

**Annexure-D****Functional Requirement Specifications (FRS)**

<b>Instructions for filling Section 7A</b>	
1.	It is mandatory to fill up all sheets provided under this Section 7A
2.	Bidder should fill up the specification sheets in the given format.
3.	Bidder should ensure that none of the listed parameters are modified, deleted and no additional parameter is added. (Remarks, if any, should be indicated separately in the Remarks column)
4.	In case the Bidder is proposing any additional product category that is not listed in this section, he may use additional sheets.
5.	Wherever minimum requirements are specified, it is mandatory to indicate with a YES or NO, whether the solution being offered complies with the minimum requirements stated. In case of non-compliance, Details or remarks must be provided.
6.	Incomplete or missing information or information not adhering to the prescribed format may not be considered during evaluation of bid and for award of marks.
7.	The bidder is advised not to make any changes to any information in the functional requirements. For example, insert a row or delete a row or modify any other information like change the functionality required, etc. In case the bidder modifies any information the response would be rejected.
8.	Please fill up make and model for proposed product in the appropriate place provided. A single product may be matching requirements across multiple sheets. Please mention the proposed product name as appropriate.

#	Description
<b>Item No. 1:</b>	Communication/ IP PBX Server And Gateway
<b>Item No. 2:</b>	Automatic Call Distribution (ACD)
<b>Item No. 3:</b>	Voice Recording & Quality Monitoring
<b>Item No. 4:</b>	Multimedia System
<b>Item No. 5:</b>	Computer Telephony Interface (CTI)
<b>Item No. 6:</b>	Outbound Dialler
<b>Item No. 7:</b>	Contact Centre Reporting System
<b>Item No. 8:</b>	Computer Aided Dispatch (CAD)
<b>Item No. 9:</b>	Mobile Application for citizen
<b>Item No. 10:</b>	Mobile Application for Police officials
<b>Item No. 11:</b>	Mobile application for GIS Data collection
<b>Item No. 12:</b>	CAD Mobile Software For PFT
<b>Item No. 13:</b>	Citizen Portal
<b>Item No. 14:</b>	E-Learning Software
<b>Item No. 15:</b>	Patrol Management system
<b>Item No. 16:</b>	Human resource management system (HRMS)
<b>Item No. 17:</b>	Host Based Intrusion Prevention System (HIPS)
<b>Item No. 18:</b>	Business Intelligence (BI), Reporting & Analytics
<b>Item No. 19:</b>	DDOS
<b>Item No. 20:</b>	Mobile Device Management (MDM)
<b>Item No. 21:</b>	Enterprise Management System (EMS)
<b>Item No. 22:</b>	Server Virtualization
<b>Item No. 23:</b>	Network Virtualization
<b>Item No. 24:</b>	Middleware
<b>Item No. 25:</b>	ERV Management Application
<b>Item No. 26:</b>	Inventory Management
<b>Item No. 27:</b>	Document Management System
<b>Item No. 28:</b>	Identity and access management system
<b>Item No. 29:</b>	Anti-virus
<b>Item No. 30:</b>	Endpoint Encryption for Hard drives
<b>Item No. 31:</b>	Directory services
<b>Item No. 32:</b>	Backup Software
<b>Item No. 33:</b>	GIS Application
<b>Item No. 34:</b>	Data Leak Prevention
<b>Item No. 35:</b>	Location Base System – LBS (Location Detection System)
<b>Item No. 36:</b>	Security Incident and Event Monitoring (SIEM)
<b>Item No. 37:</b>	Visitor Management System
<b>Item No. 38:</b>	Speech To Text (STT) Software

**Item No. 1:** Communication/IPPBX Server and Gateway

<b>Communication/IPPBX Server And Gateway</b>						
<b>Sr. No.</b>	<b>item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS product or component if relevant</b>	<b>Deviation/ Remarks</b>
IPSG.REQ.001	General Requirement	Complete platform should be supported as Virtualized system with DC and DR deployment. IP PBX and ACD system should be running on same server. System should also have Multi Tenancy capability so that system can be used by other Emergency Services like Fire, Ambulance etc.				
IPSG.REQ.002	Technology	The system should support be a complete virtualized platform supporting all type of interactions. For voice calls it should support IP or SIP as well as TDM. The TDM can be supported through an external Gateway. It should also support Email, Chat, Social Media and Data Channels like SMS and USSD integrations				
IPSG.REQ.003	Interface	Should be compatible with all telecom interfaces or Telecom Service providers				
IPSG.REQ.004	Type Of Interfaces	It should compatible with ISDN PRI, Analog trunks, H.323 trunk, SIP trunk. It should also provide facility to integrate with GSM, Radio devices.				
IPSG.REQ.005	Type of Extension Support	IP, SIP)3rd party SIP phone(, Wireless IP Phone				
IPSG.REQ.006	Expansion of Extensions	IP Telephone extensions should be expanded based on quantities of data switch ports available.				

Communication/IPPBX Server And Gateway						
Sr. No.	item	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS product or component if relevant	Deviation/ Remarks
IPSG.REQ.007	System Design	Proposed platform should be modular, expandable, embedded IP server-gateway/server based architecture, supporting COTS operating system in virtualized environment. The system shall have hot standby/Active-Active arrangement so that it should continue to operate in case of failure or maintenance of main processor or power supply or interfacing card or CPU etc. The system should support IP or SIP as well as TDM. The TDM can be supported through an external Gateway.				
IPSG.REQ.008	Conferencing	Platform should allow up to 5 party adhoc conference call for any number of requests.				
IPSG.REQ.009	ACD And CTI Support	Support for ACD Contact centre with CTI and advance call routing				
IPSG.REQ.010	Contact centre Communication Support	Support Standard SIP based IP Platform, over an MPLS Protocol for connectivity of contact centre				
IPSG.REQ.011	Outbound Calling Support	The system shall allow outbound calling.				
IPSG.REQ.012	General Requirement	The system shall support multiple announcements and music on hold.				
IPSG.REQ.013	General Requirement	The system shall be able to provide interface to ISDN PRI				

Communication/IPPBX Server And Gateway						
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IPSG.REQ.014	Features	The system shall be able to provide following features like Basic Call Setup, SIP URI Support, called or Calling or Busy or Connected Name and Number, Name Identification, Diversion )Call forwarding(, Diversion )Call forwarding( with Reroute, Call transfer and should record those calls.				
IPSG.REQ.015	General Requirement	<p>The system shall have inbuilt web-based software for administration and maintenance of the system. It shall provide the following features: The software shall provide GUI based interface for configuration and management of the system.</p> <ul style="list-style-type: none"> <li>○ The Software shall provide real-time information or alerts and reports regarding health status e.g. up or down status, performance &amp; resource utilization statistics etc. of the platform and its components.</li> <li>○ The system shall be based on Directory services and provide authorization to users for accessing the components of the platform based on user profile.</li> <li>○ It shall be possible to schedule tasks. The tasks could be one or more operations that the user can specify to run at a predetermined date and time.</li> <li>○ It shall provide reports about Platform utilisation, Interaction records , agent utilisation etc.</li> </ul>				

Communication/IPPBX Server And Gateway						
Sr. No.	item	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS product or component if relevant	Deviation/ Remarks
IPSG.REQ.016	General Requirement	Proposed platform system should support the ability to support secure communications for all the channels.				
IPSG.REQ.017	General Requirement	Proposed platform shall provide features viz. silence suppression, comfort noise and voice activity detection.				
IPSG.REQ.018	General Requirement	<p>It shall provide some features as give below but not limited to these this list. It can be expand further based on requirement</p> <ul style="list-style-type: none"> <li>○ Call forward all, Call forward while busy, Call forward if no answer</li> <li>○ Call hold and retrieve</li> <li>○ Call status (state, duration, number)</li> <li>○ Conference for at least 5 parties</li> <li>○ Missed call information on phone</li> <li>○ Directory dial from phone</li> <li>○ Hands-free, speakerphone</li> <li>○ Last number redial</li> <li>○ Secure call</li> <li>○ System transfer, Speed Dial</li> </ul>				
IPSG.REQ.019	General Requirement	The system should have IP address and connected to the network				
IPSG.REQ.020	General Requirement	The system must support log services and configuration history for at least a 30 days				

**Item No. 2: Automatic Call Distributor (ACD)**

<b>Automatic Call Distributor (ACD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS product or component if relevant</b>	<b>Remarks/ Deviation</b>
ACD.REQ.001	General Requirement	ACD )Hardware & Software( shall be provided in high availability configuration.				
ACD.REQ.002	General Requirement	Bidder should propose ACD which should be able to handle Multimedia Interactions. ACD should offer seamless experience of interactions including Email, Webchat, Social Media Chat (WhatsApp and Facebook), and voice interaction for both Inbound and Outbound. All the license quoted should be Multimedia License				
ACD.REQ.003	General Requirement	The system should be an application centric communication system, so all the users including Call Takers and Dispatchers should be provided with application to handle multimedia interactions.				
ACD.REQ.004	General Requirement	Client should be able to handle Multimedia Interactions and should provide built in Voice Stack to Handle Voice without requirement of Hardphone or softphone				
ACD.REQ.005	General Requirement	Client should have built in IM capability and should be able to handle Agent- Supervisor IM without any need of third party IM platform				
ACD.REQ.006	General Requirement	Client should have built in Dashboards				

<b>Automatic Call Distributor (ACD)</b>						
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ACD.REQ.007	General Requirement	ACD should be capable to identify Agents availability into the particular state contact centre and route the call to the identified call centre. ACD should support selective call routing based on Agent capability. E.g. 102 and 108				
ACD.REQ.008	General Requirement	The ACD system shall be able to handle call & IP Phone as per capacity defined in scope				
ACD.REQ.009	General Requirement	ACD functionality should be supported to propose Operating system				
ACD.REQ.010	General Requirement	System should support skill base routing, multiple group support, priority handling and Queue status indicator. It is desirable that calls to certain trunk groups or to certain dialled numbers be assigned a higher priority than other calls and that calls which overflow from another split be queued ahead of other calls.				
ACD.REQ.011	General Requirement	System should support all contact centre Agents as per requirement on a server and can be scalable up-to 400% of existing user.				
ACD.REQ.012	General Requirement	The ACD should support help or assist on Agent's phone. Agent can use this functionality to request help from the split supervisor. This functionality automatically dials the split supervisor's extension and				



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		connects the Agent to the supervisor. Current call should go on hold as the Agent use this functionality.				
ACD.REQ.013	Call overflow	The system should support call overflow routing e.g. if there is a queue in particular ACD group and another group is sitting idle, system should be able to transfer the calls to another group based on the settings defined by the administrator.				
ACD.REQ.014	Virtual Seating or Free Seating	The proposed system must support the concept of virtual seating. Agents can log-on from any "soft phone" instrument within the system. Agents on the proposed system will be logically defined, rather than requiring a "soft phone" extension and termination. Each Agent on the system must have an individually assigned log-on identification number which permits individual statistics to be collected by the ACD management information system.				
ACD.REQ.015	General Requirement	Automatic call distributor device should have capability to distribute the calls based on Skill level of the Agent like efficiency of the Agent and work load				
ACD.REQ.016	General Requirement	Automatic call distributor device should have Least Occupied Agent details				
ACD.REQ.017	General Requirement	Automatic call distributor device should have some functionality where Supervisor can observe the Agent pattern or silently monitor the Agent.				

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ACD.REQ.018	General Requirement	Automatic call distributor device should have functionality to provide best service to the caller like listen only, listen and talk only etc.				
ACD.REQ.019	General Requirement	Automatic call distributor device should have local treatment for IP & ISDN				
ACD.REQ.020	General Requirement	Automatic call distributor device should allow to compare specified skills, identify the skill that will provide the best service to a call, and deliver the call to that resource. If no Agents are currently available in that skill, the call is queued. To respond to changing conditions and operate more efficiently				
ACD.REQ.021	General Requirement	Automatic call distributor device should have expected Time for waiting in routing and				
ACD.REQ.022	General Requirement	Automatic call distributor device should have Contact centre Location Preference Distribution				
ACD.REQ.023	General Requirement	Automatic call distributor device should have Contact centre Support for Locally Sourced Music and Announcements for calls that have been put on wait				
ACD.REQ.024	General Requirement	Automatic call distributor device should have an integrated contact centre functionality for IP or non-IP Agents.				
ACD.REQ.025	General Requirement	Automatic call distributor device should support load balancing of all calls				

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ACD.REQ.026	General Requirement	Automatic call distributor device should support for multiple announcements be played to a caller.				
ACD.REQ.027	General Requirement	Automatic call distributor device should be able to track remote activity. The tracking for off-premises Agents must be the same as that for on-premises Agents.				
ACD.REQ.028	General Requirement	Automatic call distributor device should support to provide Agent to be seen in a real-time view on a supervisor's workstation & Agent's activity should also show up on standard report				
ACD.REQ.029	General Requirement	Automatic call distributor device should redirect unanswered calls.				
ACD.REQ.030	General Requirement	Automatic call distributor device should provide the capability to the supervisors for logout Agents from their own voice terminal without having to go to the Agent's desk & it could be possible from a remote location.				
ACD.REQ.031	General Requirement	The proposed system should support all states contact centre environment with multiple distinct sites as a single virtual contact centre operation. It should also have a capability to allocated call between sites based upon Agent skills, Agent availability, queue times, and other criteria.				
ACD.REQ.032	General Requirement	Automatic call distributor device should support automated load-balancing capabilities and customized conditional routing capabilities. Proposed system				

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		should allow the comparisons to be made in queue conditions before routing calls so that split or skills are not overloaded or it can be made in queue conditions after routing calls to determine if calls should be re-routed to alternate destinations.				
ACD.REQ.033	General Requirement	Automatic call distributor device should be able to collect request information, such as a zip code or account code, before the call is sent to an Agent and then route the call based upon that information. The system must have the ability to prompt a caller for information in terms of digit				
ACD.REQ.034	General Requirement	All calls for each ACD group )Skilled or Hunt( must be redirected to a different extension after hours. Supervisors must be able to activate this from their voice terminal. Each group may have different hours of operation.				
ACD.REQ.035	General Requirement	Automatic call distributor device should provide alternate routing automatically based upon time of day and day of week				
ACD.REQ.036	General Requirement	Automatic call distributor device should use the estimated wait time or average speed of answer to make routing decisions.				

<b>Automatic Call Distributor (ACD)</b>						
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ACD.REQ.037	General Requirement	The routing commands of the Automatic call distributor device should obtain information from another source like TSP interface or a database before routing the call				
ACD.REQ.038	General Requirement	Both Agents and supervisors should be notified via the telephone indicators when thresholds are reached for individuals and groups.				
ACD.REQ.039	General Requirement	Automatic call distributor device should have a capability for Agents to record personalized greetings that can be played to the caller prior to connection to the Agent.				
ACD.REQ.040	General Requirement	Calls can be queue to an individual Agent. Agent should be notified and a delay announcement be provided if the call queues for an individual Agent who is on another call.				
ACD.REQ.041	General Requirement	Automatic call distributor device should support to force the Agents to be put into an ACW )After call work( state for a predefined period of time in order to provide rest time between calls, pace calls to the Agents, or limit the amount of time an Agent spends in completing wrap-up work				
ACD.REQ.042	General Requirement	Automatic call distributor device should be capable to define certain Agents as “reserve” Agents for certain skill sets.				

<b>Automatic Call Distributor (ACD)</b>						
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ACD.REQ.043	General Requirement	When interflowing calls between sites, automatic call distributor device should take advantage of Network Call Transfer and Deflection provided by the public switch telephone network to redirect an incoming ISDN call without requiring trunks to be tied up at the original destination after the call rerouting takes place.				
ACD.REQ.044	General Requirement	Automatic call distributor device should allow to change or add or remove Agent skill dynamically while Agents are on calls.				
ACD.REQ.045	General Requirement	Call should be routed to IP Phone and call related signal should be exchanged with the PC attached to the respective Agent				
ACD.REQ.046	General Requirement	ACD or CTI should provide interface to signal call release, call hold, requests from call taker Agents				
ACD.REQ.047	General Requirement	ACD system shall allow a call facility for Agent. If a call taker enters clerical mode that will be signalled to ACD call will not be routed to that Agent until it becomes free.				

**Item No. 3:** Voice Recording System & Quality Monitoring

<b>Voice Recording System &amp; Quality Monitoring</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS product or component if relevant</b>	<b>Deviation s/ Remarks</b>
VRS.REQ.001		Voice Recording system shall be provided in high availability configuration.				
VRS.REQ.002		The recording software must use the recording interface provided by ACD or PBX API and should provide 100% voice call recordings.				
VRS.REQ.003	Recording	System should be able to record Multimedia communication including Voice, Screen, IM , Email Transcript				
VRS.REQ.004	Recording	Recording Software should be part of ACD solution and should record all interactions coming through multimedia queue				
VRS.REQ.005	Recording	The recording software must provide a single license that can support recording on all IP Phones.				
VRS.REQ.006	Recording	The recording software must be able to record calls coming on any type of trunk line like PRI/IP and system should also record internal calls.				
VRS.REQ.007	Recording	The recording software should also be able to record IP endpoints				
VRS.REQ.008	Recording	The software should supports SIP or IP or TDM )Time Division Multiplexing( endpoints				
VRS.REQ.009	Recording	The software should record inbound multimedia Interaction and outbound calls				

Voice Recording System & Quality Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS product or component if relevant	Deviations/ Remarks
VRS.REQ.010	Recording	The software should support for search and replay of calls				
VRS.REQ.011	Recording	The software should have Rules-based storage and recording				
VRS.REQ.012	Recording	"Tag" or classify calls with user-defined labels for simplified search and replay				
VRS.REQ.013	Quality Recording	The software shall provide screen recording for quality and training purpose				
VRS.REQ.014	Quality Recording	The software should allow for voice only, data only, or voice and data recording based on specific event triggers				
VRS.REQ.015	Quality Recording	The software should support selective recording based upon user-defined business rules				
VRS.REQ.016	Quality Recording	The system should show the status of the Call takers, which Call takers are logged on.				
VRS.REQ.017	Quality Recording	The software should allow for the automatic refresh of the logged on Call Taker display.				
VRS.REQ.018	Quality Recording	The software should be able to provide real-time Call Taker monitoring.				
VRS.REQ.019	Storage	The software shall be able to provide online, and offline storage capability in any combination.				
VRS.REQ.020	Storage	Desires an open storage platform that can provide instant access to any recording with any amount of SAN storage desired.				



Voice Recording System & Quality Monitoring						
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VRS.REQ.021	General Requirement	Should provide facility to store voice digitally in central database. Recording should be encrypted to protect against misuse of recording files and it should be played with system provided tools				
VRS.REQ.022	Storage	Archival to network attached storage or network drive should be included as a standard component with the recording platform				
VRS.REQ.023	General Requirement	Each inbound and outbound call to Emergency Response System should be recorded and stored with proper security systems				

**Item No. 4:** Multimedia System (Email, Chat, SMS)**Multimedia System ( Email, Chat, SMS)**

Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS product or component if relevant	Deviation/ Remarks
MS.REQ.001	General Requirement	It should be a Single platform which can handle Multimedia interactions routed through unified mechanism. Proposed system should be allow any user to handle any type of media depending upon operations requirement				
MS.REQ.002	General Requirement	All the multimedia communications should be handled through client supporting HTML standard. The Client should offer different type of call controls based on type of Interactions. It should have a provision for templates to avoid typing standard response for Chat and Email interactions handling. The system should allow non-voice communication channel like email, web chat and SMS to be routed to Call Taker based on skill set and availability and should route them through unified mechanism to avoid dedicated resources for Multimedia calls handling.				
MS.REQ.003	Email Channel	System should allow Administrator to assign priority to Media type, for example for certain queue, Administrator might decide Voice will be highest priority and for certain Q Admin might assign Chat calls as higher priority				
MS.REQ.004	Email Channel	System should assign different queuing priorities to the first email a user sends and all subsequent emails they send as part of the same conversation				

<b>Multimedia System ( Email, Chat, SMS)</b>						
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MS.REQ.005	Email Channel	System should automatically inform the contact )via email( that their email has been received				
MS.REQ.006	Email Channel	System should be capable to distribute mails based on keywords in the subject or the body of the emails. Different rules can be used to route the mail to the right Call taker or queue				
MS.REQ.007	Chat Channel	The Web chat solution is required for users that prefer web chat as a medium to communicate with the Officer. Solution should provide SDK to ensure Chat Facility can be enabled in Mobile Applications				
MS.REQ.008	Chat Channel	The web chat solution must route the chat user to the respective non-voice Call taker in the relevant state				
MS.REQ.009	Chat Channel	An administrator should be able to configure the standard chat messages that will be presented during establishment of a chat session				
MS.REQ.010	Chat Channel	System should allow Officer to handle Multiple Chat Sessions.				
MS.REQ.011	SMS	The proposed solution is required for the users that prefer SMS as a medium				
MS.REQ.012	Social media	Proposed Solution should integrate with WhatsApp and Facebook messenger and route these chat requests through unified mechanism				
MS.REQ.013	Chat bot	The solution should provide conversational chat solution wherein citizens can interact with bot for simple				

Multimedia System ( Email, Chat, SMS)						
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		enquires to complex form submission services as well. It should allow citizens to just type their question into the chat window and get an instant response from a virtual digital assistant and even fill up some online forms if required. When citizen enquiry cannot be handled by a bot application, the same chat can be escalated to Contact/Helpdesk Centre with previous chat history so that citizen enquiry can be handled by a live agent without losing the context of the previously happened conversation. Citizen can ask for transferring the call to an agent anytime in the conversation. Since the Chat bot needs to handle the chat or call to the live agent, the call center agent and Chat bot should be closely coupled and preference would be given to the same call center as that of Chat bot				
MS.REQ.014	Chat bot	Chat bot should be able to automate services such police NOC request, FIR, etc. It should begin with 10 forms and should be scalable up to 30 forms. The same chat transcript will be emailed to the citizen after the chat completion.				
MS.REQ.015	Chat bot	Chat bot should be able to handle 100 concurrent sessions.				

