



SCOPE OF WORK AND SPECIFICATION OF DIGITAL MATERIAL GATE PASS SYSTEM

Table of Contents

Contents

1. Introduction:	3
2. About the Tender Requirements:	3
3. Scope of work & brief requirement:	4
4. Software as a Service (SaaS) or Software as a Product (SaaP):	6
5. Contractual period: 60 Months.	6
6. Facility to be provided:	13
7. Warranty and Support:	14
8. Training:	14
9. Digital Material Gate pass system should comply with the following points:	14
10. Usage Reporting and Billing Management	15
11. Business Continuity Services (Disaster Recovery)	15
12. Escalation Matrix for Service SUPPORT:	15
13. Help Desk and Support:	15
14. Timely Ticket Resolution SLA	15
15. Measurement and Monitoring:	17
16. Periodic Reviews	17
17. Penalties:	17
18. Tax Liability:	18
19. Miscellaneous	18
20. Exit Management Plan	19

1. Introduction:

OIL AND NATURAL GAS CORPORATION LIMITED (ONGC Ltd.) is a Maha Ranta Public Sector Enterprise (PSE) of Govt. of India Enterprise under MOP & NG.

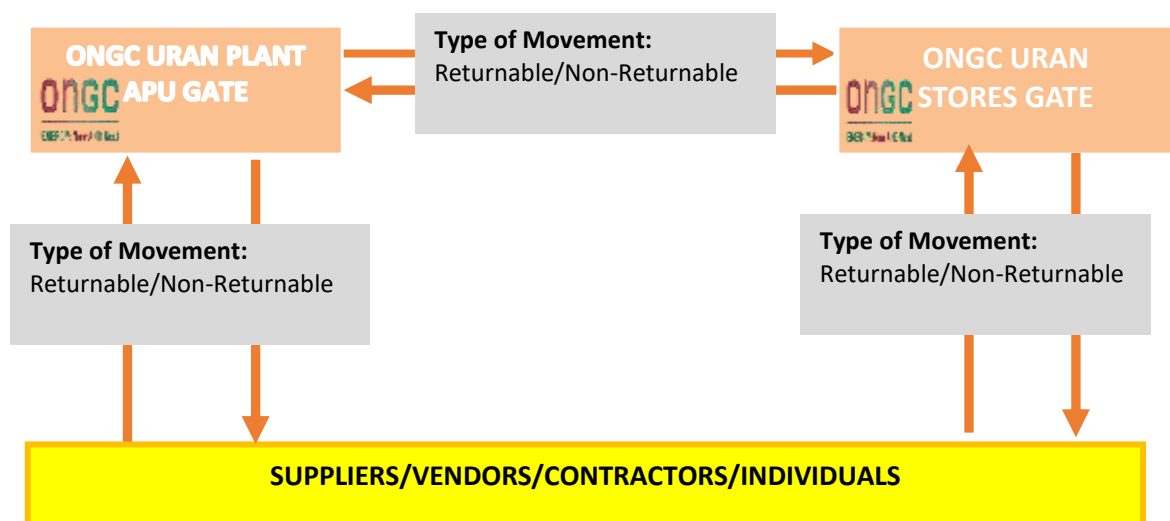
It's Uran Processing Plant is situated in Uran Taluka, Raigad District in Maharashtra. It is located approximate 50 Km away from state capital Mumbai.

ONGC Uran Plant processes Oil & Gas received from ONGC's Mumbai Offshore Fields. The processing plant currently handles about 8.5 MMSCMD of gas and 35000 m3 crude oil received from the offshore fields.

As a result, a large no. of EPC contracts, service, maintenance, and repair works are going on in the plant on continuous basis due to which significant material and vehicle movement takes place in and out of the plant premises on returnable and non-returnable basis.

2. About the Tender Requirements:

- a. In order to streamline and expedite the material and vehicle movement, ONGC Uran plant intends to digitize the existing manual Gate Pass system. The new digital system will replace existing manual paper-based system. The new digital gate pass system for materials will follow the existing rules and company protocol related to material movement. System should follow ONGC Uran plant Specific workflow and business approval hierarchy. The proposed system will be used in the entire process of a material movement like returnable, non-returnable, inwards, outwards, and keeping track of every item that enters and exits from the plant premises.
- b. The system will be used by ONGC Uran plant and its associates like various suppliers, vendors, contractors, consultants (3rd Party) and individuals. Hence there should not be any limitation on capacity of number of users to be enrolled in the system.
- c. There are two main gates (approx. 500 meters apart) through which the movement of material and vehicles takes place at ONGC Uran Plant. The movement of material and vehicles is illustrated in the following diagram:



3. Scope of work & brief requirement:

- a. The proposed system / Software application will be hosted on on-premises windows server. The server will be dual redundant type (Disaster Recovery). The system will have one independent additional test server (UAT) so that it is possible to test any modifications / software patch etc. before applying on the running system. UAT should be different from the DC and DR servers. The system will be required to interface with ONGC domain controller, active directory server, SAP Server, email server and Visitor Gate Pass System of ONGC Uran plant etc.
 - Infrastructure required in the project (Supply is in vendor's scope): Not cloud based, On-premises based solution.
- I. Two Physical Servers (DC-DR) with configuration:
 1. Server Type: Enterprise Server.
 2. Processor: Intel® Xeon® Silver 4214R CPU @2.40GHz 12 cores – 2 Nos.
 3. Operating System: Windows Server 2019 Standard.
 4. Physical Memory (RAM): 128GB DIMM DDR4.
 5. Storage Size: 5TB HDD/SSD.
- II. PC, A3 Printer, TV/Display(44Inch):

PC for testing environment, 2Nos. of PCs for CISF personnel at APU Gate & Stores Gate for material entry and approval, Printer to CISF Personnel for printing the output for records, TV/Display(44inches) to display the que at outside of Material Entry Gate.

