Statements.
- Option to mark cheque details in a transaction
- Budget
- Reverse Entry option
- Income and Expense Statement Comparison
- Receipt & Disbursement
- Option for marking Provision and reserve
- Option for marking Depreciation

..

- Ability to integrate the General Ledger Accounting with Asset Accounting ; Accounts Receivable and Accounts Payable; Costing ; Goods Management/Inventory and HR
- Ability to carry forward assets and liabilities to following accounting year
- Ability to generate General Ledger Account Balances
- Ability to account/adjust for transit loss to inventory
- Ability to value consumption of raw Goods as per defined business rules and ability to post to the appropriate General Ledger code
- Ability to make necessary adjustments in case of price revisions, where applicable
- Ability to account for differences arising on account of physical verification
- Indicate vendor balance before making payment.

6.1.7.6. Pay Management

- View and match invoice to PO, Receipt in the system at line level eliminating need for physical PO / GRN
- Automatic three way (invoice, PO and GRN) matching process after the invoice details are entered in the system
- Ability to track invoices received not processed/paid
- Enter required vendor invoice details manually for matching at Goods receipt / payment level

- Automatic alert for noncompliance of PO terms (documents, price, delivery date, other conditions of contract)
- The system should auto calculate short supply based on date of receipt and quantity entered by custodian
- Automatically place on hold invoices not matched to PO for specific vendors
- Automatic accounting for invoices based on POs by linking to A/c master.
- Ability to analyse ageing of vendor balances at any given point of time whether current or past
- Ability to generate vendor account statement to be sent to the vendors.
- Postings in Accounts Payable to be simultaneously recorded in the General Ledger
- Ability to generate balance confirmations, account statements and due date forecast

Reports

- Real time - Cash Book, Bank book, Day Book (Payment/Receipt/Journal/Contra)
- Payment Status Report.
- Pending Payment Report with ageing
- Voucher Reports, Sundry Creditors with ageing , Debtors, Security Deposits,
- Voucher-Payment Reports
- Ledger/Sub-ledger Reports
- Custom reports to Bank
- Tax (GST,IT-TDS etc) Reports
- Daily Cash Collection report (counter wise, sections etc)
- The system will have well maintained reports on the vouchers generated in the system including the details of Receipt / Payment / Journal / Purchase etc.

6.1.7.7. Cost

- Ability to define cost centers across the organization
- Detailed Priced Stores/section Ledger (Based on user defined parameters)
- Ability to compute costs for inventory valuation purpose based on defined accounting policy
- Ability to assign Fixed Assets to Cost Centers
- Ability to charge of Depreciation to assigned cost centres automatically, while posting Depreciation entries
- Allow to calculates wage costs using the fixed hourly rates determined in cost center planning
- Ability to get the breakup of costs by way of different accounts
- Track expenses related to feed, vet care, health care and man-days etc
- Ability to support online valuation of Inventory

- Provision for
 - Day-end/ day-begin, Month -end/ Month -begin should be able to be done
 - Year -end/ year -begin should be able to be done
 - The transactions of counters attached to the Park should be maintained separately and there should be provision to arrive at separate final accounts for them. There should also be provision to connect these transactions and arrive at a consolidated position