<b>Multimedia System ( Email, Chat, SMS)</b>						
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MS.REQ.016	Chat bot	Chat bot should be web based (html 5) and can be invoked using SMS, IVR or mobile web URL.				
MS.REQ.017	Chat bot	Chatbot should be able to handle text based interaction with users in Indian English. The entire solution (IP PBX, its hardware, IP Phones, Voice Gateway, recording, Chatbot, etc.) should preferably be from a single OEM				
MS.REQ.018	Chat bot	Chat bot should be able to push forms, widgets and files to the users.				
MS.REQ.019	Chat bot	Chat bot should be able to read data from back end applications using web services, JDBC/ODBC and REST interfaces. In case chat bot is unable to handle user query, it should transfer the session to contact center agent with the context and history of the conversation. Since the Chatbot is closely integrated with call center technology, preference will be given to the same OEM of chat bot as that of call center. The application should be "Pre Tested/Running" with the provided ACD platform for removing any interop related issues. The interop certification should be incorporated as part of the tender technical from both ACD and application provider.				

**Item No. 5: Computer Telephony Integration (CTI)****Computer Telephony Integration (CTI)**

Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS product or component if relevant	Deviation /Remarks
CTI.REQ.001	General	The CTI shall be capable of integrating with other application like CRM as per requirement. It should provide a GUI based module to integrate and configure integrations services like Web Services				
CTI.REQ.002	General	CTI should be an inherent part of Contact Centre platform and shouldn't be dependent on independent server, machine or CTI links				
CTI.REQ.003	General	The CTI platform shall be able to provide caller related information like CLI, Email address, Webchat Display name etc. Platform should also be able to provide menu traversal information as part of Screen Pop-up				
CTI.REQ.004	General	The CTI link shall be able to pass events and information of Call taker states and changes in Call taker states as well as incoming calls to the computer applications, e.g.:- If the customer calls from the same no. from which caller had called earlier )registered Or unregistered(, the CTI platform shall be able to automatically fetch and display at least last 5 service requests details for that customer.				
CTI.REQ.005	General	The CTI shall maintain the accounting and authorization logs of the users accessing the components of the telephony system. The logs shall include information users who have logged-in into the system and the specific commands entered by them.				

<b>Computer Telephony Integration (CTI)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS product or component if relevant</b>	<b>Deviation /Remarks</b>
CTI.REQ.006	General	Management Access to the system shall be secure. Access mechanisms viz. SSH, HTTPS shall be used to facilitate user authentication, authorization, accounting )AAA( using LDAP or Active directory or Directory services etc. and provide information about users who have login into the system and the specific commands entered by them.				
CTI.REQ.007	General	It shall have web-based GUI console for administration, configuration & management of the system, Real-time information or alerts and reports regarding health status e.g. up or down status, performance & resource utilization statistics etc. of the system shall be available through this console.				
CTI.REQ.008	General	The system shall be SNMP )Simple Network Management Protocol( manageable such as SNMP v1, SNMP v2 and SNMP v3 protocols. It shall be able to send SNMP traps to the configured Network Management System )NMS(.				

**Item No. 6:** Outbound Dialler

<b>Outbound Dialler</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS product or component if relevant</b>	<b>Deviation/ Remarks</b>
OBD.REQ.001	General Requirement	The dialer should be an integrated part of the contact center solution				
OBD.REQ.002	General Requirement	The Call taker should be able to dial the particular distress caller number in case of emergency				
OBD.REQ.003	General Requirement	The dealer should support outbound preview dealing, either automated or Call Taker-initiated				
OBD.REQ.004	General Requirement	The dialer should provide campaign management tool for supervisors to manage the campaigns				
OBD.REQ.005	General Requirement	The dialer should have the capability to fetch missed calls data from the ACD and dial out automatically whenever the call taker/supervisor is available				
OBD.REQ.006	General Requirement	The system should be able to perform a screen pop with caller information based on the campaign				
OBD.REQ.007	General Requirement	The dialer should support campaign management for data selection.				
OBD.REQ.008	General Requirement	The dialer should support Do not call list				



**Item No. 7: Contact Centre Reporting System**

<b>Contact Centre Reporting System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes or No)</b>	<b>Standard or Customized or Bespoke</b>	<b>Provide Name of COTS products or component if relevant</b>	<b>Deviations /Remarks</b>
CCRS.REQ.001	General	The reporting system )hardware or software( shall be provided in hot standby configuration.				
CCRS.REQ.002	General	Reporting System Should be able to support multimedia interactions in Multimedia Automatic call distributor )ACD(				
CCRS.REQ.003	General	The system should support up all the configure Call Takers and others				
CCRS.REQ.004	General	The system shall provide both real-time information and historical reports.				
CCRS.REQ.005	General	The system shall allow the user to set threshold on the Contact Centre parameters, which shall be notified in the form of different colour on the screen of the users				
CCRS.REQ.006	Search or filter Criteria	There shall be provision to sort and filter the reports based on various criteria via date and time, Call taker ID etc.				

Contact Centre Reporting System						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS products or component if relevant	Deviations /Remarks
CCRS.REQ.007	Report Type	<p>Following category of real-time information &amp; historical reports shall at least be available with specific dates and time with options of hourly, daily weekly and monthly, yearly in report criteria.</p> <p>I. ACD Reports: Call taker Login and Logout Reports</p> <p>ii. Call taker State Changes Report</p> <p>iii. Queue Reports</p> <p>iv. Abandon Call Reports</p> <p>v. Call by Call Details Report</p> <p>vi. Call taker or Call taker Performance Reports: Average Hold Time per Call taker or call taker, Average Call Handle Time per Call taker, No. of calls handled per hour or per shift per Call taker, Login &amp; Logout duration per Call taker</p> <p>vii. Call volume reports - number of calls during each hour, number of abandoned calls, number of incomplete calls, busy signals and rollovers, length of calls, percentage of calls answered and serviced vs. total calls received, etc.</p>				
CCRS.REQ.008	Summary and Detailing	Both summary and detailed reports shall be available by the system				
CCRS.REQ.009	Detail Report	Display call detailed reports including caller numbers, dialled number, call transfers etc.				

Contact Centre Reporting System						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS products or component if relevant	Deviations /Remarks
CCRS.REQ.010	Outcalls Detail	Allow reports on outcalls made using system to which number and by which Call taker or call taker				
CCRS.REQ.011	Calls data Detail	Provides detailed data for calls in which the caller waited in queue, using the following parameters: i. Queue time ii. Caller abandons iii. Specified set of skills				
CCRS.REQ.012	Hold Call Detail	Provide details of calls in which the caller is placed on hold, using the following parameters: i. Hold time ii. Number of holds per call iii. Caller abandoned from hold iv. Call taker or Call taker disconnected first				
CCRS.REQ.013	Customization reports feature	The reporting platform shall provide report customization capability.				
CCRS.REQ.014	Report format	It shall be possible to export, save and print the reports in various formats viz. Excel, pdf and text files				
CCRS.REQ.015	Statistics	The system shall provide Call takers with the real time statistics on their desktop in form of a wallboard. Call takers should get a notification if they exceed any pre-defined thresholds in form of a colour change on this wallboard. eg. the wallboard				

Contact Centre Reporting System						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes or No)	Standard or Customized or Bespoke	Provide Name of COTS products or component if relevant	Deviations /Remarks
		display changes if a live call duration exceeds a threshold defined for calls				
CCRS.REQ.016	Schedule Report	It shall have feature to schedule generation of reports and automatic delivery of scheduled reports to e-mail. It shall also allow automatic delivery of both manually generated and scheduled reports to a file directory or folder				
CCRS.REQ.017	Archive	It should be possible to archive or store certain data for more than one year. Such selected data could be electronically flagged to enable easy classification and then separate storage also.				
CCRS.REQ.018	BI Integration	System should be capable to integrate the data with BI tools for data analysis				

**Item No. 8:** Computer Aided Dispatch (CAD)

<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
Call taking module						
CAD.REQ.001	All Communication Channel / Multi-agency support	<p>The CAD software should be capable to receive call (Mobile, Landline), SMS, chat, email, social media like Facebook, Twitter and mobile apps to create an appropriate case and send the relevant case to the Dispatch Office after case assessment.</p> <p>The software should have capability to support multiple agencies like Police-100, Fire-101, and Medical-108 and others. The software should be able to integrate the calls for Service from this multi- agencies into the same system and prioritization should be possible.</p>				
CAD.REQ.002	Communication Channel - Call	<p>The software should be able to display caller name, caller number and caller address on Call taker desktop.</p> <p>Data from LBS: Automatic display of data on CAD screen</p> <p>Manual Data of the location: Call taker should be</p>				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		capable to enter the location of the caller on CAD Screen				
CAD.REQ.003	Communication Channel - SMS	The software should be able to automatically create a case using SMS data (Phone No. & Message) and display on the Call taker desktop. Call taker should decide whether to create an event or not based on SOP, however a transaction ID can be assigned to this input so that if required can be assessed at a later date				
CAD.REQ.004	Communication Channel - SMS	The Call taker should be able to assess the SMS case and send the case to Outbound call Call taker Or Dispatch Office rafter assessment				
CAD.REQ.005	Communication Channel - Email	The software should be able to automatically create a case using Email data (Email content) with attachment (not more than 7 MB) if any and display on the Call taker desktop. Call taker should decide whether to create an event or not based on SOP, however a transaction id can be assigned to this input so that if required can be assessed at a later date				
CAD.REQ.006	Communication Channel - Email	The software should be able to send the case to Outbound dialler Or Dispatch Office rafter assessment.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.007	Communication Channel - VOIP	The software should be able to integrated with VOIP channel like Skype where officer can speak with the users on skype and can do chat on Skype and officer can create a case into CAD based on case assessment.				
CAD.REQ.008	Communication Channel - IOT	The software should be able to receive the data from Internet of things (IOT) devices like sensors user & display on the officer desktop.				
CAD.REQ.009	Communication Channel - Chat	The software should have a functionality where Call taker can receive the chat which is initiated by the web user in real time through Haryana 100 portal. The Call taker should be able to chat with the user in real time with the user.				
CAD.REQ.010	Communication Channel - Chat	If a Call taker is offline then the citizen should be able to send the messages to chat window and message should be received as an email to Call taker				
CAD.REQ.011	Communication Channel - Chat	The software should be able to automatically create a case using Chat history ( Message and any attachment during chat ) and display on the Call taker desktop				
CAD.REQ.012	Communication Channel - Chat	The software should be able to create a case with chat history and should be able to send the case to				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		Outbound dialler Or Dispatch Office rafter assessment.  This case creation would be a manual process & not automatic creation				
CAD.REQ.013	Communication Channel - Social Media	The CAD should be able to create case with data received from Facebook, Twitter, after assessment by the Call Taker/Dispatcher. This case will be created manually by Call Taker into CAD software				
CAD.REQ.014	Merger the cases for voice and social media	The CAD should allow Communication officer to merge the cases if the citizens calling from call and sharing the data through social media (Facebook, twitter, WhatsApp) like images, audio file, and video file in the system. Data should be collated in one case in these kind of scenarios on the basis of predefined SOPs. Call Taker and Dispatcher application shall be web based working on internet browser. The application should support display across multiple monitors with movable map display on separate browser window.				
CAD.REQ.015	Communication Channel - Mobile Application	The CAD software should be integrated with Mobile Apps (registered with Government of Haryana (GoH) to receive location of the caller and caller number.				



Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.016	Call Classification	Communication Officers should be able to classify the case into distress case, enquiry case, departmental case, administrative, crank case, outbound call case etc. All such Classifications must be logged in the system Haryana Police can add more classification at later stage. System will facilitate the CO to classify and transfer the call to available CO and DO based on ACD.				
CAD.REQ.017	Call Transfer Or Call Forward	<p>CAD will provide feature to classify the volunteers of different foreign languages like Spanish, German, Thai, and Nepali etc. available at various time slots round the clock.</p> <p>Call Taker should be able to transfer and arrange conference call between dispatcher and volunteer of foreign language to assist the foreigner</p> <p>CAD Call taker should be capable to transfer the call to the contact centre call taker in other district Or in other states Or same state Or transfer to dialled number by the Call taker</p> <p>Caller's Call should not be disconnected during call forwarding Or Transferring into the system</p>				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.018	SMS Case Transfer	A case to be considered where SMS is sent in Hindi and can't be read by the Call taker. Provision for profile of Call takers to be available to forward the SMS to appropriate Call taker				
CAD.REQ.019	Duplicate Calls	An incident may attract more than one call but each call is important as it may give details about eye witnesses and other supportive evidence. The system should suggest the possibility of a duplicate call based on the location, time, classification etc. Duplicate calls should be cross referenced for easily retrievable through Grouping.				
CAD.REQ.020	Duplicate Calls	It should be possible to merge duplicate calls depending upon the situation. To achieve this, the system should have the capability for cross referencing of Case. Whenever a call is merged, the system should not generate a new dispatch.				
CAD.REQ.021	Duplicate Calls	The software should alert the communication Call taker, Dispatch Officer, Supervisor etc. or about the possibility of a single incident - Duplicate call situation				
CAD.REQ.022	Voice Recording	Integration with Voice recording software provided by Bidder				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.023	Case History	In some cases previous history of the caller can be important. It should be possible to create a reject list where crank callers could be added.				
CAD.REQ.024	Case creation and Appraisal	System should facilitate Case creation, by providing 'a drop down menu' for various functions like creation of an Case, files attachment, location of nearby Case and other information related to an Case should be recorded and updated.				
CAD.REQ.025	Soft Phone Integration	The software should have a capability of a Telephone window allowing Call takers to dial, answer, end a call, keep the call in busy status, and free a specific call. The functionality should also provide the status of incoming and outgoing calls.  Soft phone should have a feature to select the state for call forwarding Or transferring Or conference call.				
CAD.REQ.026	Emergency Call	The software should have capabilities to create Hot Calls like fire in a building, disaster emergency. The Call taker should fill minimum information for a Hot call. Dispatch Officer and Supervisor should receive the alert Or notification for the same. Dispatch Officer should be able to initiate action for quick response. To facilitate quick response to emergency calls Or hot call, there should be special and dedicated hot call button in the Call taker software.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.027	Case Status Display And Search	The Call taker GUI screen must be provided with 'Case Status Window' displaying the status of all Case like 'Pending', 'Open', 'Dispatched', 'Closed' etc. The software should be able to search the Cases using various search option. Like Case status, Case ID, phone no, Date & Time, over the time, Case Type etc.				
CAD.REQ.028	Archive Search	The Call taker should be able to search the archive records from the system.				
CAD.REQ.029	Location of Interest	Once a Location of the incident is marked in the map, The Call taker shall have the facility to see for various 'Location of Interest ' in the vicinity of a case location like nearest Hospital, Blood Bank, Fire brigades. (Applicable in Dispatch Officer module also).				
CAD.REQ.030	Display of Station Name	The software should have the facility in the system to populate within it, the relevant Police Station name, Police Zone name (Based on Case Location through GIS), Police Call takers etc., Hospitals, Fire stations/Fire ERVs(Fire brigades), whenever a new case is created to save precious time in effective response to a distress call.				
CAD.REQ.031	Update Existing Case	The software should allow the Call taker to update Or modify existing case details for any additional or supplementary information related to the same. Also				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		there should be provision to attach relevant files like pdf, Word etc. to the event, for ensuring an effective response.				
CAD.REQ.032	Alert Notification	Software should have capability to alert a Call taker or supervisor if a case is not attended in pre-defined time duration.				
CAD.REQ.033	Pre-defined Q&A	A freely configurable structured query script should be available within the software to assist the Call taker with pre-defined Q&A to ask for during the call, SMS response and web response. Based on the Case and Case subtype, the response for Call taker should be prompted.				
CAD.REQ.034	User-defined Alarm	The application should be configured with user-defined alarm modules that will be flashed on all the other screens in case of major incident, for ex. Terrorist attack.				
CAD.REQ.035	Case Cancel Or Close	The Case like rally should be expired automatically by the system once the time defined for the Case gets over or software should have a provision that supervisor can close Or Cancel Or postponed the Case manually into the system				
CAD.REQ.036	Call back	Call taker should be able to call back the caller with the click of the mouse.				

<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
CAD.REQ.037	Caller Address conflict handling	It should be possible to find the numbers whose subscriber information and caller information recorded by the Call taker are different and generate a report for the concerned agency.				
CAD.REQ.038	Case Acknowledgement	System should be capable to send an SMS to the caller stating the Case Number, acknowledgment, brief text of the complaint and caller or non-Caller can verify the status through email Or SMS to Non-Emergency helpline				
CAD.REQ.039	Incident scheduling and Mapping	Incident-scheduling functionality should be available in proposed software for future Cases like, VIP Visit, Rally, Festival etc. The software shall have provisions of setting the date and time for the particular Case, automatic Case should be generated on that date.				
CAD.REQ.040	Incident scheduling and Mapping	The Scheduled Case feature should allow operators to create, edit, delete, and search for a scheduled Case.				
CAD.REQ.041	Language Support	It should be possible to switch between English and Hindi languages. Software should have support for Hindi, English language. Display and input both functionality of given languages should be provided in the application.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.042	General Requirements	The system should support the use of primary incident type and a sub incident type to narrow down certain generic incidents. For example, a primary incident type could be "Robbery", sub incident type could be "Commercial", "Residential" etc.				
CAD.REQ.043	Call Conference	Call taker should be able to do conference call with Call takers in same centre or other Haryana 100 centre Or Other dialled number by the Call taker.				
CAD.REQ.044	Other Call taker Status For Call Conference Or Forward Call	Call taker should be able to see the Call takers status (like busy Or Free) with Call taker extension and forward Or transfer Or conference call with the caller				
CAD.REQ.045	Transfer Call	Call taker should be able to transfer the call to the dispatch Officer who is sitting at District Control room to further assessment in emergency case				
CAD.REQ.046	Outbound Call	Call taker should be able to see any type of call like Missed call Or Drop Call Case and can call back from the application.				
CAD.REQ.047	Outbound Call	Call taker should be able to dial the international number in case of international caller is in distress and contact to the proposed system.				
CAD.REQ.048	General Requirement	CAD Should have a capability to merge or split the case if the cases are of same type or different however it all depends on the situation				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.049	General Requirement	The software should have the facility to receive the information from the other government agencies like Ministry of surface and transport data, existing emergency response system like dial 109, 102 etc. via any API/ appropriate web service through which data is shared				
CAD.REQ.050	Intelligent Login facility	The software should have a feature called intelligent Log-in & Log-out facility where same user should not be able to Log-in simultaneously at different machines when operating on LAN				
CAD.REQ.051	Standard Operating Procedures (SOP's)	The software should have capabilities to set the Standard Operating Procedures (SOP) for Call takers. The same needs to be invoked during Case creation by the Call taker. It should also be possible to remodel the Case, Case sub types, priorities and type of service required by using a remodelling tool.				
CAD.REQ.052	Location History Storage and Optimization	The software should store Or update the location history of the caller in CAD database. This history should be gradually increased and optimized in the system as per requirement				
CAD.REQ.053	Physically Challenged Citizen	The CAD software should have a capability to categorise the citizen during the case analysis where the citizen is physically challenged such as Blind, Dumb, deaf and allocate the case to appropriate. These situations should be assessed by the Call				



Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		Taker and then transferred to the most suitable CT or DO				
Dispatch Module						
CAD.REQ.054	Dispatch vehicles to incident sites	The Software should suggest the patrol units of jurisdiction and/ or closest to the location of incident. The dispatcher shall choose which unit(s) to dispatch and it should be possible to do so with drag-and-drop ease.				
CAD.REQ.055	Dispatching	The Case, once classified and detailed by the communication Call taker, shall be passed by the system to Dispatch Officer screen with the call of the user				
CAD.REQ.056	Case Information	The software should display all the information entered by the Call taker for a case. It should display the location as identified by the CO on the map. The Dispatch Officer should also have the option of relocating the case.				
CAD.REQ.057	Dispatch Decision	The software should suggest vehicle for dispatch based on a pre-defined algorithm. The conditions could include jurisdiction, proximity, specialization, on duties resources etc. The Dispatch Officer shall choose which vehicles to dispatch and it should be possible to do so with a click of a button.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.058	PFT Notification	The Dispatch Officer should be able to send all the details of the incident to the PFT device, wherein the official in the ERV is able to view the complete details of the call as a “Common Operating Picture” for the Call Taker/Dispatcher and the PFT staff. The DO can also SMS, send push notification into PFT CAD application. Dispatch Officer should be able to call the vehicle person through driver in case of emergency also				
CAD.REQ.059	Police Station Supervisor module	<p>The Dispatch Officer should be able to send SMS to the nearest police station supervisor and broadcast the same to multiple receivers if required</p> <p>There should be a provision that Police station can upload GD, FIR, NC or any other remark to the cases held in their jurisdiction.</p> <p>Police station can see the cases of their jurisdiction only and the same should be integrated with BI. The Police Station Supervisor should have his own Dashboard and he should be able to update the details.</p>				
CAD.REQ.060	Case Status By Vehicle	The Dispatch Officer should be able to enter the status of the case as reported by the Responding Vehicle as an option, if the PFT cannot update the status directly.				