 - Minimum specifications for PC/AIO: Intel i7 12th generation, 2.1GHz, Cache 25MB, 16GB RAM DDR4 3200 MHz, SSD 512GB nvme, DP 1.4, BIS, BEE, ROHS certified.
 - Heavy Duty A3 Size Printer with 1200 Dpi printing resolution and Cartridges to be managed by Vendor with approx. annual consumption of ~1,00,000 prints. Printer without cartridges within the print limits will be considered as hardware unavailability and NPD will be carried as per the clause with header NPD for delay in resolution of hardware.
 - The configuration of TV/Display should be minimum 44 inches and outdoor compatible with minimum 1,000nits brightness.
 - PC and A3 printer will be included the AMC of ONGC contract, Vendor should provide warranty of 5 years (i.e., warranty should be valid for completed service period) from the starting date of contract (including extended warranty) for TV/Display.
- b. The WebApp will be used both in Internal and outside ONGC network. And should be secured by SSL encryption. As hosting is in ONGC domain, Domain Name and SSL certificate will be in the scope of ONGC.
- c. The Digital Material Gate Pass System should be responsive with mobile, tablets, laptops, Desktops, etc.,
- d. Registration of vehicles for entry should all also be included in the scope as vehicles will be used for entry of material. Vehicle movement takes place in and out on returnable and non-returnable basis. Scope includes both:

- I. Material Movement
- II. Vehicle Movement
- e. Material Movement:

Inward Material: Vendor uploads the delivery challan & details through request. ONGC person will approve the delivery challan for entry. Either Returnable or Non-Returnable basis. For returnable, entry pass shall be used as refer for outward pass.

Outward material: Request will be raised by ONGC person as creator and send to pre-defined/Approver for approval. Post approval, the outward material pass will be visible at Gate for processing.

- I. Returnable: (To be declared by requester or approver) Ex: 90 days' time for material returning, upon exit with this type of pass.
- II. Non-returnable: No-time period for material entry & exit.
- f. Dashboard for material returnable items should be available for all users. Visibility will be defined with filter of conditions – Returnable material, non-returnable material, vehicles, etc.,
- g. Pass creation, approval, and tracking should be accessible to all users and all user requests tracking shall be accessible to super-users and administrator.
- h. Provision should be available for attaching documents in various formats such as PDF, Word, JPEG, PNG, etc.,
- i. Format and fields of request forms should be done as per ONGC requirement.
- j. Application should seamlessly integrate with existing ONGC network.
- k. As material movement is also in between stores & APU gate, request page should be available to all users along with vendors.
- l. Vendor registration option should be available where the vendor details and login credentials will be created. Facility for OAuth authentication shall be included for better handing of user credentials.
- m. Hosting should be On-premises SaaS or SaaS.
- n. Contractual Period 60 months and contract work in AMC – On call basis.
- o. Provision to be kept for entry of non-PO material and without vendor code entry.
- p. Slot booking should have provision to set priority at Security Incharge role in the queuing system. Priority should be given to ONGC persons (as it impacts working hours of ONGC).
- q. Data to be fetched from SAP API (REST or SOAP API) are Company Name, Vendor Code, PO No. etc., This Data will be used for faster filling of forms and for references in material movement.
- r. Develop additional modules, workflows, or features as identified by ONGC to optimize material movement management and enhance security protocols.
- s. Nomenclature of procedures / documents/ dropdowns are to be changed as per ONGC requirement.
- t. As there may be more than 100-line items also in gate pass, provision of loading data through Excel template is also required.
- u. Customize the DMGPS application as per the procedural requirements of ONGC Uran, ensuring integration with their existing visitor gate pass system.

4. Software as a Service (SaaS) or Software as a Product (SaaS):

The Bidder shall offer its applications to host their application in ONGC on-premises as SaaS or SaaS.

5. Contractual period: 60 Months.

This contract will be for 5 (Five) years and the quoted item rates shall remain firm and fixed for the duration of the contract till execution of the order.

Technical Requirements:

- a. **The enrollment policy for Digital Material Gate Pass System should be as follows:** All the officers/ employees of ONGC Uran Plant will be readily accessible through ONGC AD server, but, vendors are required to register in “Digital Material Gate Pass System” (DMGPS). So the registered vendor need to be approved by ONGC officer, only after approval vendor can submit requests in the portal. However, 3rd party users shall be either initiator or recommender only. Approving right will be only with ONGC own officers.

After enrollment, 3rd party user can change their password. OTP based password reset facility shall also be available. (SMTP and SMS facility will be provided by ONGC).

b. Different types of users and their roles to be configured in Digital Material Gate Pass System:

System Administrator: The **default system administrator** for the DMGPS will be head security or his nominated ONGC Uran plant officer.

ONGC user/ Initiator: All the officers of ONGC Uran plant to be its default user

Warehouse Manager: As per requirement System administrator to authorize the accounts.

Approver for material exit: Dedicated list of users will have provision to approve the requests.

Security Incharge: Head Security will be authorized to login this role.

CISF : For CISF Personnel, This user should only operate from ONGC domain network only. Through this account, Material will be checked and approved for entry.

Vendors (3rd Party): These persons should have limited role for raising requests and to track the requests. Slot number with timings should be sent on their mobile and email.

c. 3rd Party user registration process:

For registering the concern user should furnish the following information:

- 1) Company Name & ONGC Vendor code
- 2) Username, Mobile No, passport size photograph, mobile number & Government Identity Proof, email id
- 3) ONGC Purchase order number (with or Without PO)

Post request, any ONGC officer should have provision to verify the company name, ONGC vendor code and Purchase Order number from SAP. If supplied information related to company name, ONGC Vendor code and PO Number are correct then provision for approval of Vendor can be done, with approval, SMS and Mail notifications will be send to registered mobile number and mail. On completion of registration process the user will be able to create request for material in/ out pass.

d. Approval Hierarchy for authorizing material movement gate pass:

i. For outward movement of goods:

Issuing Officer: All ONGC employees posted at Uran Plant shall have default right to create material gate pass request for **returnable and non-returnable goods**. Apart from ONGC Uran plant there will be user from consultants, vendors, suppliers, contractor etc. (3rd party user).

Authorized Officer/Approver: Specific officers of ONGC Uran plant shall have the right to authorize outward movement of goods. To get “Authorized Officer/Approver” right the user should apply in the DMGPS system enclosing approval document. System administrator will grant the “Authorized Officer/Approver” right to the user based on the enclosed approval note. The system will not allow any 3rd party user to seek this right. The system will allow only ONGC official to have approval right. Approval right will be specific to type of gate pass. If an ONGC Uran Plant official is having approval right for Returnable Material Gate Pass, then he cannot have / seek approval right for Non-returnable Material Gate Pass. This option should be optional & system administrator will select as per requirement.

ii. For inward movement of goods:

User: ONGC employee, any contractor, vendor, consultant or supplier can enroll as user of the system.

Reviewer: Specific officers of ONGC Uran Plant and from consultants

will have reviewer right. To get reviewer right any user should apply in the DMGPS system enclosing approval document. System administrator will grant the review right to the user based on the enclosed approval note. The system will not allow any 3rd party user (other than ONGC Uran Plant or from consultant) to seek reviewer right.