- For transactions, it should permit multiple credit entries for one or more corresponding debit entries and vice versa. The system should validate such sets of entries by ensuring that the debit total equal the credit total
- An end-of-day report should be generated at each counters for system-generated entries with the User-ID of the originator
- System should have the facility to calculate the IT-TDS ,GST,GST-TDS, other mandatory levies and Taxes and calculation based on the tax slab incorporated date
- System should have a facility to deduct tax at source as per regulations, on payments to the debit of expenditure accounts and credit to designated accounts. It should be possible to configure which payments will qualify for such deductions. Certificates for such taxes deducted should be generated by the system in user-defined formats and can be issued to the customers when needed.
- Ability to generate complete trial balance, P & L account and Balance Sheet at these levels
- Job Center / Cost-center
 - The system will maintain reports on job/cost met by the section/enclosure/zone. Expenses related to feed, vet care, health care etc . Salary paid to each employee or fee for each job/service done will be recorded and listed in this section. The system calculates the cost that is being met by this section/enclosure/zone. The section/enclosure/zone filters only the expense of the section enclosure/zone towards expenses/job/service being done. This report is segregated from the data submitted by the users.
- Year-end process
 - The system will have simple and efficient year ending processes as per the structure required for the business. The admin user will be able to easily analyse the details of a year and also compare the same with other sections.. Day book, cash book, bank book, All General ledgers, Trail balance ,P&L account and balance sheet shall be exported and saved for future reference. Detailed history of each data will be well maintained in the system. The section will list out the details of yearly transaction of each section separately and the entire network.

6.1.7.8. Borrowings/Plan fund allocation

- Multiple type
- Institution
- Receipt
- Payment

6.1.8. HR Management and Payroll

Human Resource Management Systems provide a means of acquiring, storing, analyzing and distributing information to various stakeholders. HRMS should cover the full spectrum of tasks associated with Human Resources departments, and simplifying financial transactions of all types. HR technology systems should fit all the complex needs of Human Resources departments.

The following are the key features includes but not limited to

6.1.8.1. Registration of New Employees

- The system should allow concerned section clerk to create temporary registration for newly appointed candidates and fill the following mandatory details:-
 - Employee Name
 - Employee Type
 - Date of Entry in Service
 - Date of Join in TZP
 - Office Order No
 - Order Date
 - Designation
 - Reporting Office
 - Seat/Section
 - Shift
 - Pay scale
- The HR head (or concerned Section Head in TZP) verifies and approves Employee details.
- Ability to capture information of the Joining Form
- Ability to generate unique Employee Code
- System should generate Employee ID and Password for each registered candidate.

6.1.8.2. Contractual terms

- The system should have the provision to record basic information about the contractual terms between TZP and Candidate-
 - Contract duration
 - Contract type
 - Contract information (Agreement details, renewal, history etc)
 -

6.1.8.3. Workforce management

- The system should have provision to maintain information in the fields of-
 - Name in English
 - Name in Malayalam
 - Gender
 - Address
 - Telephone number
 - E-mail address
 - Date of Birth
 - EPF Number
 - Fathers Name
 - Mothers Name

- Marital Status
 - Identification Marks
 - Employment history
 - Education Qualification
 - Disability (Yes/No) if Yes give details
 - Caste category
 - Aadhar Number
 - License Number
 - PAN number
 - Blood Group
 - Signature
 - Photo
 - Bank Name
 - Bank Account Number
 - IFSC Code
 - Recruitment Type
- The system should have provision for shift Management
 - The system should have provision to capture data regarding proposals for promotions for employees from different section.
 - The system should have provision to link promotions to a variety of employee related issues.
 - The system should have provision to capture the disciplinary actions taken against Employee.
 - The system should have provision to allow enrolment of employees in benefits programs and plans. Employees will be enrolled according to the following criteria:-
 - - Position held
 - Grade/scale
 - Years of service
 - The system should have provision to allow setting up the following types of benefits Plans for employees over a specified number of years old (in order of priority):-
 - - Medical Reimbursement
 - Insurance benefits for employees, spouses, and children
 - Leave benefits
 - The system should have provision to assign benefit plan codes by employee based on their classification (to identify level of benefits for which each employee qualifies)

6.1.8.4. Payroll System

- The system should have provision to Generate Salary for each employee based on Grade and Scale of Pay/consolidated pay/Daily wages as allotted to them during recruitment.
- The system should have provision to automatically calculate and transfer salary based on shift and attendance.
- The system should have the provision to maintain salary register for verification.