<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
CAD.REQ.061	Call Taking and Dispatching	Upon discovering that a call is of an emergency nature, the Call taker should be able to alert the Dispatch Officer and other official users. They should begin dispatching as the call proceeds. Therefore, the case form should be displayed on the Dispatch console as it is being populated by the Call taker and updated.				
CAD.REQ.062	Vehicle Tracking and Status update	The CAD Integrated GIS map should display the assigned, unassigned Vehicles using appropriate and intuitive graphical symbols. The Dispatch Officer can command an assigned Vehicle to proceed to the case location through defined media or through dispatching the case information.				
CAD.REQ.063	Vehicle Tracking and Status update	The software should be capable of displaying the vehicles on the GIS map with colour coding according to their current status. Vehicle icon colour should change automatically with their change in status i.e., dispatch, end-route, at scene, available etc. The entire movement of a vehicle from being assigned to a case till arrival upon scene should be time stamped and monitored by the Dispatch Officer. Appropriate alerts should be generated when an ERV does not send its GPS location for a defined (changeable dynamically) time.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.064	Case Update	The software should have the capabilities to record all case related information changes Or updating made after the creation of case by the same or different Call takers, Dispatch Officers, Supervisors.				
CAD.REQ.065	Vehicle Playback	Proposed software should have the tools to provide the playback of the vehicle movement data, displayed on the integrated GIS Map. The map should be an integral part of the CAD itself.				
CAD.REQ.066	Alarm for new case	The software shall provide an alarm or alert for every new case entered in the system				
CAD.REQ.067	GUI based Pre-Defined Route	The software should have the provision available within GUI for daily patrolling of the Police Vehicles and their patrol locations. Tools for route creation should be provided and Police vehicles assigned for regular patrolling, to those pre-defined routes as per the requirement of Police.				
CAD.REQ.068	Audio - Visual Indication	The Software should provide with an indicator to indicate that a case has exceeded the predetermined time in its current status till the closure				
CAD.REQ.069	Case Status	There should be facility for case symbolization. To facilitate easy identification of case status (pending& open), cases should be displayed on map with different colours.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.070	Geo-fencing	The proposed software should have geo-fencing capability. Software tools should facilitate in allocating areas for all patrolling Vehicles depending on Police needs. It should suggest alternate routes and naka bandi check-points				
CAD.REQ.071	Shortest Path indication	There should be provision for shortest route to guide Vehicles in the PFT Application. In case the PFT map does not show the same details to the driver in the ERV then the Dispatch Officer can find from the GIS based map the shortest path from the dispatched vehicle to the case location and convey the shortest path direction to the dispatched vehicle. The shortest path feature allows user to identify the shortest path or route between the source and destination.				
CAD.REQ.072	Display of resources & case on Map	There should be provision for display of field resources and open/pending cases on map.				
CAD.REQ.073	Recording of all vehicle movements on map	There should be provision for recording of all vehicle movements on map - date wise, vehicle wise.				
CAD.REQ.074	Viewing	The software should facilitate viewing of cases and vehicle chronology. Status of all vehicles and cases on the map Police stations on the map.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.075	General Requirement	The Dispatch Officer should be able to dispatch the incidents to the Mobile Data Terminal fitted in the Police Vehicles over 3G /4G/5G (not limited to) and use SMS as a fall back mode per requirement & SOP definition				
CAD.REQ.076	Interoperability	Software should be capable of swapping between Dispatch Officer-Supervisor based on the User authentication, without the need to have separate licenses in each category.				
CAD.REQ.077	Standard Operating Procedures (SOP's)	The software should have the capabilities to set the Standard Operating Procedures (SOP's) for Dispatch Officer. The same needs to be invoked during creation of case or dispatch the vehicles.				
CAD.REQ.078	Case Attachments	The software should have a provision to attach any file to a case. The file could be an image, video, audio etc.				
CAD.REQ.079	case Attachments	When the case is listed in the case list, there should be an indication that a case has a file attachment. The indication can be any icon for attachment				
CAD.REQ.080	case Attachments	All case attachments should be stored in the CAD database for easier backup				
CAD.REQ.081	General Requirements	A Dispatch Officer has the ability to create an incident for a vehicle per a vehicle's request based				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		<p>on the vehicle's observation of an activity (on view field case)</p> <p>And</p> <p>The supervisory officers / identified officers at DCRs should have permission to override the dispatch requirement as assessed at first level of contact. Respective officials can take decisions on vehicle dispatch and patrolling in case of contingencies and extraordinary situations</p>				
CAD.REQ.082	General Requirements	A Dispatch Officer has the ability to dispatch multiple number of vehicles on an incident or non-incident activity				
CAD.REQ.083	General Requirements	The originating Dispatch Officer will receive a notification when the stacked case has been worked by someone else				
CAD.REQ.084	General Requirement	A timer can be configured to notify the Dispatch Officer who originally stacked the call that the partial case has not been completed.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.085	Configuration & Creation of CAD Master Data base	<p>The software or a separate interface should create Or configure various master database as follows but not limited to the databases. The list may increase based on solution requirement and functional specification</p> <ol style="list-style-type: none"> <li>1. Users &amp; Roll creation of Call takers</li> <li>2. Dispatch Zones Or Groups &amp; Police Stations</li> <li>3. Vehicles information</li> <li>4. Cases &amp; cases Sub-type</li> <li>5. Shift Master</li> <li>6. Skill Master</li> <li>7. Location of Interest Creation</li> <li>8. Add Agencies</li> <li>9. Schedule Report</li> <li>10. Schedule Backup</li> <li>11. Language setting and dictionary creation</li> <li>12. Response Plan</li> </ol>				
CAD.REQ.086	General Requirement	<p>Solution should have fully integrated GIS module and be able to identify the location of the caller (using LBS/SDR database/otherwise), vehicle location on available map (GIS Maps) into Call taker desktop. It should have the capability and tools to view attribute details of any object. Mapping Tools to be provided to be able to group the multiple attribute layers and to control (ON and OFF) the</p>				



Computer Aided Dispatch (CAD)						
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		same. The map should be part of the CAD Solution itself to enable efficient use of GIS.				
CAD.REQ.087	General Requirement	There should be provision to display map from other sources in addition to the GIS map which is used in the system. Multiple maps should be supported on the same map view to enable the Call Taker for better functioning.				
CAD.REQ.088	Desktop GIS					
CAD.REQ.089	GIS Interface	GIS engine should be tightly integrated with the CAD software.  The user should be able to draw a fence on the map and determine points of interests that are within that fence. The POIs could be Hospitals, Health centres etc. The fence can be drawn as a polygon, rectangle or a circle				
CAD.REQ.090	GIS Interface	The user should be able to find closest POIs (Hospitals, Police Stations etc.) from a point identified on the map OR from an event location OR a PFT location.				

Computer Aided Dispatch (CAD)						
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CAD.REQ.091	Real time location of the vehicle	The Software should enable the Dispatch Officer to see the real time vehicle location on the integrated GIS Map. Dispatching tools should have the facility to track the vehicle on the said map.				
CAD.REQ.092	Ability to track vehicles in dispatch mode	Tools must be provided to facilitate the Dispatch Officer to be able to monitor the assigned vehicle in various modes like – Dispatch mode, End-route mode, Arrive mode and Available mode. The entire movement of a vehicle from being assigned to any incident till arrival upon scene should be time stamped and monitored by the Dispatch Officer.				
CAD.REQ.093	GIS Functionality	Software should support at least the following GIS Functionality - a) PFT and GPS/AVLS interface- for Patrol Vehicle tracking b) Scale- map should be displayed as per solution requirement and can be scalable further c) Route module- regular & frequent monitoring of any particular location. b) Event and address objects - for each type of call (for duplicate Or repetitive calls) and non-call case (in case of SMS, chat, email etc.)				

Computer Aided Dispatch (CAD)						
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CAD.REQ.094	Case Location Free Draw	The software should support registering the Case locations not only in the form of point spots but also append the line or polygon area affected by the same. This is to handle situations wherein the affected Or reported points is an area e.g. accident on a road segment or riot in an area. The Dispatch Officer should be able to freely draw to record such locations in the system. So that the Dispatch Officers can easily setup the staging area locations				
CAD.REQ.095	Hold Case	The software should support holding the Case for availability of specific vehicle Or responding unit. Once the field unit is available it gets dispatched automatically to the specified Case				
CAD.REQ.096	Support for Mobile Devices	The Mobile Apps should support a latest OS like Windows, Android, IOS etc.				
CAD.REQ.097	SMS Delivery	SMS should be delivered by the system whenever a vehicle is allocated for dispatch. The message should be delivered to the vehicle mobile phone, Supervisor, Police station Officer, District HQ Officer of that particular region or location of the caller, range Officer etc.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.098	Notification	A Notification should be delivered by the system in the PFT CAD software whenever a vehicle is allocated for dispatch. The message should be delivered to the vehicle mobile phone, Supervisor, Police station Officer, District HQ Officer of that particular region or location of the caller, range Call taker etc. This should be a configurable workflow depending on the SOPs defined for each type of case.				
Supervisor Module						
CAD.REQ.099	Event Monitoring	The software should facilitate supervision of Control Room operations. The Supervisor should be able to examine each event and ensure appropriate legal action is taken. The Call taker shall be able to call up the complainant to solicit feedback and satisfaction report. Supervisor should be able to issue instruction pertaining to an event while it is in progress.				
CAD.REQ.100	Dashboard	Supervisor should have a dash board to monitor the activity of the Communication Call taker, Dispatch Officers				
CAD.REQ.101	General Requirements	Status of all Call Takers and Dispatchers are updated in real time on the supervisor's screen.				
CAD.REQ.102	General Requirements	The status of each call and the assignment of resources are updated on the view of supervisor.				

Computer Aided Dispatch (CAD)						
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CAD.REQ.103	General Requirements	Supervisor shall have all facilities of call taker and dispatcher				
CAD.REQ.104	General Requirements	Supervisor should be able to issue instructions pertaining to a Case ID while it is in progress.				
CAD.REQ.105	General Requirements	Planning & Scheduling for VIP movements: There should be provision for Planning and Scheduling of Events and Resource Movements. Events can be pre-planned in case of any future incidents. Resources can be pre-scheduled for dispatching in case of VIP movements				
CAD.REQ.106	General Requirements	Patrol Response Planning and Compliance: It should be possible for the operations commander and the web supervisors to plan the patrol response i.e. which static positions to hold, when; which areas need mobile patrolling, when.				
CAD.REQ.107	General Requirements	The software should have the provision available within GUI for daily patrolling of the Police units and their patrol locations.				
CAD.REQ.108	Digitization and Assignment of routes	The software should have the provision of tools for creation of digitized patrolling route (daily, weekly etc.) assign one or more Police vehicles to these pre-defined routes along with check points.				

Computer Aided Dispatch (CAD)						
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CAD.REQ.109	Planning of Patrol, Response & compliance monitoring	It should be possible for the Supervisors to monitor the patrol response i.e. which static positions to hold, when, which areas need mobile patrolling, when. It should be possible to analyse the extent to which the prescription was followed by matching with actual AVLS information.				
CAD.REQ.110	System Settings	The Supervisor software should be able to undertake various configuration steps				
CAD.REQ.111	System Settings	Allotment of telephone extension number				
CAD.REQ.112	System Settings	Screen setting (Single & Dual)				
CAD.REQ.113	System Settings	Map Path Setting				
CAD.REQ.114	System Settings	CCTV camera icon display on GIS Map				
CAD.REQ.115	Unlock of event	The Supervisor software should be able to unlock the assigned event in process and reassign to another dispatcher to take further action.				
CAD.REQ.116	Over the Air (OTA) Configuration	The Supervisor software GUI should have the provision to configure the GPS modems installed in the vehicles by sending the SMS commands such as vehicle location refresh rate, restart and any other commands supported by the GPS modem.				
CAD.REQ.117	Response Plan	The Supervisor software should be configure/ create the response plan based on Incident type like, Accident, Robbery, Terrorist attack etc.				

Computer Aided Dispatch (CAD)						
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CAD.REQ.118	Patrol Planning and Compliance	<p>The supervisor shall be able to assign stationary patrol locations and areas to be patrolled during a shift. It should also be possible for the supervisor to see if his instructions were complied. All this should be possible by simple operations of the mouse or a stylus. The Patrolling task should be assign using GIS map.</p> <p>b) Patrolling task shall be assigned to the patrol units. It should be possible to assign, report compliance and, review these Patrolling tasks. The Patrolling tasks would be surveillance of criminals, visit to senior citizens and victims, service of summons, warrants and other court processes, etc. It should be possible to add new kind of Patrolling tasks as well. There shall be several user-definable options for patrol charts like a chart for week days, another for Sundays and holidays etc. It should be possible to allocate new people to a trip that's to be repeated</p> <p>c) Real time report of units deviating from the assigned chart shall be generated so that the dispatcher and the supervisors can take remedial action.</p>				

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		d) In different colours/ icons it should be possible to see the prescribed patrol positions/ area patrols on map for a number of units or for one unit over a period of time.				
CAD.REQ.119	Patrol Planning Analysis on GIS Map	<p>It should be possible to overlay patrol charts, actual positions and, crimes reported over a period of times. This is to analyse tactical the decisions. Were the patrol positions well chosen, did units adhere to it, even then which crimes occurred.</p> <p>It should be possible for the supervisors to monitor the patrol response i.e. which static positions to hold, when; which areas need mobile patrolling, when. It should be possible to analyse the extent to which the prescription was followed by matching it with actual PFT information</p>				
CAD.REQ.120	Create and View BOLO database	It should be possible to Create and View the BOLO (Be On Look Out) database, such as stolen vehicle etc.				



<b>Computer Aided Dispatch (CAD)</b>						
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CAD.REQ.121	Closure Case	The supervisor software should be able to close the cases also				
Remote Viewer for Monitoring and Report Generation for Supervisor						
CAD.REQ.122	General Requirements	System shall send a SMS to the caller stating the Case Number, acknowledgment, brief text of the complaint and, the password for accessing his Case information on the police website				
CAD.REQ.123	General Requirements	Remote Viewer will be a web-based software monitoring tool to be used by the senior Call takers for monitoring of limited CAD functionalities using LAN/WAN (Intranet) or Internet				
CAD.REQ.124	Monitoring	The software should support monitoring of all event. Critical functionality which related to Police control room namely - Event Monitoring, Police Vehicles Fleet Monitoring, Reports, Charts and Analysis.				
CAD.REQ.125	GIS Map	The software should have integrated GIS map with Zoom In, Zoom Out, PAN functionalities. GIS map should display the current scale.				
CAD.REQ.126	GIS Map	The GIS map display should be able to display multiple map sources. The user should be able to swap between one basemap to another.				
CAD.REQ.127	Event Monitoring	The software should support active event monitoring with detail information and location & Id on the map.				
CAD.REQ.128	Live Vehicle Tracking	The software should support live vehicle tracking of the response units with details. Like Vehicle Call				

Computer Aided Dispatch (CAD)						
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		sign, Police Station, Time Stamp, Speed and Current location.				
CAD.REQ.129	Play back history	The software should view vehicle history data of the response units with details. Like Vehicle Call sign, Police station, Time Stamp, Speed and Current location. Using various search option like Date wise, Latest No. of Records.				
CAD.REQ.130	Geo-fencing	The proposed software should have 'Geo-fencing' capability. Software tools should facilitate in allocating areas for patrolling units depending on Police needs and also receive the Notification when vehicles cross the Geo-fence.				
CAD.REQ.131	Reports	The software should have in built web based Reporting module which should be able to generate the reports as per the requirement of Haryana Police. The reporting module should have an ability to create various reports using various options like Date wise, Police Station, Police Zone, event Type, Sub Type etc.				
CAD.REQ.132	Reports	The application should have a variety of reports (which includes but not limited to) following; 1) Call Details 2) Average Response Time 3) Blank Calls, Crank Calls, Emergency Calls, Hot Calls, Information Calls				

Computer Aided Dispatch (CAD)						
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		4) Call per hour 5) Police Station wise Response time 6) Daily PCR 7) Event Audit Logs 8) Event Details, events Statistics 9) Events Sub Type 10) Fleet Summary 11) Geo Fence IN / OUT 12) Police Station / Police Zone wise Report 13) Operator Status 14) Operator activity Break code 15) Vehicle activity, Daily activity summary, Dispatch response, stop 16) Vehicle Status summary 17) Vehicle Modem Maintenance Summary 18) Vehicle Response Time 19) Vehicle Stoppages 20) Vehicle Daily Activity Summary 21) Active event By event Types 22) Zone and Police Station Wise Daily, Weekly 23) Zone and Police Station Wise events & Vehicles 24) Zone and Police Station wise event Count				
CAD.REQ.133	Dashboards	There shall be dashboards for different supervisory levels to give them graphical picture of the performance of those within their jurisdictions.				

<b>Computer Aided Dispatch (CAD)</b>						
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CAD.REQ.134	Dashboards	1. Call Trend – day, week and month				
CAD.REQ.135	Dashboards	2. Average Response Time for call taking, dispatching and responding units.				
CAD.REQ.136	Dashboards	3. By Event Type				
CAD.REQ.137	Dashboards	4.By Police stations and Fire stations				
CAD.REQ.138	Dashboards	5. Vehicle Activity – Run Time and Halt Time				
CAD.REQ.139	Dashboards	6. Case status (open, in progress, resolved, close etc.)				
CAD.REQ.140	Analysis	The reporting module should have an ability to create various GIS Analysis Reports. It should be possible to select the data on the basis of Police Zones, Police Stations, events, event Sub-type, Priority & date and time.				
CAD.REQ.141	Analysis	1. Incident Query				
CAD.REQ.142	Analysis	2. Incident Count				
CAD.REQ.143	Analysis	3. Repeat Incident				

Computer Aided Dispatch (CAD)						
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CAD.REQ.144	Vehicle Dash board	The reporting module should have inbuilt dashboard to view the performance and health check of GPS devices fitted in the patrol vehicles.				
CAD.REQ.145	Tools for Analysis	There should be software tools for response analysis, mapping and hot spot analysis. It should be possible to select the data on the basis of jurisdictions, date and time of the day range and other data fields. It should be possible to create Thematic Maps like pin mapping, Incident count mapping and repeat Incident count Mapping. It should be possible to do detailed analysis at least the following ways – Hot Spot Analysis, Trend Analysis, Neighbourhood Analysis and Change over Time Analysis.				
Administrative Tool for Supervisor						
CAD.REQ.146	Remote Supervisory Interface	The CAD Software should support Remote Supervisory functions and provide CAD and GIS view. It should be possible for the Senior Officials in Districts, Police Stations belonging to jurisdictions etc. to update the status of the incident. Comprehensive Dashboard, Logs should be available for Jurisdictions and other officials.				

Computer Aided Dispatch (CAD)						
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CAD.REQ.147	Configuration & Creation of CAD Master Data base	The application software should offer administration tool for optimum utilization of resources, master database creation and other analytical purposes. It shall enable the Systems Administrator to define users & configure their access privileges				
CAD.REQ.148	Configuration & Creation of CAD Master Data base	The software should create / configure various master database like:				
CAD.REQ.149	Configuration & Creation of CAD Master Data base	1. Users & Roll creation of operators				
CAD.REQ.150	Configuration & Creation of CAD Master Data base	2. Dispatch Zones / Groups & Police Stations				
CAD.REQ.151	Configuration & Creation of CAD Master Data base	3. Vehicles				
CAD.REQ.152	Configuration & Creation of CAD Master Data base	4. events & events Sub-type				
CAD.REQ.153	Configuration & Creation of CAD Master Data base	5. Shift Master				

<b>Computer Aided Dispatch (CAD)</b>						
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CAD.REQ.154	Configuration & Creation of CAD Master Data base	6. Skill Master				
CAD.REQ.155	Configuration & Creation of CAD Master Data base	7. Location of Interest Creation				
CAD.REQ.156	Configuration & Creation of CAD Master Data base	8. Add Agencies				
CAD.REQ.157	Configuration & Creation of CAD Master Data base	9. Schedule Report				
CAD.REQ.158	Configuration & Creation of CAD Master Data base	10. Schedule Backup				
CAD.REQ.159	Configuration & Creation of CAD Master Data base	11. Language setting and dictionary creation				
CAD.REQ.160	Configuration & Creation of CAD Master Data base	12. Response Plan				

<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
CAD.REQ.161	General Requirements	CAD Mobile application is to provide the Mobile Workforce with full access to the police event data empowering them to make informed decisions while in the field. It will enable the mobile workforce to remain in communication with the command centre allowing event assignment information to be delivered to the devices as required.				
CAD.REQ.162	Display Dispatch Message	The Mobile Application Software should display all the Dispatch related transactions assigned to the respective units. All the event information as dispatched by the dispatcher must be captured and displayed.				
CAD.REQ.163	Update Dispatch Status	On activating an assigned event by the mobile unit staff, the mobile application software should also display the Event & Vehicle Status – i.e. dispatch, en-route, at scene, back to base and closed.				
CAD.REQ.164	Event Details	On activating an assigned event by the mobile unit staff, the mobile application software should also display event information – i.e. Event-id, Event-Type, Caller Phone Number, Caller Name, Caller Address, on browser and Event location on map window.				
PFT interface for CAD						



<b>Computer Aided Dispatch (CAD)</b>						
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CAD.REQ.165	PFT Software Interface	The system should have a provision for the PFT software to facilitate data communication link with the vehicle mounted location devices (GPS).				
CAD.REQ.166	PFT Software Interface	The PFT software should provide tools to manage all data message communication, including real-time vehicle positioning information, between the Dispatch Console and the vehicles.				
CAD.REQ.167	PFT Software Interface	The software must have facility to poll a specific GPS receiver of a vehicle to transmit its current positional information.				
CAD.REQ.168	PFT Software Interface	The software should have capability of detecting vehicles with speeding violations. In order to ensure the data security, the communication server software should be an integral part of the CAD software and not a 3rd party supply item.				
<b>Message Communication Module</b>						
CAD.REQ.169	Messaging	The CAD software should have an ability for messaging between Call takers ( with in contact centre and other state call centre)				
CAD.REQ.170	Messaging	The Messaging module should allow the operator to attach files to the message. These files could be any relevant information like images, videos, documents etc.				