Approver: only specific officers of ONGC Uran Plant like Area Managers of departments will have material gate pass approval right. To get approval right concerned ONGC Uran Plant official should apply in the DMGPS system enclosing approval document. System administrator will grant the approval right to the concerned ONGC Uran Plant official based on the enclosed approval note. The system will allow only ONGC Uran Plant official to have approval right.

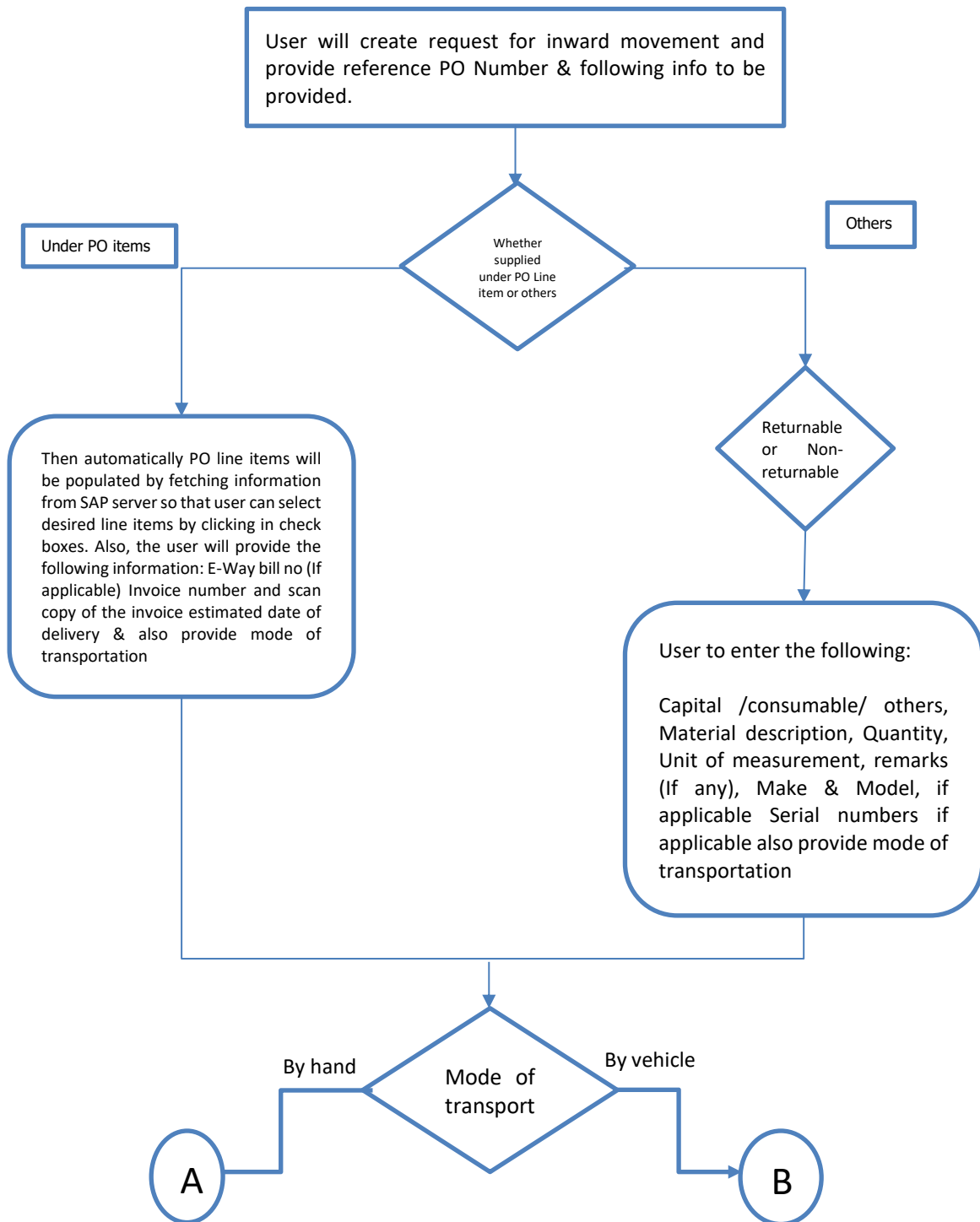
e. Workflow for approval of movement of goods & Entry Registration of Empty vehicle for Transportation of Material from Refinery to outside:

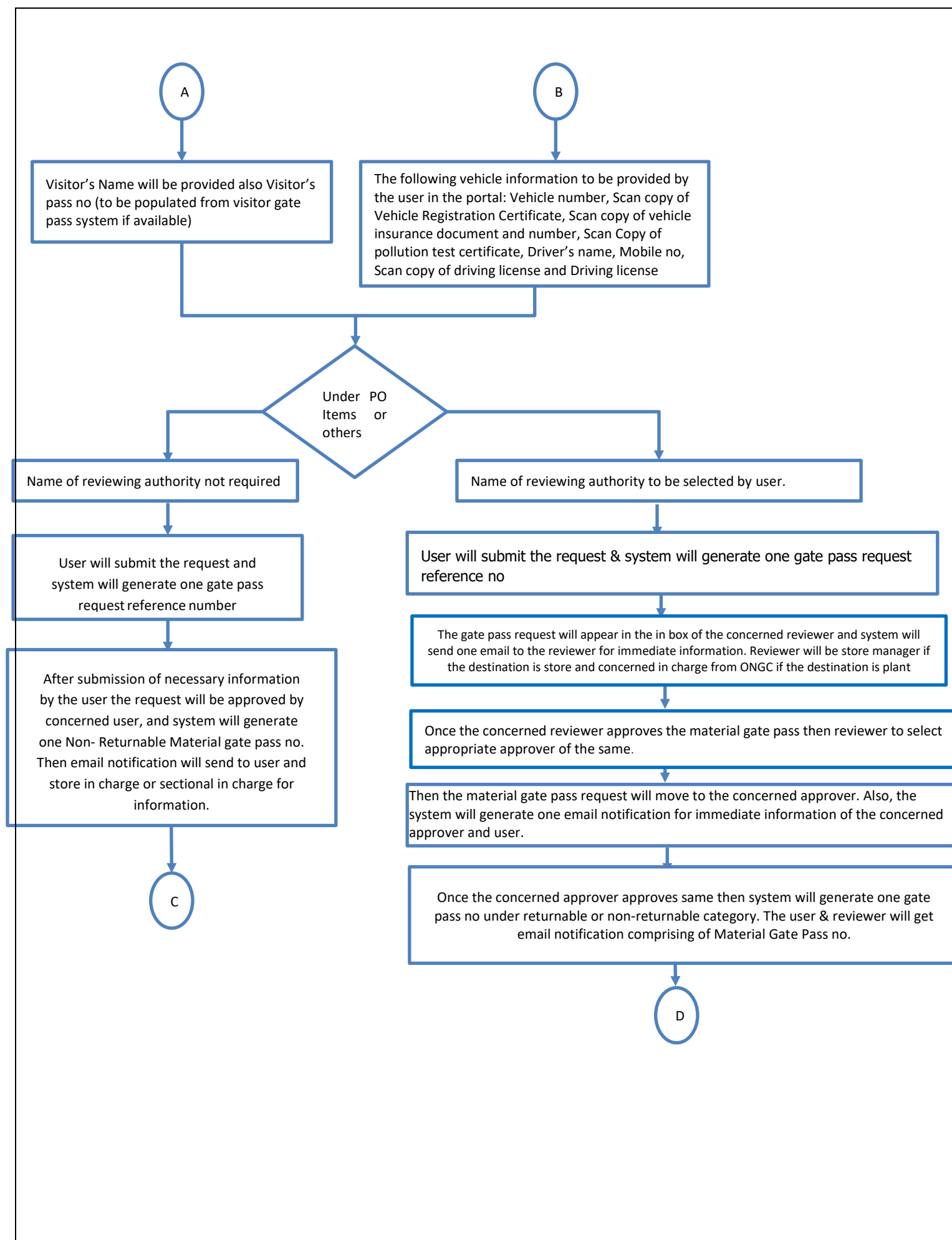
- i. Workflow for approval of inward movement of goods.
- ii. Workflow for approval of outward movement of goods.
- iii. Workflow for inward movement of Returned goods.
- iv. Entry Registration of Empty vehicle for Transportation of Material from Refinery to outside.