- The system should have the provision to revert generated salary before final approval.
- The system should have provision to automatically calculate tax, levies and other deductions from salary
- The system should have provision to auto generate monthly Pay slip for employees.
- The system should have Ability to calculate different type of pays. For example basic, allowances, bonus etc.(festival Allowance etc)
- The system should have the ability to maintain an integrated security design to ensure that employee is not paid twice in one payroll period
- The system should have provision for employees to manually correct/make changes to the attendance details if incorrectly captured by time check (this will require necessary approvals)
- The system should have the provision to monitor attendance records on a daily, weekly, and biweekly basis
- The system should have the provision to pay all types of reimbursements through payroll (medical etc.)
- The system should have the provision to add different type of Allowances, details as follows:
 - Charge Allowance
 - DA
 - Dies-Non Repay
 - Daily Allowance
 - Extra-Wage
 - Festival Advance
 - Festival Allowance
 - Holiday Wages
 - HRA
 - Medical Reimbursement
 - Night Duty
 - Refund
 - Special Allowance
 - Spectacle Allowance
 - Subsistence Allowance (eg.Under suspension)
 - Surrender Leave
 - Travel Allowance
 - Uniform Allowance
 - Wash Allowance
- The system should have the provision to add different type of Deductions, details as follows:
 - Bank Loan
 - Canteen
 - Co-Operative Recovery
 - EPF
 - ESI
 - Excess Salary Drawn
 - Half Pay Leave
 - Hire Purchase
 - Income Tax
 - LIC
 - LWA (Leave Without Allowances)
 - Medical Advance
 - Professional Tax
 - Quarters Maintenance Charge
 - Quarters Service Charge
 - Recovery
 - Relief Fund

- Rent
 - Salary Advance
 - Water Bill
 - Electricity bill
- The system should have provision to incorporate the Employee Pay slip details as follows :-
 - Employee name
 - Employee number
 - section Name
 - Bank Details
 - Gross pay with details
 - Deductions with details
 - Net Pay
 - The system should have the ability to handle Salary/Festival advances
 - There should be a provision for Part Payment of salary. This will be used when an employee is relieved in between a month.
 - System should be able to generate Form 16 for each employee.

Daily Wages Calculation

- Wages/day
- ESI
- EPF
- Bonus (based on the no of days attended)
- Salary

Increments

- Ability to generate list of employees due for increment (preferable one month earlier)
- Ability to calculate the increments as per the scale of pay for employees who have served for 12 months -- as business rule
- Ability to send auto alert/e--mail to the concerned departments/section on change of pay--scale of the employee.

Leave Surrender/Terminal Surrender Calculation

- Ability to configure necessary business rules for leave encashment in the system for different categories of employees
- Ability to raise Leave Encashment Application in the system and this should flow by workflow to concerned HR personnel.
- Ability of the approved applications to flow online to Finance / Accounts section for suitable disbursement

Employee History

- The system should have provision to maintain the employee history, including tracking employee events in chronological order
- The system should have the ability to maintain employee turnover data(e.g. Termination/Resignation reasons)

Leave Management

- The system should have the ability to track leave by type, (e.g. casual leave, Earned leave half pay/CML and leave without pay etc)
- Ability to enter and modify attendance data of employees directly in the system when punch system are not operating
- The system should have the ability to keep track of holidays and to define weekly holidays and other holidays.
- Ability to maintain updated leave balances against individual employees
- Ability to link wage / salary cut due to excess leave taken by employees
- The system should have the facility to integrate with attendance monitoring module
- Ability to scan / capture details of medical certificates with relevant Leave
- The system should have the facility for leave encashment.
- Ability to record time stamp of records entered and prevent back dated entries

Others

- Ability to generate Dues Report for the employee and show any outstanding amount in any category / department from the system
- Ability to generate No Dues Certificate / Clearance to the employee
- Track disciplinary actions taken against each employees