<b>Computer Aided Dispatch (CAD)</b>						
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CAD.REQ.171	Messaging	When a message with multiple attachments is opened, each attachment should open up in a tabbed interface within a message window to avoid too many windows being opened and cluttering the user's view				
CAD.REQ.172	Messaging	The software should allow a message to be sent as a broadcast to all logged in users including, communication Call taker, Dispatch Officers, supervisors and PFT users.				
<b>Others</b>						
CAD.REQ.173	General Requirements	The application software should be capable of integrating with Telephony system including Communication Server / IPPBX, ACD and CTI interface.				
CAD.REQ.174	General Requirements	System shall be capable of retaining logs for a period of 3 months				
CAD.REQ.175	General Requirements	After the Case has been logged in by the Call taker, the CAD shall send a SMS to the Caller stating the Case Or Tracking Number along with a password as acknowledgement to the call made to the control room. The caller can use this number on department website (as and when available) to access the case progress details such as Action Taken Reports (ATR), file attachments, Remarks, or other				

Computer Aided Dispatch (CAD)						
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		information's as per the prevailing departmental policy for data sharing.				
CAD.REQ.176	Other agencies or even senior Call takers can be informed with pre-filled data about case via SMS	The software should have the provision to inform pre-defined case data to senior Call takers or other agencies. Other agencies or even senior Call takers can be informed with pre-filled data about case via SMS				
CAD.REQ.177	Accuracy	Dispatch Officer will be able to rate the accuracy of incident by CAD				
CAD.REQ.178	Acknowledgement of vehicle	CAD should have a facility which will tell the Call taker about the vehicle that it has been reached to distress caller location or not				
CAD.REQ.179	General Requirements	The software should be able to schedule & automatically generate reports. Web based Report module should have the ability to produce reports with appropriate charts and graphs				
CAD.REQ.180	General Requirements	The report generation tool should have the facility to provide the report in both printed and electronic format.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.181	General Requirements	The application should have a variety of reports like: 1. Call Details 2. Event Details 3. Fleet Summary 4. Operator activity 5. Vehicle activity, Daily activity summary, dispatch response 7. Active Event By Event Types 8. Efficiency of call takers speed of response, longest idle time, etc. 9. Facility to generate the various graphical reports.				
CAD.REQ.182	General Requirements	System will facilitate for Fire services which will include dispatch of incidents related to Fire over PFTs of Fire Brigades and Fire stations. System will facilitate to find out location of PFTs over GIS and dispatch case to the nearest vehicle along with concerned fire station and District Control room  System shall record radio communications; should have provision for integrating with radio system.				
CAD.REQ.183	General Requirements	The Health services including ambulance services shall be integrated with the Haryana 100 project. The Health department would procure and install the PFT in their ambulances. The PFT installed in ambulance will further be integrated with the Haryana 100 project. Moreover, existing Central call center,				

Computer Aided Dispatch (CAD)						
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		Panchkula under NHM for Emergency medical services will be integrated with Haryana 100 Project. Similarly, Fire and Women help line shall also be integrated with the Haryana 100.				
CAD.REQ.184	Real-time Updates	The Software should be web based and provide for real time updates. The web browser should not be refreshed for updates received from the PFT/Vehicle. As the user is viewing the list of vehicles, their GPS connectivity, and their statuses should be updated dynamically and the page should not be refreshed				
CAD.REQ.185	Integration	The solution should provide an ESB layer that is already integrated with the CAD system. This will enable easy integration with other 3rd party systems				
CAD.REQ.186	Display of Station Name	The software should have the facility in the system to populate within it, the relevant Police Station name, Police Zone name (Based on Case Location through GIS), Police Call takers etc., Hospitals, Fire stations/Fire ERVs(Fire brigades), whenever a new case is created to save precious time in effective response to a distress call.				
CAD.REQ.187	Vehicle Tracking	If there are officers on field with their handheld devices but part of a unit, their locations should be				

Computer Aided Dispatch (CAD)						
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		shown separately. This will help in tracking officers who are away from the actual unit				
CAD.REQ.188	Fonts	Ability to change font sizes of the UI so that users can set their own font sizes				
CAD.REQ.189	Feeds	The Supervisors or Dispatchers should be able to configure feeds to receive updates on certain changes in the system				
CAD.REQ.190	Filters	Users should be able to setup filters for events that they would like to see apart from regular events that they attend to or specific units/vehicles they would like to keep an eye on. The events could be a group of events of certain event type OR from a specific dispatch area and many such standard filters				
CAD.REQ.191	Custom Workflows	The CAD system should provide functionality to define custom workflows to address certain business rules tailored by the department				
CAD.REQ.192	General	CAD should be a web based application capable of running in a browser OR it should be installable as a thin client on the user's PC.				
CAD.REQ.193	General	CAD should not be a thick client application which would require a system administrator to install and				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		configure on the client. The users should be up and running quickly.				
CAD.REQ.194	Administration	The CAD system configuration should be managed using a web based module and it should be accessible using a browser for the system administrator				
CAD.REQ.195	Administration	The user GUI should be dynamically configurable and layouts can be setup by an administrator				
CAD.REQ.196	Administration	Dynamic fields can be added by an administrator and it should reflect in the system for quick dynamic changes that can happen at any time without having to depend on a developer				
CAD.REQ.197	GUI	Users can dynamically change the GUI according to their preferences and these preferences will get saved and when they login, the GUI will be saved.				
CAD.REQ.198	General	The CAD solution should support a cloud deployment. This could be an on-premise cloud as well				
CAD.REQ.199	Vehicle Tracking	If there are officers on field with their handheld devices but part of a unit, their locations should be				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		shown separately. This will help in tracking officers who are away from the actual unit				
CAD.REQ.200	Fonts	Ability to change font sizes of the UI so that users can set their own font sizes				
CAD.REQ.201	Feeds	The Supervisors or Dispatchers should be able to configure feeds to receive updates on certain changes in the system				
CAD.REQ.202	Feeds	Feeds could be updates for certain units or some events that meet certain criteria				
CAD.REQ.203	Filters	Users should be able to setup filters for events that they would like to see apart from regular events that they attend to or specific units/vehicles they would like to keep an eye on. The events could be a group of events of certain event type OR from a specific dispatch area and many such standard filters				
CAD.REQ.204	General	System should be a web based application				
CAD.REQ.205	General	The system should provide high-performance and be browser independent				



<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
CAD.REQ.206	General	For handling Large Scale Events, system should have capabilities for predefined templates that could be used to start responding to a situation quickly.				
CAD.REQ.207	Call routing and incident handling	a. Module will provide ability to tag specific calls and incidents as being related to Large Scale Events b. Module will provide ability to mark specific work station(s) as being designated to be handling Large Scale Events				
CAD.REQ.208	Real Time	The Application should use active server-based message and news delivery in real time (push system) since a simple HTTP message retrieval process from the client would not be sufficient during a Large Scale Event.				
CAD.REQ.209	Real Time	The Application should use active server-based message and news delivery in real time (push system) since a simple HTTP message retrieval process from the client would not be sufficient during a Large Scale Event.				
CAD.REQ.210	High Availability and Redundancy	The system should be designed for high availability. All server functions should be configured to be redundant so that so-called Single Points of Failure (SPOF) are avoided				

<b>Computer Aided Dispatch (CAD)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
CAD.REQ.211	High Availability and Redundancy	The system should offer redundancy at the database and the application level				
CAD.REQ.212	Single Sign on	It should support Single Sign On				
CAD.REQ.213	Security	The system should ensure the security of the stored and transmitted information. The exchange of data across the open internet/network should be encrypted.				
CAD.REQ.214	Flexibility	The system should be flexible and easy to configure supporting various architecture standards like WCF. It should be easy to configure the workflows /input boxes etc. easily on the basis of open standards like XML.				
CAD.REQ.215	Openness	The system is based on open standards to allow easy links to other systems. In addition, the system should support open interface (web service), which third-party systems, like command and control systems, can use to send & receive messages				
CAD.REQ.216	Life Cycle	The Application should manage the entire event life cycle and fulfil the wider management functions mandated by ICS standards around the world. It should provide structure and framework to deal with large scale events. It should manage all aspects of				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		response across the entire life cycle – a. Efficient and effective - Plans/preparation use the same information and system as the response b. Fast, efficient, and fully informed transitions e.g. moving from response to recovery phase. c. Build a full event history, providing an effective and reliable data source for event reviews, investigations, training and exercises.				
CAD.REQ.217	Common Communication Platform	Standardizes coordination and communication across diverse functions, the Department, and jurisdictions in case of Large Scale events. a. Maintain clear line of command b. Build common understanding of situation and objectives c. In case of large scale events, Enable clear, unambiguous communication with consistent understanding of task objectives, responsibility & timeframe – even when collaborating with secondary and tertiary responders (utilities, social services, volunteer groups, businesses, NGOs, etc.)				
CAD.REQ.218	Dynamic	In case of large scale events, System should Adapt the Department & plans on-the-fly. Flexible to expand and contract throughout the event or incident, including between tiers of command				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		a. Reflect changing situations on the ground b. Maintain effective span-of-control c. Enable life cycle stage transitions, e.g., from response to recovery				
CAD.REQ.219	Different Views	In case of large scale events, System should provide different views on the operation data to present it in the best way for the needs of each role or task a. List views (forms and reports) b. Department view (Org Chart) c. Process-oriented view (Mind Map) d. Spatial view (common operational picture) e. Chronological view (timeline & calendar) f. Communication-oriented view (tasks, messages, reminder)				
CAD.REQ.220	Integrated GIS	The GIS should be an integrated core of the Application & its different modules should be based on the same GIS so that across roles & organisations all modules are highly integrated with each other consistent presentation of the same (operation-related) data within the different modules The GIS capabilities should include a complete full-fledged GIS functionalities that is available in a desktop base GIS systems Advanced geo-caching for performance and use with				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		low bandwidth. The map should work even when there is no connectivity All data should be geo-tagged				
CAD.REQ.221	Integrated GIS	The map tool should allow placement of preloaded tactical symbols and signs				
CAD.REQ.222	Integrated GIS	The map should allow redlining capability so users can draw on the map to indicate certain key resources on the map				
CAD.REQ.223	Integrated GIS	The GIS should have the following functions for: Dimensioning, Measurements, Construction aids, Printing, Redlining, Quick Picks, Modifying symbology etc.				
CAD.REQ.224	Integrated GIS	Extensive analysis tools from simple address query, to spatial queries and the ability to create high quality reports offer the maximum operational benefit from existing location data. For example in a bomb threat it is possible to identify the number of affected residents needing evacuation by a defined radius around the location to determine within a request and ensure that measures such as food accommodation etc. to take targeted procurement.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.225	Offline Capability	The Application should have limited offline capability as there might be scenarios where some resources have to function in no network zones; hence once they connect all systems should automatically be updated with the relevant details.				
CAD.REQ.226	Offline Capability	As Large Event scenarios do not guarantee continuous connectivity, the system should be able to work on a disconnected mode				
CAD.REQ.227	User Interface	The UI should be easily configurable so that any new fields could be added by a system admin				
CAD.REQ.228	User Interface	The UI should be flexible that it can be viewed in single window OR be able to separate modules in separate windows.				
CAD.REQ.229	User Interface	The application should have a drag and drop capability to add new resources needed for a large scale event response				
CAD.REQ.230	User Interface	The UI should allow a full-text search functionality				
CAD.REQ.231	User Interface	The system should be workflow-centric, so users are shown the precise functions that are expedient to the current work step. This ensures that the application				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		remains simple and intuitive even when staff is under stress.				
CAD.REQ.232	Notifications	Important information such as messages or orders should be distributed by an active server-based push mechanism in real time. Important information is thus delivered without delay to the recipients, without any requirement for them to refer to a separate mailbox, or to refresh.				
CAD.REQ.233	Document library	the system should be a repository of documents that can be printed any time a user wants.				
CAD.REQ.234	Audit Log	All user and system activities should be recorded in structured audit logs in the database.				
CAD.REQ.235	Audit Log	Each log entry fundamentally includes a time stamp, information on the operator and on the event-related action. The logging is the basis for reports and evaluations, as well as for the logged situation chronology.				
CAD.REQ.236	Calendar	In case of large scale event, a calendar control should be available that allows the user to switch quickly between daily, weekly and monthly views and thus allows tracking of both short-term and longer-term developments.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.237	Calendar	In case of large scale event, calendar should be able to display overlapping operations for proper resource allocations				
CAD.REQ.238	Timeline	There should be a timeline feature displaying various items/changes in an event/operation				
CAD.REQ.239	Resource Management	The resource management module will provide a real-time view of the available action units, operational resources and means used. The resources are either maintained within the system or may come from third-party systems (e.g. command and control system, personnel database).				
CAD.REQ.240	Resource Management	The system provides a quick and secure overview of the strength, position and status of resources. Relevant times (working hours, travel time, rest periods covered) may be monitored, and warnings generated for non-compliance with time limits (e.g. statutory rest break requirements).				
CAD.REQ.241	News and Messages	Key to a successful rescue and relief operation is the targeted distribution of information. Messages from external systems (e.g. a command and control system, weather), or generated by other users – are				



Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		delivered in real time to the desired recipients and automatically registered in the message list displays.				
CAD.REQ.242	News and Messages	The message list displays may be filtered by status.				
CAD.REQ.243	News and Messages	Message groups may be defined via the organisation chart automatically based on defined ranks, for example. Messages may be automatically generated from item in the workflow, and will be delivered without delay to the appropriate recipient group.				
CAD.REQ.244	News and Messages	Messages may require action within a particular timeframe, so actions may include a notification timer. Outstanding tasks are flagged, and, where appropriate, reminder instructions for the relevant users will be created.				
CAD.REQ.245	News and Messages	For each recipient, all activities (Receive, Read, task complete) are recorded in an audit log.				
CAD.REQ.246	Standard Operating Procedures and Checklists	An essential aspect of command for emergency situations is a predefined list of actions, known as a standard operating procedure, or emergency plan. Once stored in the catalogue, predefined actions are automatically added to the operation, assuring that				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		essential actions will be carried out in the proper sequence and none missed.				
CAD.REQ.247	Standard Operating Procedures and Checklists	Ad hoc actions may be added during the operation.				
CAD.REQ.248	Standard Operating Procedures and Checklists	Actions are recorded in an audit log as they are completed.				
CAD.REQ.249	Department chart	Department structure may change during the situation, for example by the addition of a new section.				
		The Department chart should be visual tree structure that the hierarchy of the chart is visible clearly				
		The Department chart is also the communication plan, i.e. the contact information of the persons involved is visible on the chart				
		Messages may be generated directly from the organisation chart, for example clicking on a telephone number to cause it to be dialed, or an email by clicking on an email hyperlink.				

Computer Aided Dispatch (CAD)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
CAD.REQ.250	Templates	In case of large scale event, Reusable templates, which already contain prepared organisational structures, policies, catalogues etc., provide support for operation preparations and can be used as a basis for the conduct of an operation.				
CAD.REQ.251	Templates	These templates should be reusable as many number of time as possible in case of large scale events.				
CAD.REQ.252	Templates	Planned events (e.g. matches, parades, carnivals, sporting events such as street marathons, religious festivals) may be prepared in advance and scheduled for a pre-defined time, to be activated automatically by the system.				
CAD.REQ.253	Portal	For systems that handle large scale events, The portal gives users a single overview of the current operational activities and links to essential applications all in one place.				

**Item No. 9:** Mobile application for Citizen

<b>Mobile application for Citizen</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
MPC.REQ.001	General Requirement	Mobile application should be available on latest versions of iOS, Android, Windows OS platform and be upgradable.				
MPC.REQ.002	General Requirement	Citizen should be able to download the app from Application Store or official website of the Haryana 100				
MPC.REQ.003	General Requirement	Citizen should be able to register in the mobile application.				
MPC.REQ.004	Registration	Registration should have minimum features as follows. These features are for sample purpose and will be illustrative further:  1. Citizen Name 2. Mobile Number 3. Email Id 4. Alternate 2 contact mobile and landline Number				
MPC.REQ.005	One Time Password Or Registration	An SMS and email should be sent to the Citizen with registration key to authenticate the Citizen mobile number and other contact information. This is one time registration process.				
MPC.REQ.006	General Requirement	Citizen should be able to enter the registration key into the application and				

Mobile application for Citizen						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		should be able to access the Mobile app functionality				
MPC.REQ.007	General Requirement	Citizen should be able to accept the terms and conditions of the mobile app to access the mobile app features				
MPC.REQ.008	SOS Button	Citizen should be able to send the SOS( Save our soul) alert into the system on click of the button with the current location of mobile app user				
MPC.REQ.009	SOS Button	On pressing SOS Button on the Mobile application, it must send: -An automatic text message/SMS to registered contacts -Mobile location with coordinates or map link -Audio & Video for 10 Seconds along with the Location to the Control Room. -The Location Information are to be sent at regular intervals to provide real time GPS tracking for the location. -Messages are sent discreetly — without you having to even look at your device.				
MPC.REQ.010	Call Button	Citizen should be able to call on the system emergency contact number after clicking on the Call button.				

Mobile application for Citizen						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
MPC.REQ.011	General Requirement	<p>Citizen should be able to see the other helpline features. Sample features are as follows:</p> <ol style="list-style-type: none"> <li>1. Frequently asked question ( FAQ) based on emergency situations</li> <li>2. Registration Profile setting</li> <li>3. Nearest Police station location contact detail</li> <li>4. Emergency contact no. and email id detail</li> </ol>				
MPC.REQ.012	General Requirement	An SMS should be sent to alternate contact numbers of the citizen in case of SOS alert by the Citizen				
MPC.REQ.013	General Requirement	GPS or location services should be auto activated when the user press the SOS alert				
MPC.REQ.014	General Requirement	The application should get regular updates of app contact details like phone numbers, email IDs etc. Even certain updates like 'instructions' and 'guidance' to citizens automatically.				
MPC.REQ.015	General Requirement	Mobile application should have user friendly GUI with easy navigation in application of the application features				
MPC.REQ.016	Public Information centre	It will serve purpose of Public Information centre				

Mobile application for Citizen						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
MPC.REQ.017	General Requirement	Application should have a feature where citizen can provide the information to the Haryana 100 and necessary action can be taken by Police.				
MPC.REQ.018	Language Support	It should be possible to switch between English, and one of Indian languages. Software should have support for Indian and English languages. Display and input both functionality of given languages should be provided in the application.				
MPC.REQ.019	Missing	Citizen should be able to upload the pictures of the missing persons, other details of persons and should be able to submit the case to Dial 100 system				
MPC.REQ.020	Missing	Application should identify characteristics (birthmarks, scars, etc.) after upload the photo				
MPC.REQ.021	Missing	Citizen should be able Set and send your phone's location as your child's last known location				
MPC.REQ.022	Missing	Application should have a module like "Know what to do" for the following activities: <ul style="list-style-type: none"> <li>• Get safety tips on keeping your child out of harm's way</li> <li>• Learn what to do in first few critical hours after a child goes missing</li> </ul>				

Mobile application for Citizen						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		<ul style="list-style-type: none"> <li>Visit additional links with resources for families and victims</li> </ul>				
MPC.REQ.023	Missing	<ul style="list-style-type: none"> <li>Application should have a module like “Get Information to Authorities in an Emergency”</li> <li>Quickly Call to Dial 100.</li> <li>E-mail your child’s pictures and information to authorities</li> <li>Show identifying information to security or law enforcement officers on the spot</li> </ul>				
MPC.REQ.024	Missing/Dead	Police officials or citizen should be able to upload the pictures of the injured or deaths, contact details of persons and should be able to submit the case to Dial 100 System				
MPC.REQ.025	Missing/Dead	Application should have a feature which can assist the citizen to identify the injured or deaths				
MPC.REQ.026	Missing/Dead	Application should be integrated with the CAD solution to register a case with all details fedded through mobile app by citizen or police officials				
MPC.REQ.027	Missing/Dead	Police officials/Citizen should be able to track the status of registered case in the system				
MPC.REQ.028	General Requirement	Application users should be able to register 5 emergency contact, in case of SOS raised by the user, SMS should be sent to emergency contact of users about SOS.				



Mobile application for Citizen						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
MPC.REQ.029	General Requirement	Application users should be able to register 5 locations of users such as Home, Office etc.				
MPC.REQ.030	General Requirement	Application users should be able to register languages known to them and users should have facility to register as volunteer as language translator of Dial 100 system.				

**Item No. 10:** Mobile Application for Police Officials

<b>Mobile Application for Police Officials</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
Supervisor Application						
MA.REQ.001	General Requirement	The Mobile Application shall provide tools for Monitoring of cases				
MA.REQ.002	General Requirement	This application will be having a login id and password to access the application.				
MA.REQ.003	Single Sign On (SSO)	The application should support single sign on feature to avoid need of re-login for various modules Or sections				
MA.REQ.004	Forgot Password	The application should have a functionality like forgot password etc. in case user lost its password. An auto email should be generated to the user with temp password and user can reset the password after entering the temp. Password into the application				
MA.REQ.005	User Dashboard	Supervisor should be able to see state, district and city level data only on dashboard in graphical format based on pre-defined roles and permission to the user. User should be able to navigate and drill down the data to see the details on click event on dashboard on requirement basis into the application. Some of the features are given below for				

Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		sample purpose: 1. Call Trend – day, week and month 2. Average Response Time for call or Non-call cases (SMS, chat, email etc.), dispatching and responding units. 3. Event Type 4. Police stations 5. Vehicle Activity – Run Time and Halt Time 6. Vehicle distance travelled 7. Non Call trend like email, SMS, chat etc. - day, week and month etc. 8. Officer Key Performance Index (KPI) with details based 9. Shift details 10. View the performance and health check of PFT Devices fitted in the patrol vehicles 11. Should be integrated with other application like EMS to see the SLA, Networking data etc.				
MA.REQ.006	Push Notification	the application should be able to receive the push notification for each case which is created and updated in Primary and Secondary Contact Centre by the communication and dispatch Officers and				

Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		other government users who are provisioned to access the application in the system				
MA.REQ.007	Unlock of Case	The software should be able to unlock the assigned Case in process and reassign to another dispatcher to take further action.				
MA.REQ.008	Case Update Or Close	The application should be able to update or close the case in the application.				
MA.REQ.009	GIS Map Integration	The application should be integrated with GIS map application to see the vehicles location of the state and should be able to send the SMS and notification in case of emergency to PFT Device of the vehicle				
MA.REQ.010	Call Button	The application should have a call button for the user to make a call. This should be linked to the mobile contact list.				
MA.REQ.011	Application Setting	The Supervisor application should be able to undertake various mobile application settings and configuration such as given below. These features are for sample purpose. It may increase on later stages - Disable the Push Notification				
MA.REQ.012	General Requirement	Mobile application should be supported on iOS, Android, Windows OS platform and be				

Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		upgradable or portable on any latest OS that may come in future.				
MA.REQ.013	General Requirement	Mobile application should be able to download from department website over the intranet				
MA.REQ.014	General Requirement	Mobile application will be formed considering Police and Fire department requirements				
MA.REQ.015	General Requirement	Mobile Application should be integrated with Patrol Management System to display Patrol Routes active in the Jurisdiction of the officer				
MA.REQ.016	General Requirement	Mobile Application should be able to search Patrolling Units on Maps				
MA.REQ.017	General Requirement	On Map different units should show different color icons for Patrolling Units based on its status such as Available, Dispatch, Acknowledge, enroute, Arrive etc.				
MA.REQ.018	General Requirement	For Events with status dispatched, User should be able to see assigned unit on Map along with the event.				
Senior Officer At State Level						
MA.REQ.019	General Requirement	The Mobile Application shall provide tools for Monitoring of cases				
MA.REQ.020	General Requirement	This application will be having a login id and password to access the application.				

Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
MA.REQ.021	Single Sign On (SSO)	The application should support single sign on feature to avoid need of re-login for various modules Or sections				
MA.REQ.022	Forgot Password	The application should have a functionality like forgot password etc. in case user lost its password. An auto email should be generated to the user with temp password and user can reset the password after entering the temp password into the application				
MA.REQ.023	User Dashboard	Each senior official should be able to see their state, district and city level data only on dashboard in graphical format. It will be restricted to see the other state data. User should be able to navigate and drill down the data to see the details on click event on dashboard on requirement basis into the application. Some of the features are given below for sample purpose: 1. Call Trend – day, week and month 2. Average Response Time for call or Non-call cases (SMS, chat, email etc.), dispatching and responding units. 3. Event Type				

Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		4. Police stations 5. Vehicle Activity – Run Time and Halt Time 6. Vehicle distance travelled 7. Non Call trend like email, SMS, chat etc. - day, week and month etc. 8. Officer Key Performance Index (KPI) with details based 9. Shift details 10. View the performance and health check of PFT Devices fitted in the patrol vehicles 11. Should be integrated with other application like EMS to see the SLA, Networking data etc.				
MA.REQ.024	Push Notification	The application should be able to receive the push notification for each case which is created and updated in its centre by the supervisor				
MA.REQ.025	Call Button	The application should have a call button for the user to make a call. This should be linked to the mobile contact list.				

<b>Mobile Application for Police Officials</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
MA.REQ.026	Application Settings	The application should be able to undertake various mobile application settings and configuration such as given below. These features are for sample purpose. It may increase on later stages - Disable the Push Notification				
MA.REQ.027	General Requirement	Mobile application should be supported on iOS Or Android Or Windows OS platform and be upgradable Or portable on any latest OS that may come in future.				
MA.REQ.028	General Requirement	Mobile application should be able to download from department website over the intranet				
MA.REQ.029	General Requirement	Mobile application will be formed considering Police department requirements				
MA.REQ.030	Functional requirement	Back button to be added at every stage of monitoring  Event details-District name to be added/displayed and event chronology to be made available/displayed.				



Mobile Application for Police Officials						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		Filter option-should have district option as well. "Select" option of event/sub event/ps to be renamed as "select all".				

**Item No. 11:** Mobile Application for GIS Data Collection

<b>Mobile Application for GIS Data Collection</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
GDC.REQ.001	General Requirement	Application should be able to collect the data from the field in real time				
GDC.REQ.002	General Requirement	Application should have fields like address, latitude, longitude, landmark etc.				
GDC.REQ.003	General Requirement	Application should have a capability to click the picture and store the picture in mobile app Database				
GDC.REQ.004	General Requirement	latitude and longitude field should be filled automatically when the picture is saved in the mobile app database				
GDC.REQ.005	General Requirement	User should be able to fill all fields manually also in case automation to populate the field is not working properly				
GDC.REQ.006	General Requirement	user should be able to tag the location also in the mobile app				
GDC.REQ.007	General Requirement	Application should be able to process the data internally and store in the DB in pre-defined format which will be synced in DC/DRC database				
GDC.REQ.008	General Requirement	Application should have a capability to plot the captured location on the GIS map and can show in the mobile application also				

Mobile Application for GIS Data Collection						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
GDC.REQ.009	General Requirement	Application should have a capability to put some comments in a text area manually by the user				
GDC.REQ.010	General Requirement	If the application is connected with the internet over GPRS then real time location of the user should be populated automatically in the fields boxes when the user create a new address record in the mobile app				
GDC.REQ.011	General Requirement	All the collected records should be in form of list with date and time stamp, title of the collected location and status of sync in DC Or DR or not				
GDC.REQ.012	General Requirement	If the user is trying to save the duplicate address then application should give an alert to the user about the duplicate record				
GDC.REQ.013	General Requirement	The records ( which are new created, modified of the existing records in the mobile app) should be sync in the DC Or DR				
GDC.REQ.014	General Requirement	The sync records location should be plotted on loaded GIS map in the mobile app also				
GDC.REQ.015	General Requirement	User should be able to take the picture of real time location in the filed through application				

Mobile Application for GIS Data Collection						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
GDC.REQ.016	General Requirement	Application should remove the picture which has already been synced in DC Or DR database or file system location				
GDC.REQ.017	General Requirement	Application should provide general search also to search the collected data				
GDC.REQ.018	General Requirement	Application should support Hindi and English language including input fields				
GDC.REQ.019	General Requirement	The software should be capable to update Or upgrade the version of the software including GIS maps installed in the mobile application remotely.				
GDC.REQ.020	General Requirement	Mobile application should be available on latest versions of iOS, Android, Windows OS platform and be upgradable				
GDC.REQ.021	General Requirement	Mobile application should be able to download from department website over the intranet				

**Item No. 12:** CAD Mobile Application for PFT

<b>CAD Mobile Software For PFT</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
PFT.REQ.001	General Requirement	PFT software is to provide the Mobile Workforce with full access to the assigned case with distress GIS Map location to empower them to make informed decisions while in the field.				
PFT.REQ.002	General Requirement	The system will have feature of single sign on to authorize the user and this feature will be integrated with attendance module linked HRMS				
PFT.REQ.003	General Requirement	PFT software will enable the mobile workforce to be in contact with Officer over the call, SMS, CAD Application notification etc.				
PFT.REQ.004	Case Acknowledgement	The Dispatcher shall send cases data to the Vehicle on its PFT and the Vehicle staff shall initiate the response by accepting the Case on the PFT. The software shall be capable of delivering the acknowledgment to the CAD software for receipt of case information on the PFT device.				

CAD Mobile Software For PFT						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
PFT.REQ.005	Display Dispatch Message	The Software should display all the Dispatch related transactions assigned to the respective Vehicles.				
PFT.REQ.006	Case Details	On activating an assigned Case by the vehicle staff, the Software should also display Case information – i.e. Case id, Case type, user Phone Number, user Name, user Address, into the Software and user location on map. The map should be provided by GIS Map service provider				
PFT.REQ.007	Update Dispatch Status	On activating an assigned case Or incident by the mobile vehicle staff, Software should also display the user Or caller detail, location & Vehicle Status like dispatch, end-route, at scene, back to base and closed.				
PFT.REQ.008	Update Case Status	It should also enable the PFT users to report case closure.				
PFT.REQ.009	Communication	The PFT users should have the ability to provide information to the contact centre Officer Or dispatcher Or Supervisor through SMS messages and case closing reports				

CAD Mobile Software For PFT						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
PFT.REQ.010	Update GIS Map	PFT GIS map should be for defined local area (such as Police stations etc.). And that updated data from central server can be refreshed into it remotely.				
PFT.REQ.011	User Location	The Software should have the capability to display real-time location of the User on the map and tracking of the user on map				
PFT.REQ.012	Vehicle Location ( AVLS Software Interface)	The software should be capable to send the location of the vehicle in real time to the data centre				
PFT.REQ.013	Action Taken Report	It should also enable the PFT users to report Action Taken by attaching Audio Files, Image Files, Video Files and Text Entry. All Action Taken data should be available to Dispatcher and Supervisor through logs.				
PFT.REQ.014	Communication	The Software should support GPRS Message Or SMS Capabilities between the dispatch consoles and vehicle.				
PFT.REQ.015	PFT User Status	The Software should have functionality to update the Status like Available, Away, Attending to cases, On Break, etc. of the police personnel.				

CAD Mobile Software For PFT						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
PFT.REQ.016	Offline Support	PFT user should be able to update the transaction as required in the application even in case of poor or no network connectivity. All the transaction should be stored in the PFT devices and can be sync once the devices is connected				
PFT.REQ.017	Software Update and GIS Map Update	The software should be capable to update Or upgrade the version of the software including GIS maps installed in the PFT remotely.				
PFT.REQ.018	OS support	Mobile application should be available on latest versions of Android OS platform and be upgradable Or portable with latest updates in the application				
PFT.REQ.019	Fire Services	Mobile application for PFT of Fire services will have additional features like contact facility to Primary and Secondary Call Centre, District control room and concerned fire stations. Application will also have list of fire causes like chemical, jungle fire, cylinder blast fire and call closure mechanism				
PFT.REQ.020	Configuration	The software should be configurable and have capabilities for minor modifications				



**Item No. 13:** Citizen Portal

<b>Citizen Portal</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
CP.REQ.001	General requirement	The Portal should be hosted at the data centre infrastructure being installed by the bidder				
CP.REQ.002	General requirement	The Portal should be state of the art with user friendly interface, informative, interactive and easily accessible.				
CP.REQ.003	Citizen Registration	The Portal should be able to register citizens on the website.				
CP.REQ.004	Citizen Registration	The registration should include data such as name, contact information, mobile number, detail of device, email, address, photo ID, gender, blood group, emergency contacts etc. These fields are for sample purpose. It may modify Or increase on later stages.				
CP.REQ.005	Citizen Registration	The information collected from the registration should be verified with one time password on the Citizen mobile number.				
CP.REQ.006	Citizen Registration	Once the Citizen has registered, the Citizens would be prompted to download the mobile application				
CP.REQ.007	Search Functionality	The Portal should be searchable to query registration patterns, users, regional specifics etc.				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
CP.REQ.008	Portal Features	The Portal should have the following features for citizens:				
		Overview about emergency helpline services				
		Brief statistics of emergency helpline like No. of cases registered, No. of resolutions etc.				
		Administrative setup for GoH				
		Access to various literature related to rules and regulations				
		Feedback and RSS feed.				
		News Section				
		Contact us				
		Link for administrators for various modules Or components including components for security, database, user administration etc.				
		Information related to Rights to Information Act that may be required to be made public.				
		Information about various acts and sections relevant to emergency helpline services and all services of Haryana Police				
		MIS reports for citizen, GoH and identified stakeholders. MIS reports from the BI				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		application also need to be integrated with the portal.				
		The Portal shall be linked to social media sites (Facebook, twitter etc.) and count should be displayed of no. of likes of the Haryana 100				
		An effective presence on all major Social media platforms like Facebook, twitter, YouTube, Instagram etc. will be created and kept undated. This will be integrated with the citizen portal				
		The Portal shall have link for downloading the application from App stores (Android, iOS, Windows etc.)				
		The Portal shall provide the steps for downloading, installation and using the application.				
		The Portal shall also have a short video on how to use the mobile application.				
		The Portal should have a section on Frequently Asked Questions (FAQ) with pre-defined answers.				
		The Portal should have a contact information on emergency numbers Or non-emergency numbers etc.				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
CP.REQ.009	Chat Window	The Portal should be integrated with Chat Window functionality where citizen can do the chat with contact centre Officer. Citizen should be able to initiate the chat after giving the location of the chat location, citizen name and contact number.				
CP.REQ.010	Common requirements of Portal	The portal should meet and compliant the web design and security guidelines of Govt. of India				
		The system should adhere to Best Or Standard programming practices and other recommended security practices that can help authorized user to easily extend the functionality of the portal.				
		The system shall provide consistent look & feel, Themes, Navigation to the users and the standards defined for content, structure and presentation of the portal shall be applied and followed throughout the portal.				
		All the sections of the portal should be of dynamic nature and must be supported with easy content management and administration of the same.				
CP.REQ.011	Portal Administrator	The Portal should have administrator console where administrator can manage the content, users and can create portal				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		dynamic menus ( a common navigation bar should be included on all pages)				
		The Portal administrator should be able to modify Or design custom look and feel of the portal with minimal change in software code.				
CP.REQ.012	Portal Administrator - Publishing	The system should allow the authorized user to publish Emergency Helpline news, articles, events etc.				
CP.REQ.013	Multimedia Support	The system should adhere to automatically format images and other rich media based on predefined standards for resolution, size etc.				
CP.REQ.014	Security	The system shall ensure virus check for all files that are uploaded in Solution e.g. detect malicious executables.				
CP.REQ.015	Security	Where ever documents are involved, the system should allow the user to assign a note Or annotation to a document image.				
CP.REQ.016	Security	The system shall support provide support for HTTPs Or SSL for secured data transfer and session timeouts.				
CP.REQ.017	Single Sign On Access	Internal user should be able to access the internet portal using single sign on and should be able to access the relevant				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		application assigned to the user as per roles and permission				
CP.REQ.018	Internal Application Access	All the internal application like HRMS, Finance Management, Patrol Management etc... Should be able access by the internal user through this portal based on roles and permission to the user				
CP.REQ.019	Intranet portal access	Portal should be integrated with Intranet portal for internal user				
CP.REQ.020	Internal user detail	Information for Internal user on portal will be available to entire hierarchy of the field officer as per jurisdiction over the internet starting with station house officer, circle officer, additional SP city or rural area, SSP/SP, DIG, IG, IG (law and order), ADG (law and order), DGP based on user roles and permission				
CP.REQ.021	Audit Trail	The system shall display the date and time of last login when the user logs in.				
CP.REQ.022	Portal Content Management	The system should allow the authorized user, through a user friendly GUI, to manage Or edit the content of the various web pages. It shall allow authorized user to manage and maintain content of website in an efficient manner. User should be able to perform advanced update maintenance				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		jobs on website content with minimal technical knowledge on website development.				
CP.REQ.023	Portal Content Management	The front end user interface must be integrated with content management solution for easy management and change of theme design.				
CP.REQ.024	Portal Content Management	The system should allow the authorized user, through a user friendly GUI, to design and create a web page dynamically and publish it through an approval workflow. It should provide feature to define the position of the web page like centre frame, left frame or right frame etc.				
CP.REQ.025	Portal Content Management	The system should allow the authorized user, through a user friendly GUI, to create meta tag search of each web page.				
CP.REQ.026	Portal Content Management	It should allow the authorized user to upload any image, on the page and further allow him to define position of the image on web page				
CP.REQ.027	Portal Content Management	The system should allow the authorized user, through a user friendly GUI.				
CP.REQ.028	Search Content	The system should be able to search the Fire, Medical, Police and other databases as per requirement.				

Citizen Portal						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
CP.REQ.029	Search Archive Content	The system should be able to search the archive content through internet portal				
CP.REQ.030	Reporting access	All reports from BI / Reporting engine should be available to authorized users. There should be user access control on Citizen portal				
CP.REQ.031	Portal Content Management	The system should allow the user for meta tag basis search option. The search result should show path of the web page with brief description of the page or else first 20-30 words of the page. Solution should further allow drill down to the page.				
CP.REQ.032	Mobile Compatibility	the portal should be accessible on Smartphone also				
CP.REQ.033	Public Information Centre	It will serve purpose of Public Information centre				
CP.REQ.034	Ambulance Services Registration	Portal should be capable of providing following features: a. Registration of Instructions regarding Ambulance services – Govt. and Private b. Paid and Free Ambulance services				



**Item No. 14:** E-Learning

<b>E-Learning</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation /Remarks</b>
EL.REQ.001	E-Learning	The officer should be able to access their assigned eLearning courses in the browser-based interface that they use to manage schedules and request time off from their systems. They have to log in and open a new application window for training session.				
EL.REQ.002	E-Learning	Quality monitoring evaluation data shall be used to assign targeted learning.				
EL.REQ.003	E-Learning	E-learning software should be able to schedule the training based on skill assessment of the Officers				
EL.REQ.004	E-Learning	E-Learning software should allow access for scheduled training assignments while listening to a recorded interaction.				
EL.REQ.005	E-Learning	Integrated Scorecard should be able to aid in automatic lesson assignments when a KPI falls below an excepted goal				
EL.REQ.006	E-Learning	The software should provide a provision where training clips can be developed based on best practice calls. The recorded interactions should be used to rapidly build				

<b>E-Learning</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation /Remarks</b>
		learning content with assessment information.				
EL.REQ.007	E-Learning	The E-Learning software should support remote access.				
EL.REQ.008	E-Learning	The E-Learning content development software should allow adding and or recording narration directly into the application without additional software requirement				
EL.REQ.009	E-Learning	The E-Learning content should be in English and Hindi language for the user				
EL.REQ.010	E-Learning	E-Learning capabilities are required to enhance self and anytime learning of the users of Emergency Response system located all across the country				
EL.REQ.011	E-Learning	Bidder shall prepare interactive Online Training Module for the applications and SOPs for the project.				
EL.REQ.012	E-Learning	Interactive modules should be available in English and Hindi languages. It should be accessible to all the users of system based on their requirements.				

<b>E-Learning</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation /Remarks</b>
EL.REQ.013	Web Learning	Changes in the training modules of e-Learning should be pushed through centrally.				
EL.REQ.014	Web learning	As per the Department guidelines, the conferencing solution shall be open-source based with the Department having full ownership of the source-code that can support future enhancements or modifications as required				
EL.REQ.015	Web learning	The conferencing solution must be able to support analytics data that can allow the bidder to optimize the webinar sessions in real-time				
EL.REQ.016	Instructor led module	As per the Department guidelines, the instructor led training software should enable the department to schedule classroom based sessions				
EL.REQ.017	Instructor led module	It should also allow the trainers/master trainers to schedule sessions and invite participants for the same				
EL.REQ.018	Instructor led module	System should have a calendar interface to display the training scheduled				

**Item No. 15:** Patrol Management System

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
PMS.REQ.001	General	Should be able to define the routes for Emergency Response Vehicles(ERV) patrolling (based on Maps with PoI (Point of Interests or Landmarks) along the route				
PMS.REQ.002	General	Once the Routes have been defined, the System should be able to assign timings (Time taken for a ERV to travel from POI-1 to POI-2 along the defined route) and halt time at each PoI				
PMS.REQ.003	General	Once the timings have been assigned, System should be able to allocate manpower (ERV Police Personnel) for the defined and assigned Route. It should also be able to add Or update details of personnel available				
PMS.REQ.004	General	System should be able to assign the ERVs and Drivers for the defined route should be able to send and receive patrol routes over device				
PMS.REQ.005	General	Patrol Management System should be so designed as to pick up locational data from the GIS system that is part of the solution. The locations of the patrol route traversed by a vehicle should get auto populated from				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		the system with associated date and time stamp picked from the system and should be coupled with locations visited.				
PMS.REQ.006	General	It should be able to generate MIS in various formats as required for patrolling				
PMS.REQ.007	Login	PMS should provide authentication functionality for administrator with ID and Password which shall be deployed at central server generated through PMS server application.				
PMS.REQ.008	Login	PMS should provide normal users on the field a login with ID and password and if field user forgets his password he can ask the Administrator for his user ID and password and the administrator can help him get his credentials centrally.				
PMS.REQ.009	Administrative Rights	In "Patrol Management System", administrator shall be given some additional rights. Admin will be able to create any number of Users, depending on the requirements. He may rotate Coy or may view previous rotation details. He can Import or Export Officer Or Official list and Import map along with its coordinates.				
PMS.REQ.010		Administrator shall be able to				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
	Administrative Rights	i. Create User with login , name , password etc. details				
		ii. Can view duty rotation of ERV staff				
		iii. Can import and export ERV staff list for patrolling				
		iv. Can import maps and coordinates				
		v. Can change images and store centrally				
		vi. Other files access will be there in PMS. It will only be used when there is a need of addition Or deletion in master file (Landmark, Location etc.).				
		vii. PMS activities with a daily patrolling record day to day activity will be available.				
		viii. System should allow the Circle Officer of Field Police and above with all Master Administrator rights to request route, assign timings and manpower. District Inspector shall have the rights of allocation of patrols and perform the above activities.				
PMS.REQ.011	User rights	ERV Police Personnel shall be able to :				
		i. Import Master Files to see patrolling duties				
		ii. Patrol Activities for day and week				
		iii. Pending activities of patrolling of ERV				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		iv. Reports to export about patrolling details				
		v. Feed about start and finish about patrol				
		vi. Change Images of landmarks				
PMS.REQ.012	Application Content	PMS will have master file which will have features like Open MAP for normal patrolling routes will be there				
PMS.REQ.013	Application Content	PMS will have file which will have guide for best route options during day, night time, other situations like traffic jam , rally				
PMS.REQ.014	Application Content	<p>PMS will have master files for Landmarks which will show the prominent points under fall on the patrolling routes. It may be a local and provincial data like hospitals, locally called landmarks, malls, and Police stations etc.</p> <p>While selecting the landmark certain points would be taken care of such as:</p> <p>i. It should be static.</p> <p>ii. It should not be too large or scattered. For example if someone want to select 'hospital' as a landmark then select the main gate of that hospital as an actual landmark.</p> <p>iii. To convert 27o 30' 45" into degree Or decimal following formula may be used-</p>				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		$27 + 30 \text{ Or } 60 + 45 \text{ Or } 3600 = 27 + 0.5 + 0.012500 = 27.512500$ iv. PMS should not choose landmarks very close to each other. Distance between each landmark must not be less than 20 mtrs. v. PMS should not register unnecessary landmarks in PMS. vi. Landmarks should be scattered in the entire patrolling routes				
PMS.REQ.015	Application Content	PMS will have Create Route option in field which will be authorized by the administrator and shall contain following options: i. Route with landmarks ii. Existing route table on upper right side iii. Map on the lower right side				
PMS.REQ.016	Application Content	PMS will be enabled on GPS devices which records and shows geo-coordinates (may say location) of any point on their route. It will record the geo-coordinate of points on routes in regular intervals which will further utilized showing route of the patrol party on map.				
PMS.REQ.017	Patrol activities	PMS application should have the following feature of patrol activities:				



Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		i. Send Patrol: When any district is selected, all existing routes for that particular District will appear in the dropdown box "Route Name". Select any one of them where ERV wants to send patrol. When route is selected, the landmarks falling on that route will appear in the lower table as well as on map. There will be a selection option of patrol 'in' and 'out' time with date. Also option to fill "Reaching Time" and "Halt Time" (In minutes) at any Landmark. Further "Patrol Duration" and "Patrol Distance" will also appear at the bottom of screen.				
		ii. There will also be an option to make any amendment in time or configuration of patrolling staff (Police Personnel as well as Drivers)				
		iii. Receive Patrol: When send patrol is covered by ERV staff there would be option for ERV Staff to show "Actual Reaching Time" and "Actual Waiting Time" during route. These entries will be filled according to the narration of the ERV staff to record daily patrolling route of vehicles.				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		iv. All details of patrolling routed will be filled using PFT devices				
		v. There will be list of pending patrolling routes in application to show if ERV has not covered defined patrolling route for that day				
PMS.REQ.018	Patrol Order Sheet	<p>Circle Officer and above rank officers can define Patrol order sheet. The Patrol order sheet will be send to ERV through GPS over PFT which will consist of:</p> <ul style="list-style-type: none"> <li>i. Patrol Order sheet unique number</li> <li>ii. Date of Patrol</li> <li>iii. Patrolling routes information</li> <li>iv. Reaching Time</li> <li>v. Halt time</li> <li>vii. Detail of ERV staff</li> <li>viii. Single sign on of ERV staff</li> </ul> <p>ERV staff will fill required details and submit the order sheet back to respective officer Incharge officer will approve the Patrol order sheet submitted by ERV staff. There will also be option for printing the patrolling sheets through web link.</p>				
	Integration requirements	System needs to be integrated with central HRMS system for allocation of manpower (Police ERV personnel) for the defined Patrol Routes				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		System needs to be integrated with ERV Management Application for assigning Drivers and Vehicles for the defined Patrol Routes				
		Landmark should be prominent and static				
		Landmark should be recorded with Long/Lat				
PMS.REQ.019	Detailed MIS Reports	PMS will display patrolling reports for monthly, weekly and daily basis of ERV				
		i. Reports can be monitored by web link from officers sitting in Both Contact Centre, District Control room and field				
		ii. Reports will be designed considering factors like:				
		iii. MIS reports must be able to display the performance of Circle Officers and above based on the activities performed by them using the Patrol Management Application				
		iv ERV patrolling routes				
		v. ERV associated to districts				
		vi. ERV patrol monitoring				
		vii. Yearly Monthly , weekly, daily MIS				
		viii. Assigned patrol routes covered				
		ix. Seizure or alert during patrolling				
		x. Deviations from assigned routes				
		xi. Addition of new routes for patrolling				