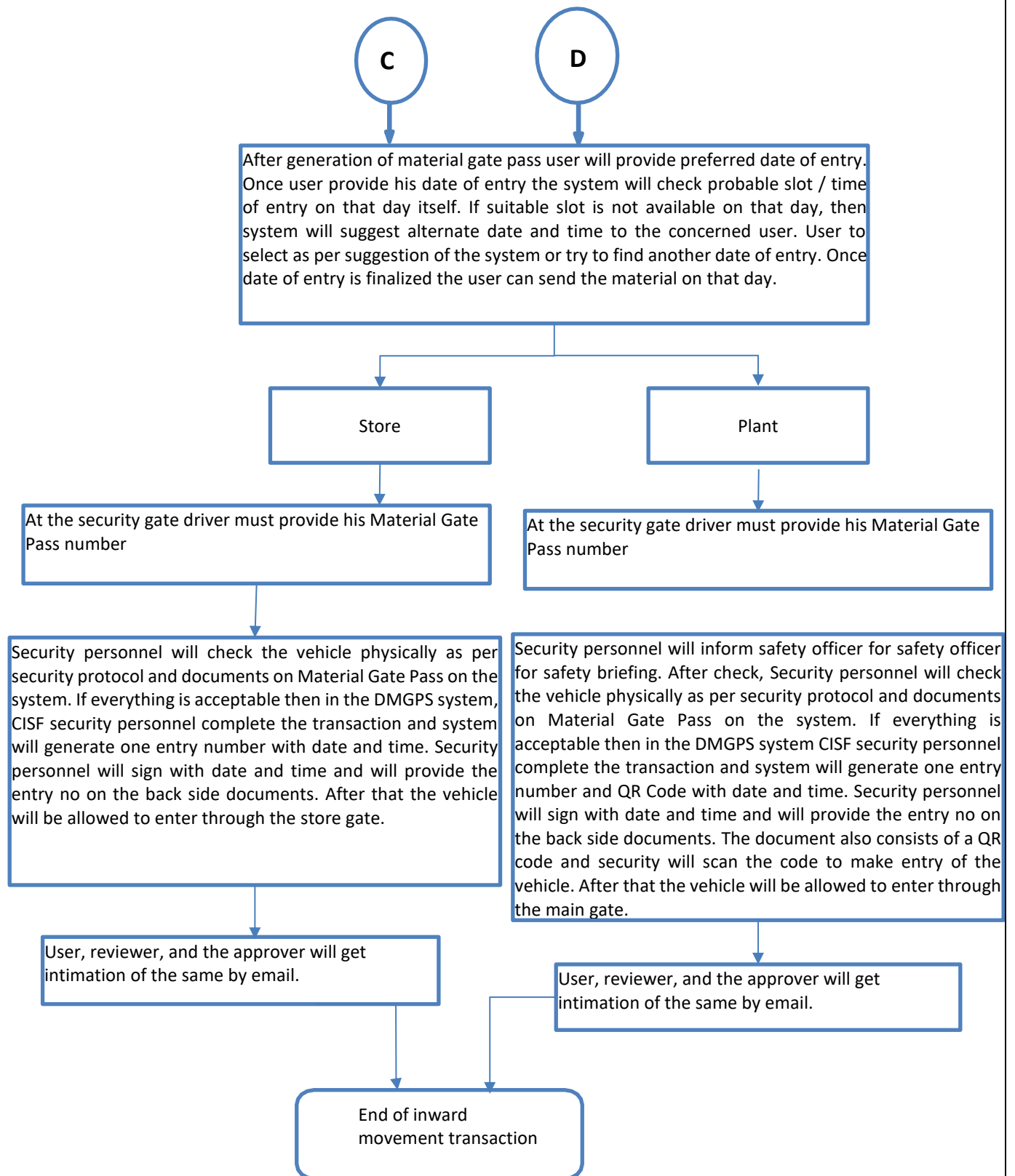
These workflows are provided for understanding ONGC Uran Plant requirements. However, at the time of execution of this project the vendor may have to accommodate changes / modifications, additions, and deletion as per direction of Engineers In-charge of ONGC.