Reports

- The system should have the ability to generate the following Reports
 - Allowance Report
 - Deduction Report
 - Deduction Report
 - EPF
 - Pay + DA
 - EPF-UAN Report
 - ESI
 - Employee Service Report
 - Income Tax
 - Income Tax Report
 - Income Tax-TDS
 - Individual Detailed Pay Record
 - LIC Remittance
 - Last Pay Certificate
 - Pay Roll
 - Recovery Consolidation
 - Retirement Details
 - Salary Abstract
 - Salary Certificate
 - Salary Report
 - Salary Slip
 - Welfare Fund
 - General Report

6.1.8.5. Biometric Attendance Module

There should be provision for to integrate with Andhra based biometric punching and attendance system

6.1.9. Asset Management

This module will take care of end to end dealings of assets in TZP including fixed assets maintenance, transfer and disposal of assets.

The following are the key features includes but not limited to

- Receipt of Asset on delivery of asset by supplier (based on PO)
 - Add Item wise Tender Details.
 - Payment to Supplier (link to Finance Module)
 - System should alert the warranty, AMC, ASC, service, aging, depreciation, insurance, pollution, licence renewal, tax renewal etc. related to equipment /vehicle/furniture/land/buildings.
 - Physical verification and reconciliation
 - Replacement, scrapping and decommissioning
 - Impairment or disposal of assets and sale
- System should have a provision to enter asset details like:
- Product name
 - Date of purchase
 - Value of asset
 - Year of manufacturing
 - Vendor name with GSTIN
 - Bill no
 - Batch no
 - Warranty details
 - Asset Owner
 - Insurance details
 - Service details
 - Pollution certificate
 - Category
 - Item
 - Supplier
 - Manufacturer
 - Unit
 - Purchase order
 - Purchase invoice
 - Confirmation
 - Purchase return
 - Stock transfer
 - Damage marking
 - Write off

- Scrap sales report
 - Automation in Depreciation
 - Opening stock
-
- Asset code generated should be unique and should identify each asset specifically. For example, a chair in Main Office and kept in the finance section located on ground Floor should be evident from asset code
 - Centralized definition of fixed asset categories, description, multiple depreciation rates, predefined residual values etc.
 - Record the physical location of each fixed asset
 - Automatically consolidate FA Register at units into FA Register for the company
 - Prevent units from entering/updating data in any FA Register other than their own FA Register
 - Ability to categorize assets based on various parameters like movable, immovable
 - The system should have a provision to enter purchase value for an asset and enter depreciation rate
 - Provision to record manufacturer's serial number
 - Reclassify individual fixed asset or a group of fixed assets
 - The system should auto calculate value of each assets based on initial value and depreciation rate
 - Record transfer of fixed assets from unit to unit ,one location to another or from one employee to another etc
 - Record fixed assets with date placed in service in the past
 - Record fixed assets with date placed in service in the future
 - Provision to rectify errors in recording fixed assets in the same period or in previous periods
 - Ability to record number of units against each fixed assets
 - The system should generate list of assets which are due for replacement and generate replacement alert to concerned authority.
 - Facilitate drilldown facility from the GL to individual fixed asset transaction in the fixed asset module
 - Create accounting automatically for fixed assets addition, depreciation, recategorization, revaluation, t, transfers etc
 - Forecast the depreciation and written down value for any user defined periods
 - Maintain depreciation data cost centre wise
 - Suspend depreciation on specific or categories of fixed assets for specified period of time
 - Run/ roll back depreciation multiple times
 - Support change of useful life and effective rate of depreciation
 - Ability to perform valuation of fixed and current assets
 - Provision to facilitate physical verification of fixed assets by printing fixed assets reports location-wise, employee-wise, category-wise etc
 - Ability to reclassify individual fixed asset or a group of fixed assets
 - Ability to keep track of last physical verification data for each asset record
 - The system should give list of assets which are expected to be replaced in next one year, which may be used for Budgeting purposes
 - Provision to facilitate physical verification of fixed assets by printing fixed assets reports location--wise, employee-wise, category-wise etc
 - Option to assign each fixed asset to one or multiple custodians
 - The system should have the provision of transferring of asset between sections if required.
 - The system should have provision for entering AMC/ASC details