Patrol Management System (PMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		xii. Addition of landmarks				
		xiii. Map report which displays the route of patrol				
PMS.REQ.020	Browsing capabilities	The PFT user in field will be able to browse application on PFT in field				
		The Senior Police Officer can view MIS over web link in Call Centre, District Control Rooms and Police offices				
		The District ERV staff / manager , Circle Officer and SP Or SSP rank officers can view the patrolling in their respective districts over app and web link				
PMS.REQ.021	General	Application should have form to enter details about persons arrested and handed over to Police station against event attended				
PMS.REQ.022	General	Application should have form to enter details of any seizures against events attended				

**Item No. 16:** Human Resource Management System (HRMS)

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.001	General Requirement	The solution must be fully integrated system and automate all related processes for State wide Haryana 100 staff				
HRMS.REQ.002	General Requirement	The solution must be real-time update and access of detail data				
HRMS.REQ.003	General Requirement	The solution must support facility to provide centralized key services				
HRMS.REQ.004	General Requirement	System should enable accurate and flexible mapping of the Departmental roles				
HRMS.REQ.005	General Requirement	It should have accurate and easy availability of information with drill downs, drill ups with supporting data				
HRMS.REQ.006	General Requirement	It should provide Authentic, reliable, accurate and timely data				
HRMS.REQ.007	General Requirement	It should have Business intelligence, MIS from the system (reports daily Or weekly Or monthly Or yearly Or till date) comparison of data (Past Or Current)				
HRMS.REQ.008	General Requirement	System should be web based				
HRMS.REQ.009	General Requirement	All forms and reports should be downloadable and printable in pdf format				
HRMS.REQ.010	General Requirement	Should be able to integrate with user directory				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.011	General Requirement	Should have the ability to integrate with Patrol Management System				
HRMS.REQ.012	General Requirement	Should be able to integrate with single sign based on different user roles				
HRMS.REQ.013	Attendance & Leave Management	HRMS will be integrated with biometric system for attendance				
HRMS.REQ.014	Attendance & Leave Management	System should have ability to view list of weekly offs, holidays in an year of Haryana 100, field and SERC staff				
HRMS.REQ.015	Attendance & Leave Management	System should have ability to define types of leaves: sick leave, privilege Or earned leave, casual leave etc.				
HRMS.REQ.016	Attendance & Leave Management	System should have ability to apply for leave under the appropriate category and state the reasons for it				
HRMS.REQ.017	Attendance & Leave Management	System should have ability to Check the status of leave request				
HRMS.REQ.018	Attendance & Leave Management	System should have ability to approve Or cancel Or modify leave requests by staff				
HRMS.REQ.019	Attendance & Leave Management	System should have ability to view accrued leave balances				

HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HRMS.REQ.020	Attendance & Leave Management	System should have ability to intimate the officer concerned when a staff member goes on unauthorized leave (unmarked attendance) Or returns back from unauthorized leave Or extends leave Or reports in the middle of the sanctioned leave period (along with appropriate reduction in sanction)				
HRMS.REQ.021	Attendance & Leave Management	System should have ability to provide the following reports to authorised persons on attendance and leave details:				
HRMS.REQ.022		1) consolidated status of present Or absent staff members working under him Or her				
HRMS.REQ.023		2) number of staff members for whom leave has not been approved Or declined Or modified				
HRMS.REQ.024		3) number of staff members attending office late				
HRMS.REQ.025		4) total number of leave quota (category-wise) and actual leaves taken in a period by a staff member				
HRMS.REQ.026	Attendance & Leave Management	System should have ability to manage on-line application, tracking and approval of various kinds of leave through workflow logic and self-service				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.027	Attendance & Leave Management	System should have ability to update work schedule Or shift pattern of staff				
HRMS.REQ.028	Attendance & Leave Management	System should have ability to maintain working hours, weekly offs and national Or local holidays				
HRMS.REQ.029	Attendance & Leave Management	System should have ability to define overtime facility				
HRMS.REQ.030	Attendance & Leave Management	System should have ability to define leave quota for staff				
HRMS.REQ.031	Attendance & Leave Management	System should have ability to manually update attendance & leave details of staff in case for a staff member to whom access card is not applicable				
HRMS.REQ.032	Attendance & Leave Management	System should have ability to correct attendance & leave details of staff				
HRMS.REQ.033	Attendance & Leave Management	System should have ability to update half day attendances Or leaves in the system				
HRMS.REQ.034	Attendance & Leave Management	It should facilitate leave balances to be merged Or transferred Or credited through an accrual process in the system automatically based on user defined criteria				



<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.035	Attendance & Leave Management	System should have ability of record keeping and maintenance of historical data				
HRMS.REQ.036	Travel and Transport	It should have ability to automate Travel process				
HRMS.REQ.037	Travel and Transport	It should have ability to record Travel Policy & Procedure				
HRMS.REQ.038	Travel and Transport	It should have ability to generate itinerary details				
HRMS.REQ.039	Travel and Transport	It should have ability to record the travel with unique number and update about cancelled, approved or deferred				
HRMS.REQ.040	Travel and Transport	It should have ability to request travel by staff and approve Or reject transfer requests of staff (Integrate with SSS Module)				
HRMS.REQ.041	Travel and Transport	It should have ability to generate lists of travel requests Or recommendations received to be reviewed by the Competent Authority for deciding on travels				
HRMS.REQ.042	Travel and Transport	It should have ability to produce itinerary , travel request, routes details				
HRMS.REQ.043	Rewards	HRMS will have all details of rewards and recognition received by staff would be available online				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.044	Rewards	Rewards and recognition will be provided based on recommendation and will be recorded online				
HRMS.REQ.045	Rewards	Reward list , nominees will be part of HRMS				
HRMS.REQ.046	Rewards	It should provide and generate rewards policy				
HRMS.REQ.047	Rewards	It should provide recognition rules, terms and conditions, applicability				
HRMS.REQ.048	Rewards	It should have all rewards cycle, emoluments involved if any enlisted				
HRMS.REQ.049	Appraisal	This appraisal will be for outsourced staff members. It should have ability to fill appraisal documents in the system during each stage of appraisal and integrate with SSS				
HRMS.REQ.050	Appraisal	It should have ability to view appraisal documents, provide rating and feedback				
HRMS.REQ.051	Appraisal	It should provide the functionality to review to request changes within a specified time after submission of appraisal document post approval from competent authority				
HRMS.REQ.052	Appraisal	It should have the ability to capture agreement on final rating of both the reviewed and reviewer.				
HRMS.REQ.053	Appraisal	Ability to maintain Audit trail of all changes made to this process				

HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HRMS.REQ.054	Training	It should have ability to capture Training needs of various classes of staff				
HRMS.REQ.055	Training	It should have ability to capture Training needs of staff met Or not met during the quarter Or year				
HRMS.REQ.056	Training	It should have ability to formulate and update Annual Training Calendar with list of Training Programmes, Batch size, target group etc.				
HRMS.REQ.057	Training	It should have ability to provide input for payment to Trainers Or Institutes				
HRMS.REQ.058	Training	It should have ability to update list of Trainers Or Institutes for various training programmes				
HRMS.REQ.059	Training	It should have ability to record participant's attendance in training programmes and staff members nominated but did not attend a training programme				
HRMS.REQ.060	Training	It should have ability to notify supervisors of staff members about the nomination for training programme				
HRMS.REQ.061	Training	It should have ability to define and print training nomination letters to be sent to staff for invitation				
HRMS.REQ.062	Training	It should have ability to customize training feedback form and training nomination letters				
HRMS.REQ.063	Training	It should have ability to define training feedback & effectiveness form				

HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HRMS.REQ.064	Training	It should have ability to manually update training feedback provided by participants in the online feedback form				
HRMS.REQ.065	Training	It should have ability to analyse training feedback				
HRMS.REQ.066	Training	It should have ability to capture Training facilities available within the Department				
HRMS.REQ.067	Training	It should have ability to book training rooms by departments for specific training programmes				
HRMS.REQ.068	Training	It should have ability to capture course content of all training programmes along with list of Target group, batch size				
HRMS.REQ.069	Training	It must have functionality for online registration, cancellation, rescheduling , reminder, and confirmation of training classes				
HRMS.REQ.070	Training	For any request raised with regards to registration, cancellation, rescheduling, it should provide the functionality to approve Or reject the request by competent authority				
HRMS.REQ.071	Training	It should have ability to maintain training database with full training history of entire staff				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.072	Violation	HRMS will have violation policies and guidelines for Police department and outsourced staff members				
HRMS.REQ.073	Violation	HRMS should enable appropriate authorised persons to log in and register any act of violation against a staff member as per the agreed rules and policy				
HRMS.REQ.074	Violation	It should have the ability to approve or reject the above by competent authority				
HRMS.REQ.075	Violation	Module should include details of number of violations allowed as per role				
HRMS.REQ.076	Violation	Type of violations should be listed				
HRMS.REQ.077	Violation	It should have the ability to auto send email to respective role's supervisor, if he Or she crosses the threshold limit				
HRMS.REQ.078	Violation	If the number of violations allowed are exceeded, it should have the ability to mention next steps to be taken both by the defaulter and immediate supervisor				
HRMS.REQ.079	Violation	It should have the ability to cancel, change number of violations captured after due approval from competent authority				
HRMS.REQ.080	Violation	It should have the ability to grant access to this information to only a select few				

HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HRMS.REQ.081	Staff Master	Ability to store and maintain staff's personal data such as staff members no., name, addresses, phone numbers, emergency contact information and email addresses, Salary Bank Account Details, passport details				
HRMS.REQ.082	Staff Master	Ability to maintain staff's gender, date of birth, blood group, citizenship, marital status, religion, caste etc.				
HRMS.REQ.083	Staff Master	Ability to maintain an staff's education, certifications, degrees and any endorsements				
HRMS.REQ.084	Staff Master	Ability to maintain previous (multiple) employment details like name of the Department, department, position held (designation), start Or end dates, reason for leaving, last salary drawn, references etc.				
HRMS.REQ.085	Staff Master	Ability to maintain names, date of birth and contact details of spouse, children, dependents, parents, dependants, nominees under different schemes, etc.				
HRMS.REQ.086	Staff Master	Ability to maintain staff's recruitment category like physically handicapped Or sportsperson Or ex-servicemen Or specialist Or SC Or ST Or OBC Or compassionate grounds Or Others				

HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HRMS.REQ.087	Staff Master	Ability to update staff member's recent photograph				
HRMS.REQ.088	Staff Master	Ability to maintain the dialect and languages known with details of speak, read and write separately. Clear indication for the mother tongue				
HRMS.REQ.089	Staff Master	Ability to maintain history of trainings attended (prior to joining & after joining) like name of the course, name of the Institution, month & year of training, duration of the course in days Or weeks etc.				
HRMS.REQ.090	Staff Master	Ability to maintain the awards for which nominated Or received by a staff including the name of the award, year of award, in which discipline Or field and date of receipt of award and special status Or privilege, if any, to be given to him for the award				
HRMS.REQ.091	Staff Master	Ability to maintain date of joining, probation period, date of confirmation in each grade Or post				
HRMS.REQ.092	Staff Master	Ability to date and time stamp all changes in the database enabling data availability on 'as on date Or time' basis				
HRMS.REQ.093	Staff Master	Flexibility of additionally capturing any information relating to staff member at a later date				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.094	Staff Master	Ability to maintain concurrent jobs for staff with additional responsibilities Or special duties in addition to regular responsibilities				
HRMS.REQ.095	Staff Master	Ability to update only authenticated data reflected in the staff's master				
HRMS.REQ.096	Staff Master	Ability to maintain staff's data with regards to claims, etc.				
HRMS.REQ.097	Staff Master	Ability to maintain and view staff leave details				
HRMS.REQ.098	Staff Master	Ability to maintain staff's data with respect to PF, Gratuity, etc. and the nominations for the same				
HRMS.REQ.099	Staff Master	Ability to create Departmental chart of all positions and reporting relationships				
HRMS.REQ.100	Staff Master	Ability to provide restricted access to different classes of staff master data				
HRMS.REQ.101	Staff Master	Ability to maintain the insurance related details for each staff member, like insurance number, nominee details, amount etc.				
HRMS.REQ.102	Staff Master	Ability to maintain Audit trail of all changes made to sensitive information				
HRMS.REQ.103	Staff Master	Ability to maintain service files documents in scanned form including Proof of Date of Birth, domicile, Bonds, if any, executed, disciplinary cases details, photograph etc.				
HRMS.REQ.104	Staff Master	Ability to send alerts to appropriate authorised persons when driving license				



HRMS Application						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		expires or violation is logged in against a staff member or on any other related issue				
HRMS.REQ.105	Staff Master	Ability to track the physical location of the service file by recording the unique file number and place where it is kept (After HRMS no physical file movement may be required)				
HRMS.REQ.106	Staff Self Service (SSS)	It will facilitate staff to apply for changes in permanent & correspondence addresses, details of family members, emergency contact details, contact details, office location, nomination for various schemes like PF Or Gratuity, etc.				
HRMS.REQ.107	Staff Self Service (SSS)	HRMS should be able to add Or update bank information for expense reimbursement, PAN no, passport details, driving license no. or any other relevant information				
HRMS.REQ.108	Staff Self Service (SSS)	HRMS should be able to provide address proof letter to GoH for various purposes				
HRMS.REQ.109	Staff Self Service (SSS)	HRMS should be able to integrate SSS with Employee Master				
HRMS.REQ.110	Staff Self Service (SSS)	HRMS should be able to remind the staff through self-service Or e-mail regarding modification or requirement of additional data				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.111	Staff Self Service (SSS)	HRMS should be able to send the staff confirmations after changes are made online				
HRMS.REQ.112	Grievance Redressal and Suggestion System	HRMS will have Haryana 100 staff grievance related policies and guidelines for Police department and outsourced staff members				
HRMS.REQ.113	Grievance Redressal and Suggestion System	HRMS will facilitate to list various techniques to facilitate communication				
HRMS.REQ.114	Grievance Redressal and Suggestion System	HRMS will facilitate to issue docket number for different classes of staff members separately				
HRMS.REQ.115	Grievance Redressal and Suggestion System	It should have the ability to define type of grievance or suggestion				
HRMS.REQ.116	Grievance Redressal and Suggestion System	The users should the ability to log in complaints or suggestions				
HRMS.REQ.117	Grievance Redressal and Suggestion System	Ability to check status of the grievance or suggestion logged				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.118	Grievance Redressal and Suggestion System	It should have the functionality to restrict access to a select few and maintain confidentiality of information				
HRMS.REQ.119	Grievance Redressal and Suggestion System	It should have the ability to withdraw or change complaint or suggestion within a specified time				
HRMS.REQ.120	Grievance Redressal and Suggestion System	If the grievance or suggestion is not responded to within a specified time, it should have the ability to auto send email to higher authority for escalation				
HRMS.REQ.121	Grievance Redressal and Suggestion System	Ability to maintain Audit trail of all changes made to this information				
HRMS.REQ.122	Policy Rules and automation	The proposed solution should have an intuitive business rules definition framework that would enable business users to manage business policies easily with less Or no intervention from technical staff.				
HRMS.REQ.123	Policy Rules and automation	The business rules framework should be able to model the complex business logic in a natural language format				

<b>HRMS Application</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HRMS.REQ.124	Policy Rules and automation	Business users should be able to test the logic integrated with the underlying architecture as well independently.				
HRMS.REQ.125	Policy Rules and automation	Solution shall be linked to SMS gateway as per requirement for Payroll mechanism, grievance etc.				
HRMS.REQ.126	Transfer, Promotion and Suspension	HRMS will have all transfer, promotion or suspension related policies and respective guidelines of outsourced staff present in this module				
HRMS.REQ.127	Transfer, Promotion and Suspension	It should have the ability to raise request for outsourced staff member's transfer, promotion or suspension using a detailed form or defined framework only for specified persons				
HRMS.REQ.128	Transfer, Promotion and Suspension	Any request raised for transfer, promotion or suspension to be reviewed and approved Or rejected by competent authority				
HRMS.REQ.129	Transfer, Promotion and Suspension	Should provide an escalation or appeal mechanism for the requestor in case request is rejected				
HRMS.REQ.130	Transfer, Promotion and Suspension	It should have the functionality to restrict access to a select few and maintain confidentiality of information				

**Item No. 17:** Host Based Intrusion Prevention System (HIPS)

<b>HIPS</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
HIPS.REQ.001	Make					
HIPS.REQ.002	Model					
HIPS.REQ.003	General Requirement	The solution should be sized for atleast 250 servers. MSI needs to provision for the incremental licenses as per their solution.				
HIPS.REQ.004	General Requirement	Solution should provide security monitoring across physical and virtual servers including real-time file integrity monitoring, configuration monitoring, consolidated event logging, and file and system tamper prevention.				
HIPS.REQ.005	General Requirement	Solution should support Agent/agentless on a myriad of OS platforms including Windows, AIX, HP-UX, Solaris, Oracle Linux, Redhat Linux, Suse Linux, VMWare ESX/ESXi, Microsoft Hyper-V.				
HIPS.REQ.006	General Requirement	Solution should protect both physical and virtual servers by delivering application and protected whitelisting, fine grained intrusion detection and prevention; file, system and admin lockdown; and file integrity and configuration monitoring.				

HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.007	General Requirement	Solution should be deployed as a stand-alone solution or with additional modules in the family to enable a comprehensive and sustainable security assessment of servers with detailed reporting on risk reduction.				
HIPS.REQ.008	General Requirement	Solution should automate the assessment of technical controls and security configuration standards of servers to ensure a consistent, centralized approach to evaluating organizations security posture and compliance status.				
HIPS.REQ.009	General Requirement	Solution should have out of the box Host IDS and IPS Policies. These prebuilt policies for Windows environments should monitor and prevent suspicious server activity.				
HIPS.REQ.010	General Requirement	Solution should be able to prevent against a new class of threats utilizing comprehensive IPS protection against exploit/vulnerabilities automatically. Solution should have the capability to integrate with sandbox solution.				
HIPS.REQ.011	General Requirement	Solution must have host firewall to control inbound and outbound network traffic to and from servers.				

HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.012	General Requirement	Solution should be able to control to restrict application and operating system behaviour/ Compensating host intrusion prevention controls using policy-based least privilege access control.				
HIPS.REQ.013	General Requirement	Solution must have file and system tamper prevention and Lock down configuration, settings, and files.				
HIPS.REQ.014	General Requirement	Solution should have application control to lock down configuration settings, file systems.				
HIPS.REQ.015	General Requirement	Solution mitigate patching for new and legacy systems and enable application and instance level security for public and hybrid cloud deployments.				
HIPS.REQ.016	General Requirement					
HIPS.REQ.017	General Requirement	Solution should protect system files and registry entries from modification or deletion.				
HIPS.REQ.018	General Requirement	Solution should be able to provide process control based on the application initiating the change, the target file/registry key, the user/group attempting the change and finally based on additional arguments used when starting the application.				

HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.019	General Requirement	Solution must provide the ability to lock down files/key (or ban/control) all applications/files allowing other applications to run and perform their tasks without manual intervention where and when to reduce the attack surface.				
HIPS.REQ.020	General Requirement	Solution should provide pre-defined automated responses to events. Actions should include alerting the administrator, logging the event.				
HIPS.REQ.021	General Requirement	Solution must have the role based access control so that specific users can be assigned with selected task.				
HIPS.REQ.022	General Requirement	Solution should provide a way for users to 'override' the protection in case they need to change System in ways that would normally be blocked.				
HIPS.REQ.023	General Requirement	Solution should have targeted prevention policy to respond to server incursion or compromise immediately with quickly customizable hardening policies.				



HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.024	General Requirement	Solution should have granular intrusion prevention policies to protect against zero day threats and restrict the behavior of approved applications.				
HIPS.REQ.025	General Requirement	Solution must not be dependent on signatures for protecting server from malware.				
HIPS.REQ.026	General Requirement	Solution should monitor across physical and virtual servers including real-time file integrity monitoring, configuration monitoring, consolidated event logging, and file and system tamper prevention.				
HIPS.REQ.027	General Requirement	Solution should allow security monitoring of public and hybrid clouds including security configuration monitoring, file integrity monitoring, whitelisting with application control for on premise and off-premise data centers, and security automation across the cloud environment via REST API or similar.				
HIPS.REQ.028	General Requirement					

HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.029	General Requirement	Solution should simplify continuous monitoring and compliance reporting of hybrid data center infrastructures for cybersecurity and compliance based on the policies defined in policy manager.				
HIPS.REQ.030	General Requirement					
HIPS.REQ.031	General Requirement	Solution should be a single tool to effectively identify policy violations and suspicious activities at an application or instance-level, in real-time, across the physical and virtual servers.				
HIPS.REQ.032	General Requirement	Solution should monitor and protect physical and virtual data centers using a combination of host-based intrusion detection (HIDS), intrusion prevention (HIPS), and least privilege access control.				
HIPS.REQ.033	General Requirement	Solution should be virtualization-technology agnostic and broad platform to secure workloads regardless of where it resides and can protect entire data centers including legacy systems that cannot be patched.				