I) INWARD AND OUTWARD MOVEMENT OF MATERIALS IN URAN PLANT

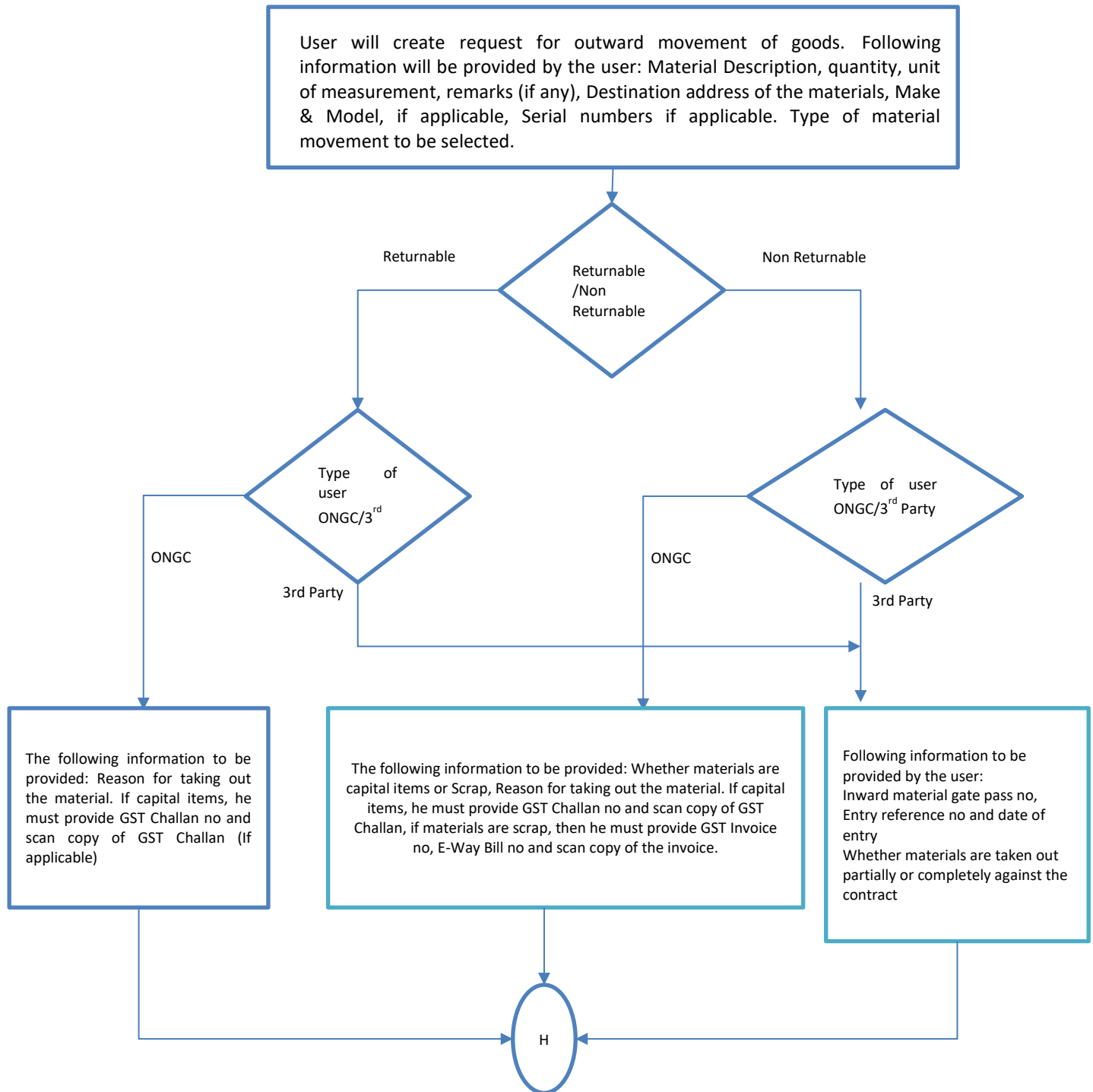
a) Workflow for approval of inward movement of goods

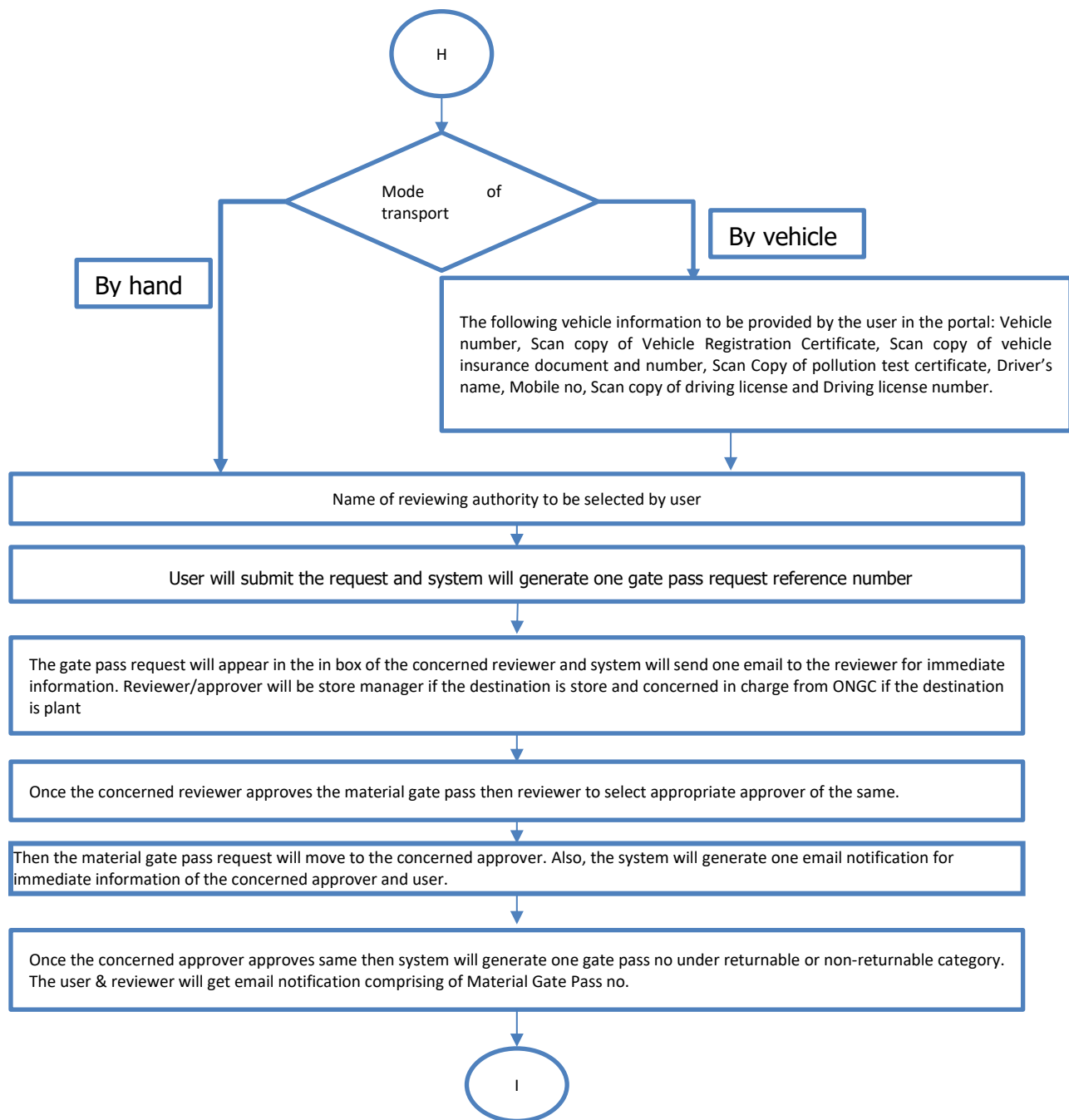






b) Workflow for approval of outward movement of goods







After generation of material gate pass user will provide preferred date of exit. Once user provide his date of exit the system will check probable slot / time of exit on that day itself. If suitable slot is not available on that day, then system will suggest alternate date and time to the concerned user. User to select as per suggestion of the system or try to find another date of exit. Once date of exit finalized the user can do the necessary on that day.