- The system should give AMC/ ASC alerts and notification to concerned asset owner
- The system should have provision to create request for transfer of an asset from one section to another
- The system should have provision to approve transfer request
- The system should automatically assign new code to an asset transferred from one place to another
- The system should be able to generate various asset related Reports. Some examples are given below:
 - Assets belonging to a particular section
 - Assets purchased during a particular time period
 - Assets expected to be out of life for a particular time period
 - Assets owned by a particular asset owner
 - Assets who's AMC/ASC is due next month
- Revalue an existing fixed asset or a group of fixed assets or all fixed assets belonging to a category or all fixed assets in the fixed assets register
- Asset revaluation/scrap sale
 - Ability to retire entire or part of an existing fixed asset/set of fixed assets and update asset register on retirement of assets
 - Ability to record salvage value, sale proceeds, and cost of removal
 - Ability to Create, view, update, delete relevant details in Asset Register (disposal/retirement details)- (maker- Checker)

6.1.9.1. Registers

- Asset
 - Asset Register
 - Movement Register

7. APPENDIX: EoI RESPONSE FORMS

The Bidders are expected to respond to the EoI using the forms given in this section and all documents supporting Pre-Qualification Criteria. Pre-Qualification & Technical Proposal shall comprise of following forms::

- Form 1: EoI Response template (checklist)
- Form 2: Compliance Sheet for Pre-qualification Proposal
- Form 3: Particulars of the Bidder
- Form 4: Letter of Proposal
- Form 5: Project Citation Format
- Form 6: Proposed Solution

7.1. Form 1: EoI Response template (Check list):

S. No.	Bid response documents for evaluation (Pre-Qualification & Technical) Criteria	Compliance status (Fully Complied / Not Complied)	Details on compliance and reference documents, wherever required, in Appendix
1	Form 1: Bid Response compliance status/ EoI response checklist . (This form)		
2	Form 2: Compliance Sheet for Pre-qualification Proposal		
3	Form 3: Particulars of the Bidder		
4	Form 4: Letter of Proposal		
5	Form 5: Project Citation Format		
6	Form 6: Proposed Solution		

7.2. Form 2: Compliance Sheet for Pre-qualification Proposal

(The pre-qualification proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Pre-Qualification proposal)

S.No.	Basic Requirement	Specific Requirements	Documents Required	Provided	Compliance status and Reference & Page Number
1	The bidder should be TSPs of Government of Kerala for IT/ITeS or Registered under KSUM for IT/ITeS	Document proof	Copy of the GO or relevant document	Yes/No	
2	EOI Fee	Online payment , Rs.1000 (INR Rupees Thousand Only)	Bank transaction details or Document proof for Exemption	Yes/No	
3	The solution provider should be a IT Solution Provider with experience in the implementation and operation of similar solution	Minimum of one number of successful implementations of similar IT solution/ERP	Copy of the Work order and successful completion certificate from customer/client.	Yes/No	
4	Sales Turnover in IT and ITeS services (System integration/ software development)	Average annual turnover generated from services related to IT/ITeS during the last 3 financial years	Extracts from the audited Balance sheet and Profit & Loss statement for each of the three years or Certificate from the Statutory auditor	Yes/No	

5	Certifications if any	ISO 9001 or ISO 27001 or or CMMi	Copy of all valid certificates	Yes/No	
6	Solution Provider Certification with Assurance	In case Bidder is different from the solution provider then bidder should provide the Certificate from Solution Provider with Assurance for supporting the Bidder for this proposal for any third-party products used in the proposal.	Certificate of authorization from the original solution provider from an authorized signatory with contact details.	Yes/No	
7	GST details	Document for proof	PAN/TAN/GST Registration Certificates	Yes/No	
8	Manpower Strength	Solution provider is required to provide details of no. of professionals proposed for the enhancement activities with TZP should contain various roles (such as Project Manager,Architect, DB expert etc) capable of handling any enhancements independently.	Self-certification by the Solution provider	Yes/No	