HIPS						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
HIPS.REQ.034	General Requirement	Solution should perform integrity checking of files using File Hash or by creating baseline to give visibility of unwanted changes				
HIPS.REQ.035	General Requirement	Solution should perform file hashing locally rather than transferring the file across a network to be hashed on a central server and thus impact network bandwidth				

**Item No. 18:** Business Intelligence (BI), Reporting and Analytics

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.001	General Requirement	The system shall be provided in high availability configuration to avoid any single point of failure				
BI.REQ.002	Auto Schedule Reports	It shall have feature to schedule generation of reports and automatic delivery of scheduled reports to e-mail. It shall also allow automatic delivery of both manually generated and scheduled reports to a file directory or folder				
BI.REQ.003	Archiving	System should have a capability for data archival from an overall data management perspective				
BI.REQ.004	MIS Reports	The system should generate the MIS reports details based on state, district, zone , range etc. and should be accessible to internal users based on roles and permission in the system				
BI.REQ.005	MIS Reports Access	The MIS reports should be linked to Haryana Police Intranet and Haryana 100 Citizen portals for internal users.				
BI.REQ.006	Predictive Analytics	The software should have the capability to perform predictive analytics which can help in extracting information to predict trends like deployment the police officials around a certain area within a state on the basis of emergency Or non-emergency calls made over a period of time etc.				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.007	Pattern Analytics	The software should have a capability to perform the pattern analytics which can help in extracting the information to pattern trends like Crime pattern like robbery, women cases w.r.t state, district and city level etc.				
BI.REQ.008	General Requirement	<p>The following daily, Weekly, monthly and yearly trending reports must be provided by system. The given below reports are for reference purpose only. It may update and can increase on later stages. Reports should be categorized into District Or City or village level also.</p> <ol style="list-style-type: none"> <li>1. Average Speed of Answer</li> <li>2. Service Level Percentage</li> <li>3. Calls Offered</li> <li>4. Calls Handled</li> <li>5. Abandoned Call Rate</li> <li>6. Average Talk Time</li> <li>7. Average Hold Time</li> <li>8. Average Handle Time</li> <li>9. Longest Delay Before Answered</li> <li>10. Outbound Call Volume</li> <li>11. Outbound Call Duration</li> <li>12. Average Delay before Abandon</li> <li>13. Longest Delay before Abandon</li> <li>14. Number of calls exceeding threshold (i.e. calls waiting in queue longer than given time)</li> </ol>				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
		15. Average time in queue by call type 16. After Call Work (Wrap Up) 17. Operator Hours Report 18. Staffing Distribution Report 19. Number of instances the operator found busy 20. Calls made Or referred to stakeholder institutions 21. Call type 22. Development of suitable Management Information System (MIS) for reporting periodical progress in redress of public grievances 23. Category Or Sub-Category-wise complaint registration Or resolution status 24. Category Or Sub-Category-wise Complaint escalation status 25. Area wise problem based (emergency and non-emergency) analytical report on monthly Or quarterly basis based on call data base. Prepare and submit problem based schematic maps for districts Or groups of districts 26. Vehicle distance travelled to the caller Or user location				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.009	Response time reports	The system should be able generate the various response time reports like: 1. Haryana 100 field response time report - It should have all activity response time like call receiving, analysis of the case, dispatch response time, vehicle response time to reach at distress caller location, Acknowledgement by vehicle. 2. Haryana 100 response time for non-dispatch cases - It should have all activity response time like call receiving, analysis of the case, feedback etc.				
BI.REQ.010	Tools for Analysis	It should be possible to analyse crime and criminal's in. at least, the following ways: 1. Hot Spot Analysis 2. Trend Analysis 3. Suspect Analysis 4. Crime forecasting 5. Journey to crime 6. Response time 7. Repeat Callers 8. Change over Time mapping 9. Neighbourhood Analysis 10. Serial sex offender tracker 11. Patrol Charts 12. Crime against women etc. This list is for reference purpose and may update or increase on later stages.				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.011	Data ware House And Searching	Data warehouse should be created to manage all BI and reporting system reports. System should have functionality to search structured data, unstructured data, video and images as well in the system for archival records as well.				
BI.REQ.012	Analysis	The system should be able to analyse the real time data, weekly data, monthly data, and archival data also and generate the reports in the system.				
BI.REQ.013	Patrol Planning Analysis on GIS Map	It should be possible to overlay patrol charts, actual positions and, crimes reported over a period of times. This is to analyse tactical the decisions. Were the patrol positions well chosen, did units adhere to it, even then which crimes occurred.				
BI.REQ.014	Application Integration	It should be integrated with other application like EMS of GoH for data analysis and reporting				
BI.REQ.015	Exception Reporting	The ability to generate reports as a result of critical event or scenario such as system capacity utilization nearing threshold or average handle time of a call falls below defined threshold for a call operator				
BI.REQ.016	Architecture	The data components of the architecture should include the internal and external sources of structured and unstructured data that users or stakeholders will need to access and analyse to meet their requirements				



<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.017	Data Integration	The BI software should have data integration tools available that seamlessly and natively integrate with other applications				
BI.REQ.018	Data Quality Tool	Data quality tools and methodologies to support the preparation of data for business intelligence applications and reporting				
BI.REQ.019	Master Data Management	Master Data Management tools and methodologies to support the preparation of a system of record for business intelligence applications and reporting. All type of records which are created through multiple communication channel like call, SMS, Chat, , Mobile apps etc. which will be used to do the BI and analytics operations to do such operations like Crime pattern, hot spot analysis etc.				
BI.REQ.020	Analytical Tool	There will be analytical tool for all date and time related data which should be integrated with Hindi Calendars (Vikram) and Islamic Calendars for analytics.				
BI.REQ.021	Metadata Management	Metadata Management – Tool should enable the creation, consolidation , ongoing auditing and reporting on the metadata				
BI.REQ.022	Analytical tool	There will be exclusive mechanism relate to sort the incidents related to Fire Services, Women helpline and other services like Highway Police, City surveillance, ITMS, elderly helpline				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
BI.REQ.023	General	Tool should be state of the art technology platform capable of storing, transforming and processing humongous volumes data both structured and unstructured like text, image, video files in a parallel processing mode. The stored datasets which may be diverse, complex and massive are to be retrieved and processed in tolerable time. The platform must be capable to store unstructured, semi-structured and structured data in a reliable, secure, and fault-resilient and must act as a scalable data store that can be organized and sorted for indexing and analysis.				
BI.REQ.024	Reports	The application should have a variety of reports (which includes but not limited to) following; 1. Call Details 3. Average Response Time 4. Blank Calls, Crank Calls, Emergency Calls, Hot Calls, Information Calls 5. Call per hour 6. Police Station wise Response time 7. Daily PCR 8. Event Audit Logs 9. Event Details, events Statistics 10. Events Sub Type 11. Fleet Summary				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
		12. Geo Fence IN / OUT 13. Police Station / Police Zone wise Report 14. Operator Status 15. Operator activity Break code 16. Vehicle activity, Daily activity summary, Dispatch response, stop 17. Vehicle Status summary 18. Vehicle Modem Maintenance Summary 19. Vehicle Response Time 20. Vehicle Stoppages 21. Vehicle Daily Activity Summary 22. Active event By event Types 23. Zone and Police Station Wise Daily, Weekly 24. Zone and Police Station Wise events & Vehicles 25. Zone and Police Station wise event Count 26. Feedback Reports 27. Event Chronology Report 28. Report for Distance between Event Location and Unit Arrive location 29. Deviance Report 30. Call Taker and Dispatcher Response Time Report 31. Patrolling Unit Response Time Report.				
BI.REQ.025	Dashboards	There shall be dashboards for different supervisory levels to give them graphical picture of the performance of those within their jurisdictions.				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
		1. Call Trend – day, week and month 2. Average Response Time for call taking, dispatching and responding units. 3. By Event Type 4. By Police stations and Fire stations 5. Vehicle Activity – Run Time and Halt Time 6. CFS or case status (open, in progress, resolved, close etc.) 7. GPS Health Check Report				
BI.REQ.026		The analytics tool should be able to conduct non-structured search across the database irrespective of any parameter or database structure				
BI.REQ.027		The analytics solutions should be able to establish patterns through complex query search and present it in graphical and non-graphical forms.				
BI.REQ.028		The solution should be able to apply business rules of Haryana Police and should be customizable as per the requirements of Haryana Police				
BI.REQ.029		The solution should have a range of filters, drop-downs, slicers and search functions which can be customized as per the requirements of Haryana Police so that information search and dashboards can be generated quickly.				
BI.REQ.030		The solutions should have the ability to drill-down into data, going from a high-level overview of to a				

<b>Business Intelligence (BI), Reporting &amp; Analytics</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS products Or component if relevant</b>	<b>Deviation/ Remarks</b>
		detailed, granular view based on various variable parameters				

**Item No. 19:** DDOS (Distributed denial-of-service)

<b>DDOS</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
DDOS.REQ.001	Make					
DDOS.REQ.002	Model					
DDOS.REQ.003	DDOS	The proposed solution should be appliance based solution with inspection and prevention features along with IP reputation functionality. The Anti-DDoS Appliance should be able to maintain a “multi-layered” security approach and strengthen the security further/zero day protection (preferred). The DDoS should be from different OEM than NGFW				
DDOS.REQ.004	DDOS	Solution must support at least 8 x 10G LAN & 8 x 10G WAN interfaces				
DDOS.REQ.005	DDOS	Solution must at least support 16 Gbps of total traffic				
DDOS.REQ.006	DDOS	The device should support high availability				
DDOS.REQ.007	DDOS	Latency should be lower than 50 microseconds				
DDOS.REQ.008	DDOS	The solution shall support IPV6 protocol.				
DDOS.REQ.009	DDOS	DDoS Solution should be completely Behavioural Based only should not have signature based inspection.				
DDOS.REQ.010	DDOS	The system must detect the attack dynamically without the need of any static				

DDOS						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		control/redirection (E.g. route maps or static routes)				
DDOS.REQ.011	DDOS	The system should be capable to mitigate and detect both inbound and outbound traffic.				
DDOS.REQ.012	DDOS	The DDoS detection solution shall have the learning mode to easily identify anomalies in the network communication.				
DDOS.REQ.013	DDOS	It should be possible to block Geographical Locations to prevent flooding attacks from a particular country				
DDOS.REQ.014	Security	The system must be able to block invalid packets (including checks for Malformed IP Header, Incomplete Fragment, Bad IP Checksum, Duplicate Fragment, Fragment Too Long, Short Packet, Short TCP Packet, Short UDP Packet, Short ICMP Packet, Bad TCP / UDP Checksum, Invalid TCP Flags, Invalid ACK Number) and provide statistics for the packets dropped				
DDOS.REQ.015	Security	The system must support the dropping of idle TCP sessions if client does not send a user-configurable amount of data within a configurable initial time period				
DDOS.REQ.016	Security	The system must limit number of simultaneous TCP connections on a per-client basis				

DDOS						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
DDOS.REQ.017	Security	The system must allow protection parameters to be changed while a protection is running. Such change must not cause traffic interruption				
DDOS.REQ.018	Security	Solution should support security at layers 3,4 and 7				
DDOS.REQ.019	Security	Solution should support for all 255 protocols at layer 3				
DDOS.REQ.020	Security	Solution should support all 64k TCP and UDP ports				
DDOS.REQ.021	Security	System must not use signatures, System must have methods of using behavioural and heuristic analysis				
DDOS.REQ.022	Security	System must detect and block HTTP Opcode Flood				
DDOS.REQ.023	Security	System must detect Excessive URL/source/second				
DDOS.REQ.024	Security	System must be able to detect and block SYN Flood attacks				
DDOS.REQ.025	Security	System must be able to detect and block Zombie Floods				
DDOS.REQ.026	Security	System must be able to detect and block ICMP Floods				
DDOS.REQ.027	Security	System must be able to detect and block Fragment Flood				



DDOS						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
DDOS.REQ.028	Security	System must be able to detect and block HTTP GET Flood				
DDOS.REQ.029	Security	System must be able to detect and block Floods from Unwanted Geographical Areas				
DDOS.REQ.030	Security	The solution should be able to prevent from SSL based attacks, Layer 7 Targeted Attacks, DNS based attacks including DNS tunnelling, DNS query floods, DNS reflection attacks, DNS Header anomaly prevention etc. and IoT based botnets				
DDOS.REQ.031	Certificate	The solution should be able to prevent against IPv4 and IPv6 DDoS attacks				
DDOS.REQ.032	Certificate	The solution must support IPV6 logo ready, or IPV6 ready.org phase 2 certification				
DDOS.REQ.033	Deployment Options	Inline: - The DDoS appliance should support 'inline', meaning it is installed between the one or more protected systems and the rest of the network. In the simple network, data passes through the DDoS appliance as it travels to and from a protected system and the rest of an Ethernet local area network.				
DDOS.REQ.034	Mechanism	DDoS Appliance should be completely Behavioural Based				
DDOS.REQ.035	Mechanism	It should measures byte and packet counts, state transitions, fragments, checksum, flags,				

DDOS						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		new connections, address pairs, and so on as Layer 3 to Layer 7 parameters to define Threshold				
DDOS.REQ.036	Mechanism	In case of threshold violation traffic should be drop				
DDOS.REQ.037	Mechanism	It should be possible to write manual ACL's to block certain IP				
DDOS.REQ.038	Mechanism	It should be possible to block Geographical Locations to prevent flooding attacks from a particular country				
DDOS.REQ.039	IP	DDoS Appliance should receive a continuous update feed of Malicious Sources categorize as phishing, botnet etc.				
DDOS.REQ.040	IP	When protection enabled traffic from these sources should be blocked				

**Item No. 20:** Mobile Device Management (MDM)

<b>Mobile Device Management</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
MDM.REQ.001	General Requirement	The solution must support end point management for platform such as Windows 10, iOS, Mac OS and Android.				
MDM.REQ.002	General Requirement	The solution should provide Zero-day support for end point management for platform such as Windows 10, iOS, Mac OS and Android.				
MDM.REQ.003	General Requirement	The solution should use a common MDM agent for all the devices and platform.				
MDM.REQ.004	General Requirement	The solution should provide remote management and automatic updates and upgrades for the provisioned devices from a centralized Web console.				
MDM.REQ.005	General Requirement	The MDM solution should provide granular & detailed MDM capabilities like Password management, device restriction, remote wipe & lock.				
MDM.REQ.006	General Requirement	The MDM solution should provide the real-time device inventory status like Battery, network, passcode present on device or not, Location Information.				
MDM.REQ.007	General Requirement	The solution must have capability to generate automated, scheduled reports and real-time dashboards.				

Mobile Device Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
MDM.REQ.008	General Requirement	MDM platform should have a secure Multi-tenant architecture to support multiple active LDAP, Exchange, PKI, integration services etc..				
MDM.REQ.009	General Requirement	The MDM solution should Detects jailbreak or rooting before allowing enterprise resource access.				
MDM.REQ.010	General Requirement	The MDM solution should Checks device policy compliance before allowing enterprise resource access.				
MDM.REQ.011	General Requirement	The Solution should be part of mobile security alliance and provides threat security for business mobility against cyber-attacks by integrating the industry's leading security solutions.				
MDM.REQ.012	General Requirement	The MDM solution should have an automatic policy control that deletes all enterprise policies, profiles, apps and data if the management agent is removed.				
MDM.REQ.013	General Requirement	The MDM Solution should support Kiosk mode to restrict device to run approved applications.				
MDM.REQ.014	General Requirement	The Solution should provide user self-service portal to manage their own devices and corporate access (GPS,				

Mobile Device Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
		Policy and Security Management, Compliance visibility).				
MDM.REQ.015	General Requirement	The Solution should be able to enforce conditional access policies based on identity, authentication strength, data sensitivity, user location, device compliance.				
MDM.REQ.016	General Requirement	The Solution should have the capability to support both on-premises and on cloud deployment model with same set of features and functionality.				
MDM.REQ.017	General Requirement					
MDM.REQ.018	General Requirement					
MDM.REQ.019	General Requirement					
MDM.REQ.020	General Requirement					
MDM.REQ.021	General Requirement	Solution should be end-end FIPS 140-2 compliant				
MDM.REQ.022	General Requirement	The EMM solution support app specific encrypted mVPN for access to apps in the Datacentre				

<b>Mobile Device Management</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
MDM.REQ.023	General Requirement	The users should have access to a self-service portal to wipe or lock their individual device				
MDM.REQ.024	General Requirement	The solution should restrict document/ attachment opening in apps not controlled by the MAM platform				
MDM.REQ.025	General Requirement	MAM Suite should have the ability to block 3rd party keyboards for all corporate apps based on defined active directory user groups				
MDM.REQ.026	General Requirement	Should Support for multi-factor authentications				
MDM.REQ.027	General Requirement	Integrated email client with rich Mail, Calendar & Contacts				
MDM.REQ.028	General Requirement	Seamless access to intranet web applications with-out full VPN via a Secure Browser Client				
MDM.REQ.029	General Requirement	Should have the ability to blacklist/ whitelist the applications				

**Item No. 21:** Enterprise Management System (EMS)

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.001	Make					
EMS.REQ.002	Model					
EMS.REQ.003	General Requirement	All the modules of EMS solution should be from same OEM and shall be based on industry standard best practice framework such as ITIL etc.				
EMS.REQ.004	Reporting System	Automatic Report creation, execution and Scheduling, must support variety of export formats including Microsoft Word, CSV, Adobe PDF etc.				
EMS.REQ.005	Reporting System	The solution must support Templates for report generation, Report Filtering and Consolidation and Context sensitive Drill-down on specific report data to drive standardisation and governance of the DC/DR				
EMS.REQ.006	Reporting System	The solution must support security for drill-down capabilities in dashboard reports ensuring visibility for only relevant personnel of the Data Centre				
EMS.REQ.007	Reporting System	Support real-time reports (like at-a-glance status) as well as historical analysis reports (like Trend, Capacity planning reports etc.)				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.008	Reporting System	Resource utilisation exceeding or below customer-defined limits				
EMS.REQ.009	Reporting System	Resource utilisation exceeding or below predefined threshold limits				
EMS.REQ.010	Reporting System	Should provide facility to trigger a corrective action workflow and define the stakeholders for the same.				
EMS.REQ.011	Network Management System	The Solution should provide capability to monitor any device based on SNMP v1, v2 & 3				
EMS.REQ.012	Network Management System	The Solution should monitor bandwidth utilization				
EMS.REQ.013	Network Management System	The solution should monitor utilization based on bandwidth				
EMS.REQ.014	Network Management System	The Solution must be capable of monitoring the availability, health, and performance of core networking devices including but not limited to CPU, memory, temperature.				
EMS.REQ.015	Network Management System	The Solution should have the ability to issues pings to check on availability of ports, devices.				



<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.016	Network Management System	The Ping Monitoring should also support collection of packet loss, Latency and Jitters during ICMP Ping Checks				
EMS.REQ.017	Network Management System	The Port Check for IP Services monitoring should also provide mechanism to define new services for network traffic and ability to send custom commands during port check mechanism.				
EMS.REQ.018	Network Management System	The Solution should have the ability to receive SNMP traps and syslog.				
EMS.REQ.019	Network Management System	The Solution should automatically collect and store historical data so users can view and understand network performance trends.				
EMS.REQ.020	Network Management System	The solution should be capable of monitoring network delay/latency.				
EMS.REQ.021	Network Management System	The solution should be capable of monitoring packet loss, Packet QOS, Packet Errors on one or more ports				
EMS.REQ.022	Network Management System	The solution should allow users to access network availability and performance reports via the web or have those delivered via e-mail.				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.023	Network Management System	The solution should support auto-discovery of network devices				
EMS.REQ.024	Network Management System	The solution should have the ability to schedule regular rediscovery of subnets.				
EMS.REQ.025	Network Management System	The solution should provide the ability to visually represent LAN/WAN links) with displays of related real-time performance data including utilizations.				
EMS.REQ.026	Network Management System	The system should provide discovery of heterogeneous physical network devices like Layer-2 & Layer-3 switches, Routers and other IP devices and do mapping of LAN & WAN connectivity.				
EMS.REQ.027	Network Management System	The solution should provide accurate % port utilization reporting				
EMS.REQ.028	Network Management System	The System shall support monitoring of Syslog				
EMS.REQ.029	Network Management System	The solution should provide capability to add an IP device or IP Range or IP subnet with functionality supporting multiple SNMP strings.				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.030	Network Management System	The solution should provide capability to add devices from word/excel/CSV file by import process and auto configure based on pre-defined settings.				
EMS.REQ.031	Network Management System	The solution should allow easy configuration of polling frequency till per minimum 30 second scenario only for diagnostic scenario and minimum 5 minutes for regular operations.				
EMS.REQ.032	Network Management System	The solutions should have real time, detect configuration and asset information changes made across a multi-vendor device network, regardless of how each change is made and also support configuration deployment/rollback and configuration templates.				
EMS.REQ.033	Server Performance Monitoring System	The proposed tool should integrate with network performance management system and support operating system monitoring for various platforms supplied as part of the project				
EMS.REQ.034	Server Performance Monitoring System	The proposed tool must provide information about availability and performance for target server nodes.				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.035	Server Performance Monitoring System	The proposed tool should be able to monitor various operating system parameters such as processors, memory, files, processes, file systems, etc. where applicable.				
EMS.REQ.036	Server Performance Monitoring System	The solution should provide a unified web based console, which consolidates all aspects of role based access under a single console.				
EMS.REQ.037	APM- Application Performance Management	The proposed solution must be able to perform infrastructure aware application triage, i.e. pin point network issues causing application degradation.				
EMS.REQ.038	APM- Application Performance Management	The proposed solution must determine if the root cause of performance issues is inside the monitored application, in connected back-end systems or at the network layer from a single console view				
EMS.REQ.039	APM- Application Performance Management	The proposed solution must proactively monitor 100%of real user transactions; detect failed transactions; gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.040	APM- Application Performance Management	The proposed solution must provide deeper end-to-end transaction visibility by monitoring at a transactional level and without deploying any software at end user desktop.				
EMS.REQ.041	APM- Application Performance Management	The proposed solution must provide a single view that shows entire end-to-end real user transaction and breaks down times spent within the application components, SQL statements, backend systems and external 3rd party systems.				
EMS.REQ.042	APM- Application Performance Management	The proposed solution must be able to provide root-cause probability graphs for performance problems showing the most probable root-cause area within application infrastructure.				
EMS.REQ.043	APM- Application Performance Management	The proposed solution must provide a real-time application topology map to triage and quickly pinpoint the component causing a performance bottleneck in the end-to-end transaction flow.				
EMS.REQ.044	APM- Application Performance Management	The proposed solution must gather available performance indicator metrics from all within real-time production environments and real user transactions 24x7 with minimal				

Enterprise Management System (EMS)						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		overhead on monitored applications without sampling.				
EMS.REQ.045	APM- Application Performance Management	The proposed solution must provide for easy dynamic instrumentation of application code, i.e. be able to enhance out of the box monitoring with extra monitoring definitions without having to restart application or JVM.				
EMS.REQ.046	APM- Application Performance Management	The proposed solution must be able to detect production Memory Leaks from mishandled Java Collections and Sets and isolate exact component creating leaking Collection or Set (or .NET Memory Leaks within the CLR).				
EMS.REQ.047	APM- Application Performance Management	The proposed solution must allow monitoring granularity of no more than 15 seconds for all transactions.				
EMS.REQ.048	APM- Application Performance Management	The proposed solution must support multivariate analysis and automatic analysis of potential anomalies.				
EMS.REQ.049	APM- Application Performance Management	The proposed solution should have the capability to analyze performance data and recognize normal and abnormal transaction patterns.				
EMS.REQ.050	APM- Application Performance Management	The proposed solution should automatically search for metrics that are correlated, and				

<b>Enterprise Management System (EMS)</b>						
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		use intelligence to help proactively identify issues.				
EMS.REQ.051	APM- Application Performance Management	The proposed solution must report of response times of Java/.Net methods based on simple method parameters (Strings, Integers etc).				
EMS.REQ.052	APM- Application Performance Management	The proposed solution must provide real-time monitoring of resource utilization like JVM memory usage, Servlets, EJB pools, DB connection pools and Threads.				
EMS.REQ.053	APM- Application Performance Management	The proposed solution must be able to identify socket and file Input / Output activity from the application.				
EMS.REQ.054	APM- Application Performance Management	The proposed solution should be capable to provide Deep Transaction Trace visibility with Zero configuration while collecting deep call stack visibility in the customer's in-house developed code and third-party libraries thereby eliminating the need for manual configuration.				
EMS.REQ.055	APM- Application Performance Management	The proposed solution should provide the capability to create socket groups either by enabling the IP range or port range, thereby simplifying the isolation and troubleshooting of a group of socket connections made to 1 or many back end processes (e.g.				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
		Java/.NET, Mainframe, Native applications, etc.) .				
EMS.REQ.056	APM- Application Performance Management	As a means of detecting poorly performing SQL, the solution must be able to proactively record all SQL calls, and report on the slow performing ones. The SQL measurements must be made from within the monitored application – not using an external database agent.				
EMS.REQ.057	APM- Application Performance Management	The proposed solution must monitor performance of all stored procedures being executed from within the Java/.NET application.				
EMS.REQ.058	APM- Application Performance Management	The solution should have provision for automatic transaction discovery, for example by setting up some bounding parameters to describe transactions like the web site, the language, and parameters (such as post, query, and cookies).				
EMS.REQ.059	APM- Application Performance Management	The proposed solution must provide ability to monitor performance of applications up to the method level of execution (Java/.Net method) 24x7 in production environments with negligible impact on monitored application.				