Store

Plant

At the security gate driver must provide his Material Gate Pass number

At the security gate driver must provide his Material Gate Pass number

Security personnel will check the vehicle physically as per security protocol and documents on Material Gate Pass on the system. If everything is acceptable then in the DMGPS system CISF security personnel complete the transaction and system will generate one Exit number with date and time. Security personnel will sign with date and time and will provide the exit no on the back side documents. After that the vehicle will be allowed to exit through the gate.

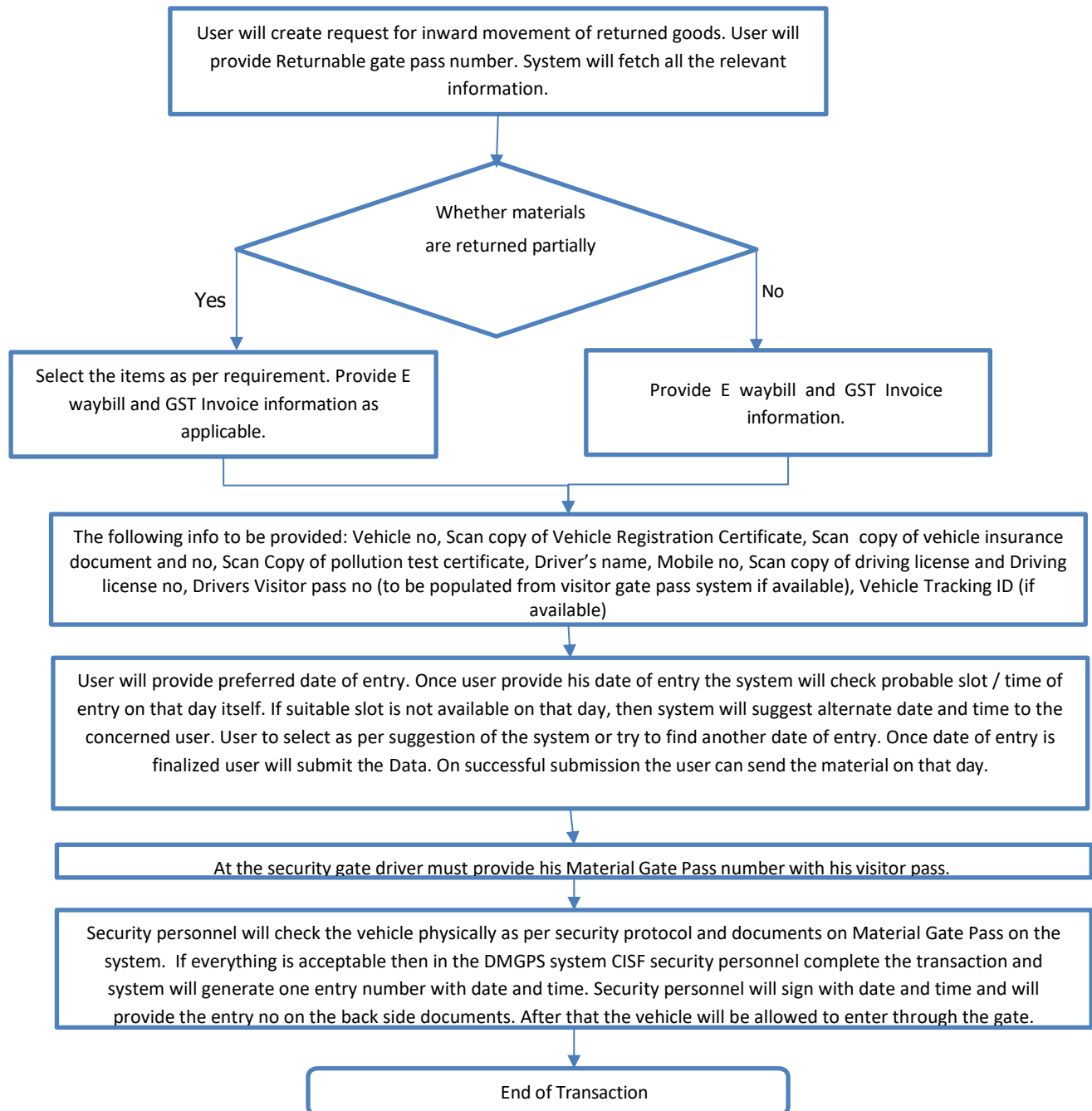
Security personnel will check the vehicle physically as per security protocol and documents on Material Gate Pass on the system. If everything is acceptable then in the DMGPS system CISF security personnel complete the transaction and system will generate one Exit number with date and time. Security personnel will sign with date and time and will provide the exit no on the back side documents. After that the vehicle will be allowed to exit through the gate. Security will scan the QR code to exit the vehicle for the day if the vehicle pass is still active.

User, reviewer, and the approver will get intimation of the same by email.

User, reviewer, and the approver will get intimation of the same by email.