9	Blacklisting	The Solution provider should not have been blacklisted by any Central or state Government, Ministry or Agency for breach of Contractual Conditions as on EOI calling date. The Solution provider should also not be entangled in any legal disputes with any Govt. / PSU body	Declaration from the Solution provider in letterhead.	Yes/No	
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7.3. Form 3: Particulars of the Bidder

S. No.	Information Sought	Details to be Furnished
A	Name and address of the Company/Organisation	
B	Incorporation status of the firm (private limited/TSP,etc.)	
C	Year of Establishment	
D	Date of registration	
E	GSTIN	
F	Bank Account Details	
G	Details of registration with appropriate authorities for service tax	
H	Name, Address, email, Phone nos. And Mobile Number of Contact Person	Letter from the authorized signatories of the organisations, for contractual aspects, confirming the details requested

7.4. Form 4: Letter of Proposal

(Company letterhead)

[Date]

To,

The Director

Thrissur Zoological Park Puthur P.O, Near Kurisumoola Thrissur P.O

Kerala-685 014 India

Subject: Submission of the Proposal for Implementation of End to End computerization of TZP (eGov-TZP) .

Dear Sir,

Having examined the Expression of Interest (Eol), we, the undersigned, intend to submit a proposal in response to the Expression of Interest (Eol) for presenting our credentials to the Client. We are ready to participate in the meeting with the Client at Puthur, Thrissur, Kerala for making presentation regarding our firm and our credentials in the field of software solution for eGov-TZP

Primary and Secondary contacts for our company are:

Particulars	Primary Contact	Secondary Contact
Name:		
Title:		
Company Name:		
Address:		
Phone:		

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to Thrissur Zoological Park is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements

therein do not in whole or in part mislead the Client in its RFP developing process.

We confirm that any information, technical design etc submitted by our company/organization in EOI shall be used for the preparation of RFP by the TZP.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the EOI process, we are liable to be debarred from the RFP process that will follow.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Yours sincerely,

Authorized Signature [In full and initials] with company seal:

Name and Title of Signatory:

Name of Firm:

Address:

Location:

Date:

7.5. Form5: Project Citation Format

Relevant IT project experience(provide maximum 3 projects) Use 1 project per page	
General Information	
Name of the project	
Client for which the project was executed	
Name and contact details of the firm	<Name> <Department > <Designation> <email id> <Mobile / Work Nos>
Project Details	
Description of the project	
Contract period	Start date & End date
Transaction volume	No of users : Maximum number of tickets issued per day : No of tickets issued per year : Maximum number of transaction per day: Maximum number of transaction per year :
Scope of services	
Service levels being offered/Quality of service(QOS)	
Technologies used and Infrastructure Architecture, Current Product version at customer site	
Outcomes of the project	
Other Details	
Total cost of the project	
Duration of the project (no. of months, start date, completion date, current status)	
Other Relevant Information	
Value added services, if there any, provided	

7.6. Form 6: Proposed Solution

.Bidders are required to provide their response in the following format with maximum page size is given for each of the sections within bracket, wherever applicable.

- 1) About the Company (1)
- 2) Proposed technical stack: The proposed solution shall be based on open source technology
- 3) About the proposed product / solution and its features (4)
- 4) Additional features/technology (functional and non-functional) other than mentioned in scope of work in EoI if any
- 5) Architecture:, Proposed Application architecture based on micro service architecture and loosely coupled , Uses modern/latest frame work and libraries which support modular development, scalability and maintainability . The Proposed Infrastructure architecture, key considerations in the Architecture to meet the requirements (4)
- 6) Technology used with versions, list of third party products planned to use in the solution (2)
- 7) Project Management approach
- 8) Risk Management and BCP
- 9) Approximate cost (Module wise)