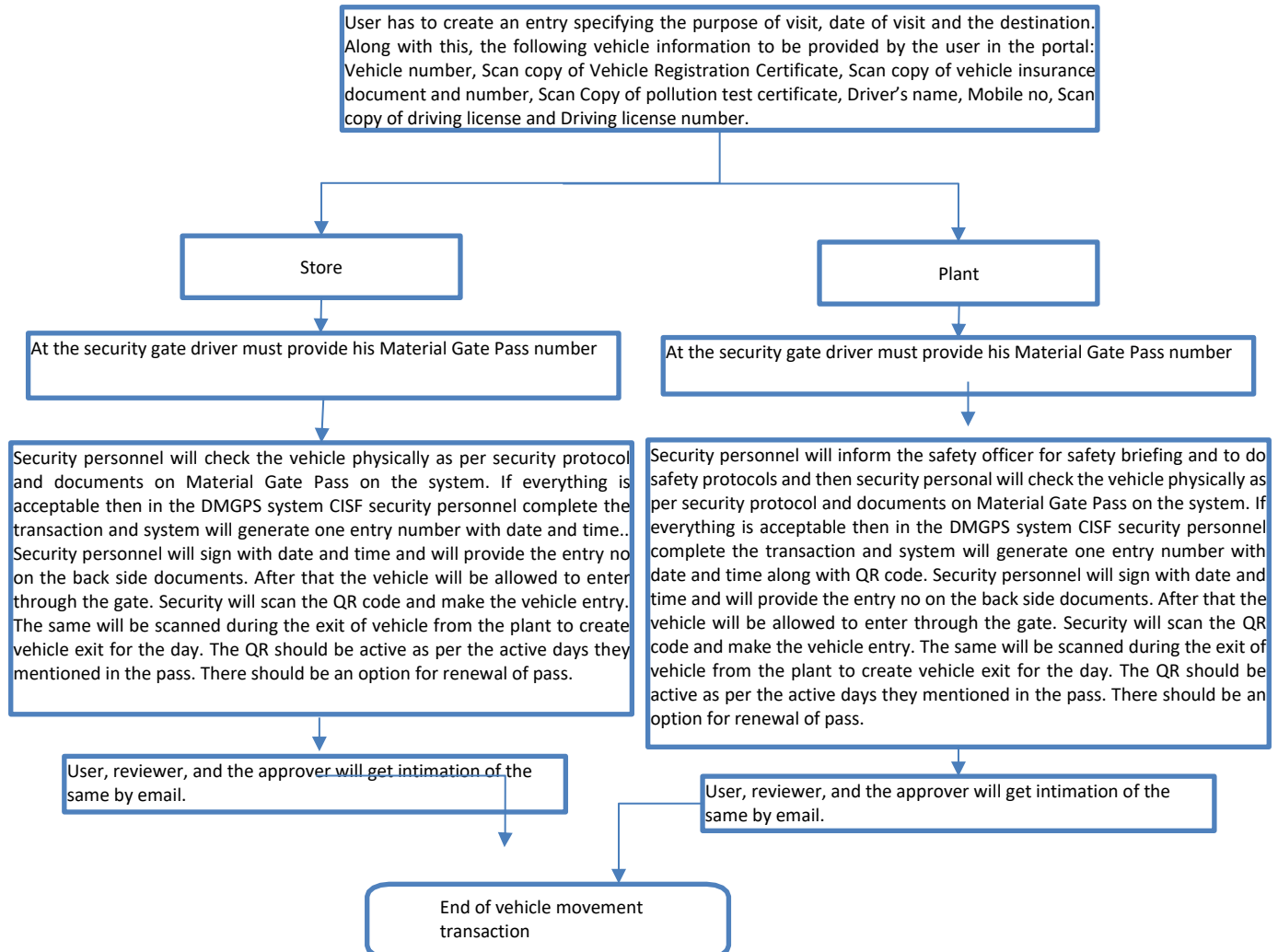
End of outward movement transaction

c) Workflow for inward movement of Returned goods



- As many vehicles such as cranes(stationary, pick and carry), Trailers, Trucks, Pickup vans, Cars etc. will make an entry into ONGC Uran plant on daily basis, it is necessary to make the vehicle entry permit for them. The flow sheet for the entry of empty vehicle is mentioned below.

I) Entry Registration of Empty vehicle for Transportation of Material from Plant to outside



- Gate Pass template:** There will be multiple templates for Material Gate Pass. These templates should have customizable data fields. ONGC Uran Plant will provide standard templates at the time of project execution.

6. Facility to be provided:

- Dashboard:** There should be provision for dashboard for each user of the system. In that dashboard specific information related to that particular user should be available. No 3rd party user will have information access to view any other user's material movement data.
- For CISF security dashboard should provide date wise schedule of planned

materiel movements with time. So that Security personnel can manage the incoming and outgoing materiel movements efficiently. At any given time, it should be possible for CISF to know how many vehicles related to material movement are inside the refinery campus.

- c. In case of unforeseen situation CISF can suggest rescheduling of entry and exit date. CISF Suggestion should come to the particular user as notification.
- d. There should be dedicated dashboard for warehouse manager. Warehouse manager should have all information related to material movements procured under ONGC PO and movements of all returnable/ non-returnable materials.
- e. The system should provide search facility by PO number, Vendor Code, User wise, Reviewer wise and approver wise, etc. At the time of project execution ONGC may require more such feature which should be full filled by the vendor without any additional commercial implications.
- f. There should be facility for user configurable reports.
- g. Track returnable materials with automated alerts to authorized individuals.
- h. The offered solution should be customizable to meet ONGC needs.

7. Warranty and Support:

Bidder will be responsible for upkeep and always running of the solution without any errors.

- a. **Patch & Configuration Management:** Bidder shall provide managed service for system patch and configuration management. Critical security patches are applied as needed, or when updates or patches are released from OS vendors. Bidder must ensure patch and updates applies in a timely and consistent manner to minimize the impact on business.

8. Training:

The Bidder to provide online training to the users of ONGC during the time of execution before going live of the system. The bidder to provide online training material/ resources on the website so that any 3rd party users can learn about the system & use the system comfortably.

9. Digital Material Gate pass system should comply with the following points:

- a. The provided software needs to be fully resilient to various cyber-attacks like XSS (Cross-site Scripting) attack, SQL Injection, JavaScript injection, Session fixation, dangerous file inclusions, Cookies theft etc.
- b. Following minimum measures are to be implemented, of Strong password policy, Username & Password encryptions all the time.
- c. Login with Captcha
- d. IP Restrictions, Reuse of old passwords, user blocking on failed attempts etc.
- e. Support Same Site & Secure cookies.
- f. Auto logout with configurable times (Session Management).
- g. The software must pass the Vulnerability Assessment & Penetration Testing (VAPT) ensuring it is GIGW compliant before it Go-live. VAPT tests should be carried out by vendor. VAPT test should be carried out after the inspection of software by ONGC

- QAD, and application should be hosted only after UAT from user-department of ONGC.
- h. Data should be protected through appropriate encryption while in transit and at rest in server. The cryptographic keys must be managed in a secure manner and be available with only the least possible number of authorized personnel. The cryptographic keys must be stored at the least possible number of Locations.
 - i. Logs of all activities must be available for review.
 - j. Monitoring of privilege accounts, virtualized image creating instances, unauthorized access attempts, multiple failed login attempts, system lockout, and critical file changes.

10. Usage Reporting and Billing Management

- a. Track system usage and usage reports.
- b. Monitoring, managing, and administering the monetary terms of SLAs and other billing related aspects.
- c. Provide the relevant reports including real time as well as past data/information/reports for ONGC to validate the billing and SLA related penalties.

11. Business Continuity Services (Disaster Recovery)

- a. Provide business continuity services from secondary site with 100% capacity in case the primary site becomes unavailable.
- b. DMGS and Storage resources should be highly available with auto recovery from hardware failures without any manual intervention.
- c. Storage should be highly available, reliable, and durable, replicating data across multiple servers in a data center to prevent the loss of data from the failure of any single component.
- d. Robust backup strategy should be in place offering image and data restoration options.

12. Escalation Matrix for Service SUPPORT:

Bidder must provide Escalation Matrix of Telephone Numbers for Service Support. Bidder must have a toll-Free Telephone No. for Service Support.

13. Help Desk and Support:

Service provider shall provide the Call logging & Help Desk support on every day (Except National Holidays) from 10 AM to 5 PM for all services. Time of the calls will be counted from the time of reporting through any channel provided.

14. Timely Ticket Resolution SLA

Based on the severity of the issue, the tickets have been categorized into 3 levels of priority. Penalty matrix for each level of priority is as below:

Priority 1:

Sl.no	Performance	Requirement	Penalty
.			

1	Application-level breakdown includes both Main server and DR Server combined.	Response Time: 1 hour, Maximum Resolution Time: 3 hours. Resolved after 3 hours (in resolution time) No NPD for tickets for tickets resolved within 3 hours.	10% of monthly Payment for each instance.
---	---	---	---

Note

1. This category includes application-level breakdown issues only, not hardware related and any issues regarding the network related to ONGC will be excluded.
2. The implementation agency is required to implement the requisite tools to automatically generate reports on up-time.
3. Maximum NPD of 20% shall be deducted in a Monthly payment with combined priority 1 and 2 cases.

Priority 2: Software related issues such as bugs, features, performance, security, configuration, question/inquiry, etc.,

Average Time taken to acknowledge and respond once a ticket/incident is logged through one of the agreed channels. This is calculated for all tickets/incidents reported within the reporting quarter.

Sl.no	Performance	Requirement	Penalty
1	Baseline	<p>Category I. Minor Issues: Response Time: 1 hour, Maximum Resolution Time: 3 hours.</p> <p>Category II. Medium Issues: Response Time: 1 hour, Maximum Resolution Time: 8 hours.</p> <p>Category III. Major Issues: Response Time: 1 hour, Maximum Resolution Time: 48 hours.</p> <p>If 95% of calls are Resolved within SLA (in resolution time) NO NPD is applicable. Else, NPD is applicable.</p>	5% of monthly Payment if less than 95% instances are resolved within SLA.

Note

1. The severity of the issue (Minor/Medium/Major) will be decided mutually by ONGC and vendor.
2. The implementation agency is required to implement the requisite tools to automatically generate reports on up-time.
3. Maximum NPD of 20% shall be deducted in a Monthly payment with combined priority 1 and 2 cases.

15. Measurement and Monitoring:

- a) The SLA parameters shall be monitored on monthly basis as per the individual SLA parameter requirements. However, if the performance of the system/services is degraded significantly at any given point in time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of ONGC or an agency designated by them, then ONGC will have the right to impose penalty as per direction of Engineer in Charge (EIC), take services from another bidder and by termination of the contract.
- b) The full set of service level reports should be available to ONGC on a monthly basis or based on the project requirements.
- c) The measurement methodology/criteria/logic will be reviewed by ONGC.
- d) In case of default on any of the service level metric, the selected bidder shall submit performance improvement plan along with the root cause analysis for ONGC's approval.

16. Periodic Reviews

- a) During the contract period, it is envisaged that there could be changes to the SLA, in terms of measurement methodology/logic/criteria, addition, alteration or deletion of certain parameters, based on mutual consent of both the parties, i.e., ONGC and selected bidder.

17. Penalties:

Payments to the Bidder to be linked to the compliance with the SLA metrics laid down in the agreement.

- a) The payment will be linked to the compliance with the SLA metrics.
- b) The penalty in percentage of the monthly Payment is indicated against each SLA parameter in the table.
- c) In case multiple SLA violations occur due to the same root cause or incident then the SLA that incurs the maximum penalty may be considered for penalty calculation rather than a sum of penalties for the applicable SLA violations.
- d) If the penalties exceed more than 50% of the total monthly bill, it will result in a

material breach. In case of a material breach, the operator will be given a cure period of one month to rectify the breach failing which a notice to terminate may be issued by ONGC.

18. Tax Liability:

The bidder will have to bear all Tax liabilities such as Corporate Tax, Personal Tax or any other tax as applicable.

19. Miscellaneous

- a) Successful Bidder to ensure that the application is deployed within **Twelve Weeks** of award of the contract.
- b) Non-Disclosure Agreement (NDA) is mandatory.
- c) Bidder to Advise ONGC on optimal operational practices.
- d) Prepare a comprehensive O&M plan for managing the services and keep it updated with any changes during the contract period of the system.
- e) During the contract period, if there are any minor changes to company rules or policies the bidder may need to adjust the system accordingly, without any commercial implication on ONGC. For any major changes/requires development shall be considered as additional work with mutually agreed man-hours & cost.
- f) During the contract period, if there are any minor changes (man hours up to 5% of development time) to company rules or policies, the bidder may need to adjust the system accordingly, without incurring any additional costs.
- g) Create and maintain all the necessary technical documentation, standard operating procedures, configurations required to continued operations and maintenance of the system.
- h) Contractor may depute your accredited representative with authorization letter to be present at the time of opening of the bid documents.
- i) ONGC has to finalize its purchase within a limited time schedule. Therefore, it may not be feasible for ONGC to seek clarifications in respect of incomplete offers.
- j) Vendor should conduct a thorough analysis of ONGC Uran's existing material gate pass procedures in consultation with Security Section & Infocom Section, Uran Plant.
- k) ONGC will provide necessary support for SAP and VMS Integration.

- l) ONGC will carry out all DR setup such as load balancing, high availability and other network related points.
- m) SSL Certificate will be provided by ONGC and assistance in DMGPS will be provided by ONGC.
- n) Any delays or challenges from the ONGC team in providing remote access to the server or necessary support for issue resolution will not be attributed to vendor's delay time.

20. Exit Management Plan

- a. ONGC intends to use DMGPS service for a period **of five years** and service provider (Bidder) shall enter into **a five-year contract agreement with ONGC**. However, ONGC reserves the right to terminate the contract at any point of time without any explanation by giving 3 months' notice.