Enterprise Management System (EMS)						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
EMS.REQ.060	APM- Application Performance Management	The proposed solution must be able to report on any application errors occurred while executing application functionalities and pinpoint exact place of error within transaction call stack.				
EMS.REQ.061	APM- Application Performance Management	The proposed solution must provide for at least 2 levels of thresholds which can be set on alerts and provide for actions so that alerts can automatically trigger other processes when thresholds are breached. The proposed solution must not necessitate any changes to application source code.				
EMS.REQ.062	APM- Application Performance Management	The proposed solution must proactively identify any thread usage problems within applications and identify stalled (stuck) threads.				
EMS.REQ.063	APM- Application Performance Management	The proposed solution should allow SQL statement normalization by aggregating hundreds of related SQL statements into a single performance metric using regular expressions and pattern matching.				
EMS.REQ.064	APM- Application Performance Management	The proposed solution must monitor individual web service and performance transaction debugging for web services. The proposed solution must also monitor web				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
		services across multiple processes (cross JVM tracing)				
EMS.REQ.065	APM- Application Performance Management	The proposed solution should eliminate problem resolution guesswork by using its performance metrics to automatically identify complex emerging performance issues, enabling triage and diagnosis teams to solve problems faster and understand their environments better.				
EMS.REQ.066	APM- Application Performance Management	The proposed solution must support any combination of operating platforms that support JDKs higher than 1.2 or Application Server (or .NET v1.1 and above) with a single methodology.				
EMS.REQ.067	APM- Application Performance Management	The proposed solution must provide real-time performance metrics for leading application servers including WebSphere, WebLogic and all respective JVMs (or .NET v1.1 and above on Windows).				
EMS.REQ.068	APM- Application Performance Management	The proposed solution must have ability to report on non-java or non-.NET measurements (i.e. CPU-Utilization, Disk Space, processes etc.) to the same management console in order to correlate with application metric Data.				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.069	APM- Application Performance Management	The proposed solution must be able to monitor application performance to all connected backend systems like Databases, MQ systems or any other external system from a single agent within the application, thus eliminating the need to install separate agents on all connected systems.				
EMS.REQ.070	APM- Application Performance Management	The proposed solution must tie SQL statements to components involved, i.e. SQL queries should be able to get correlated to the Java components calling them. This should be clearly visible by showing the transaction call stack.				
EMS.REQ.071	APM- Application Performance Management	All application stakeholders (i.e. DBA, Operations, and Application developers) must get performance data pertaining to their specific areas from single Java/.NET Application Agent within the application server.				
EMS.REQ.072	APM- Application Performance Management	The proposed solution should allow access to performance data both using a Graphical user interface (GUI) and over the web (web based access).				

<b>Enterprise Management System (EMS)</b>						
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EMS.REQ.073	APM- Application Performance Management	As a means of detecting poorly performing SQL, the solution must be able to proactively record all SQL calls, and report on the slow performing ones.				
EMS.REQ.074	APM- Application Performance Management	The proposed solution must have integrated ability to store historical performance data without requiring external database to be configured for any length of time.				
EMS.REQ.075	APM- Application Performance Management	The proposed solution must have ability to define and schedule user defined reports that can be easily customized for different user groups and application stakeholders.				
EMS.REQ.076	APM- Application Performance Management	The proposed solution must support multiple concurrent administration sessions on different user Interface without impacting performance of the application.				
EMS.REQ.077	APM- Application Performance Management	The solution must show out of the box application triage maps that allow to instantly grasp the layout of the applications in the environment in a visual manner to help identify and triage current and emerging problems.				
EMS.REQ.078	APM- Application Performance Management	The proposed solution must identify any changes to application configuration files (.xml, properties etc), File system or				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
		application code and be able to correlate changes to application performance dynamically in production environments.				
EMS.REQ.079	APM- Application Performance Management	The proposed solution must not necessitate any changes to application source code.				
EMS.REQ.080	APM- Application Performance Management	The proposed solution must provide for dynamic instrumentation of application code, i.e. enhance be able out of the box monitoring with extra monitoring definitions without having to restart application.				
EMS.REQ.081	APM- Application Performance Management	The proposed solution must include auto-baselining concept, learning about the application over time and report automatically report any anomalies.				
EMS.REQ.082	APM- Application Performance Management	The proposed solution must automatically archive, summarize (rollup) for reporting and purge the performance metrics based on IT requirements				
EMS.REQ.083	APM- Application Performance Management	The proposed solution user Interface (GUI) of proposed solution should be user friendly and easy to use: e.g. features like right-click on Dashboard taking user to the actual performance metric should be offered out of the box.				

<b>Enterprise Management System (EMS)</b>						
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EMS.REQ.084	APM- Application Performance Management	The proposed solution should provide out of the box monitoring of Web-services (whether publisher or Consumer) for leading Web Services platforms like WebLogic, WebSphere, etc.				
EMS.REQ.085	APM- Application Performance Management	Solution must be able to send data to Collector that's reside remotely. In other words, there should be no restriction on the placement of the Collector, e.g. same LAN/VLAN, to minimise hardware required.				
EMS.REQ.086	APM- Application Performance Management	Solution must not use transaction tracing that's turned on all the time to collect performance data. Transaction tracing is more expensive than normal performance metric collection and gather more data than necessary, and must only be used when out-of-normal conditions occurred. However, performance metric has to be collected 24x7.				
EMS.REQ.087	APM- Application Performance Management	Solution must have agent solution to collect infrastructure metrics. Agentless method such as via Windows PMI are prohibited as they introduce security loophole.				
EMS.REQ.088	APM- Application Performance Management	Solution must be able to report concurrency and stall metrics – they are important to predict application stall/slowness.				

Enterprise Management System (EMS)						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
EMS.REQ.089	APM- Application Performance Management	Solution must be able to list and compare performance metrics for Java/.Net components, e.g. Servlets, JSPs, and SQLs for long term period (6 months to 1 year).				
EMS.REQ.090	APM- Application Performance Management	The proposed solution must provide ability to monitor performance of PHP based applications up to the method level of execution 24x7 in production environments with negligible impact on monitored application.				
EMS.REQ.091	APM- Application Performance Management	The proposed solution should provide the capability to automatically collect transaction traces when a problem occurs, so that there is no need to re-create the issue. It should further provide stall snapshots with deep call stack visibility that shows actionable information and trigger traces based upon customized criteria, errors and stalls				
EMS.REQ.092	APM- Application Performance Management	The proposed solution should provide the capability to manage the agents' configuration via a central hub thereby eliminating the administrative overhead to manage the Agents in a manual, decentralized manner. It should provide user-friendly dashboard to enable users to access an inventory of thousands of agents across				

Enterprise Management System (EMS)						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		multiple APM clusters in one view so that they can more quickly generate diagnostic reports and diagnose agent configuration problems.				
EMS.REQ.093	APM- Application Performance Management	The proposed solution should have the provision to support latest Java versions.				
EMS.REQ.094	APM- Application Performance Management	The proposed solution must provide support for MongoDB apart from other popular databases like Oracle, SQL Server, MySQL etc.				
EMS.REQ.095	HelpDesk	The proposed helpdesk solution must provide flexibility of logging, viewing, updating and closing incident manually via web interface for issues related to the project.				
EMS.REQ.096	HelpDesk	Helpdesk system should provide incident management, problem management templates along with helpdesk SLA system for tracking SLA's pertaining to incident resolution time for priority / non-priority incidents.				
EMS.REQ.097	HelpDesk	The proposed helpdesk solution must have a built-in workflow engine to define escalations or tasks to be carried out after issues or				



Enterprise Management System (EMS)						
Sr. No.	Item	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		change order are logged pertaining to project.				
EMS.REQ.098	HelpDesk	Centralized Helpdesk System should have integration with Network/Server Monitoring Systems so that the Helpdesk Operators can to associate alarms with Service Desk tickets to help surveillance operators that for what particular alarms corresponding helpdesk tickets got logged.				
EMS.REQ.099	HelpDesk	Admin should be able to manually create tickets through Fault Management GUI.				
EMS.REQ.100	HelpDesk	Network admin should be able to manually create tickets through Fault Management GUI				
EMS.REQ.101	HelpDesk	System should also automatically create tickets based on alarm type				
EMS.REQ.102	HelpDesk	System should provide a link to directly launch a Service Desk view of a particular ticket created by alarm from within the Network Operation console				
EMS.REQ.103	IT Asset & Lifecycle Management	The proposed solution should have ability to track Asset status (Asset Lifecycle stages) & contain the concept of a Model and inheritance of properties and attributes				

<b>Enterprise Management System (EMS)</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EMS.REQ.104	IT Asset & Lifecycle Management	The proposed solution should have ability to update a Model and have all Assets defined based on that model updated as well ability to modify standard Model attributes				
EMS.REQ.105	General	The proposed EMS/NMS solution should have been deployed in Central/State Government Department/ PSUs				

**Item No. 22:** Server Virtualization

<b>Server Virtualization</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation /Remarks</b>
SEV.REQ.001	Make					
SEV.REQ.002	Model					
SEV.REQ.003	Bare Metal Solution	Virtualization software shall provide a Virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security.				
SEV.REQ.004	Guest OS Support	Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu and CentOS) etc.				
SEV.REQ.005	VM Live Migration	Virtualization software should Support live Virtual Machine migration with enhanced CPU compatibility.				
SEV.REQ.006	Storage Live Migration	The system should have live migration capabilities without any service disruption and downtime to any VM.				
SEV.REQ.007	QoS	Virtualization software should provide quality-of-service capabilities for storage I/O so as to ensure that the most important virtual machines get adequate I/O resources even in times of congestion.				
SEV.REQ.008	High Availability	Migration of VMs in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software.				

Server Virtualization						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
SEV.REQ.009	Always Available	Virtualization software should have the ability to provide no-downtime protection for any app in a VM, not just applications that are cluster aware, in the event of a hardware failure.				
SEV.REQ.010	Resource Addition	Virtualization software should provide support to add CPU, compute, memory & devices to VMs				
SEV.REQ.011	Resource Scheduler	VM software should be able to schedule resources based on usage, load, availability and performance				
SEV.REQ.012	Security	System should have a very small code base to update & upgrade the security through patch updates.				
SEV.REQ.013	Security	The system should have VM-level encryption for securing cluster and application data including meta data, both at-rest and in-motion				
SEV.REQ.014	Security	Integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, antimalware, firewall and hips solutions without the need for agents inside the virtual machines while agents based integration also acceptable.				
SEV.REQ.015	Storage support	Support boot from iSCSI, FCoE, and Fibre Channel SAN. Integration with Storage API's				

Server Virtualization						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
		providing integration with supported third-party data protection, multi-pathing and disk array solutions.				
SEV.REQ.016	Virtual Switch	Virtualization software shall allow creating virtual switches that connect virtual machines.				
SEV.REQ.017	Security/ Firewall	Virtualization software should provide an integrated network firewall for virtual network with centralized management, suitable for all virtualized applications.				
SEV.REQ.018	VM based Replication	Efficient replication of virtual machine data over the LAN or WAN. This Replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 15 minutes.				
SEV.REQ.019	VM Backup	Simple and cost-effective backup and recovery for virtual machines which should allow admins to back up virtual machine data to disk without the need of agents and this backup solution should have built-in variable length de-duplication capability.				
SEV.REQ.020	OEM Support	Direct OEM 24x7x365 days with unlimited incident support and 30mins or less response time including the unlimited upgrades and updates.				
SEV.REQ.021	Operations Management	It should include proactive smart alerts with self-learning performance analytics				

Server Virtualization						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
		Capabilities with Prebuilt and configurable operations dashboards to provide real-time insight into infrastructure behaviour, upcoming problems, and opportunities for efficiency improvements.				
SEV.REQ.022	Operations Management	Virtualization management software console shall provide single view of all VMs , allow monitoring of system availability and perf , and automated notifications with email alerts.				
SEV.REQ.023	Operations Management	Virtualization management software console shall provide single view of all VMs , allow monitoring of system availability and perf , and automated notifications with email alerts.				
SEV.REQ.024	Operations Management	Virtualization software shall have the capability for creating virtual machine templates to provision new servers				
SEV.REQ.025	Operations Management	Virtualization software shall allow taking snapshots of the virtual machines to be able to revert back to an older state if require				
SEV.REQ.026	Operations Management	Virtualization software should have the ability to thin provisions disks to avoid allocating all storage space upfront. Full monitoring capabilities and alerts to prevent from accidentally running out of physical storage space compatibility				
SEV.REQ.027	Operations Management	Virtualization software should allow configuring each virtual machine with one or				

Server Virtualization						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
		more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address				
SEV.REQ.028	Operations Management	Virtualization software must support NIC teaming for load sharing and redundancy.				
SEV.REQ.029	Operations Management	Virtualization software shall support configurations of 802.1q VLANs which are compatible with standard VLAN implementations from other vendors				
SEV.REQ.030	Operations Management	Virtualization management software console shall provide the Manageability of the complete inventory of virtual machines, and physical servers with greater visibility into object relationships.				
SEV.REQ.031	Operations Management	Virtualization management software should support user role and permission assignment (RBAC)				
SEV.REQ.032	Operations Management	Virtualization management software should include provision for automated and integrated online/offline VM patch management and automated host patch management with no VM downtime				

**Item No. 23:** Network Virtualisation

<b>Network Virtualization</b>						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
NV.REQ.001	Make					
NV.REQ.002	Model					
NV.REQ.003	Anti-Virus	Solution should provide agentless or agent-based implementation of Anti-virus, Host based IPS, so that there is no requirement of installing agent inside every Virtual Machine.				
NV.REQ.004	Server Virtualization	Solution should be integrated with proposed virtualization solution so that it should allow for automated and on-demand creation of Security policies which is scalable in nature.				
NV.REQ.005	Security	Solution should enable creation of security groups and security policies/ rules based on constructs like machine name, OS type, IP address, Logical Switches, Security Tags etc.				
NV.REQ.006	Security	The security policies should follow the Virtual Machines as it moves within and between the virtual infrastructures so that there is no need of creation of security policies again for the applications once they move inside the datacentre.				
NV.REQ.007	Security	Solution should protect every Virtual Machine with a state full distributed firewall embedded in the kernel of the hypervisor.				
NV.REQ.008	Security	Solution should provide efficient in-kernel service chaining within the hypervisor for				



Network Virtualization						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation /Remarks
		providing advanced security with Virtual IPS, Firewall for Applications.				
NV.REQ.009	Security	The software defined security solution should provide a tight integration with other security vendors which can host their virtual Next Gen Firewall, IPS etc. onto the platform and should provide a centralized dashboard which can be used to automate the deployment of these 3rd party products across the underlying infrastructure and should provide advanced service chaining and traffic steering capability within the server itself without traffic coming into the IP Path.				
NV.REQ.010	Security	The offered solution should provide creation of on-demand per application server virtual load balancer with SSL offload capability which can be deployed in a scaled-out architecture and can be integrated with management platform for consumption in a completely automated fashion.				

**Item No. 24:** Middleware

<b>Middleware</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
MID.REQ.001	General Requirement	The Bidder needs to supply the suitable Middleware as per the requirement which should be able to compose a collection of various devices and application interconnected by a MPLS or internet (VPN/APN) for remote interaction with other devices of the system.				
MID.REQ.002	General Requirement	Proposed middle ware should be suitable for Haryana 100 project and will be hosted at DC & DR.				
MID.REQ.003	General Requirement	Should be able to interact all database of the solution				
MID.REQ.004	General Requirement	Should be able to interact all mobile, web based and other applications of the solution				

**Item No. 25:** ERV Management Application

<b>ERV Management Application- Functional Requirement Specifications</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
ERV.REQ.001	General requirement	ERV management application should be able to facilitate supervision, monitoring and effective management of 4W				
ERV.REQ.002	Technology	The application should be able to be installed on PFT and also should work seamlessly on the Desktops using a web link (for usage at department or its representative and also by the District ERV Manager from its premises)				

ERV Management Application- Functional Requirement Specifications						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
ERV.REQ.003	MIS Generation Capabilities	<p>System should be able to generate all kinds of reports necessary for efficient management of ERVs and should include (but not limited to):</p> <ol style="list-style-type: none"> <li>ERV Fabrication design report</li> <li>ERV Pilot vehicle delivery report</li> <li>ERV received report</li> <li>ERVs Handover report</li> <li>ERV acceptance report</li> <li>ERV maintenance reports</li> <li>ERV inspection reports</li> <li>ERV fuel reports</li> <li>ERV personnel reports</li> <li>ERV personnel salary reports</li> <li>ERV accidental repair reports</li> <li>ERV code violation reports</li> <li>ERV personnel training reports</li> </ol> <p>System should allow the generation of these reports by Bidder or Haryana 100 or their authorized representatives in the minimum possible time</p>				

ERV Management Application- Functional Requirement Specifications						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
ERV.REQ.004	Online Odometer Logbook	<p>The application shall have a provision of logging the odometer readings at the time of ERV handover-takeover so as to capture the details of patrol mileage by the outgoing ERV personnel. These readings as captured by the application shall be reported to the central system and shall act as an authentic source of validation.</p> <p>The system should be able to integrate with the AVLS and also the GPS in PFT with Odometer for automatic update of the Kilometres travelled</p>				
ERV.REQ.005	Validation of odometer readings	System will enable other sources of validation of the odometer readings submitted by the ERV personnel through the in-built GPS in PFT that tracks the distance run by the ERV on its assigned Patrol route every day as part of the central solution that tracks across the state				
ERV.REQ.006	Operational records maintenance	<p>System will facilitate maintenance of proper records of operations including (but not limited to):</p> <ol style="list-style-type: none"> <li>1. ERV personnel logs (For Drivers, District ERV Managers including their personal details, attendance through the biometric</li> </ol>				

ERV Management Application- Functional Requirement Specifications						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		module, leaves etc.) 2. ERV Maintenance Service Book 3. Repair or Maintenance History for each ERV 4. Breakdown or Maintenance or Out of Service schedule 5. Maintenance files for in-fleet components of ERVs (with maintenance status etc.) 6. Inventory of consumables required for uninterrupted ERV operations 7. ERV periodic inspection reports 8. Fuel records, Fuel Card-Driver Id Card transaction summary reports 9. Vehicle maintenance records				
ERV.REQ.007	ERV Response Time recording and reporting	System shall also be able to provide ERV Response time records to Haryana 100 through the application online. The data should be suitable for Statistical Analysis for all ERV responses. These records should include the following data elements: ERV-identifier, Time-ERV enroute, Time-ERV clear and Time-ERV-available for the next call.				
ERV.REQ.008	Code Violations	System should record violations of dress code, moral behaviour, or any violations as per Department policy in terms of number of complaints and the penalties shall be applied				

ERV Management Application- Functional Requirement Specifications						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		if the number of complaints exceed the threshold limit				
ERV.REQ.009	ERV Periodic Inspection Report	The application should have provision to monitor and enlist periodic Inspections (at least one every Calendar Month) to determine the ERV condition including compliance or otherwise with the maintenance manual, the maintenance programme, specifications (through PFTs) and standards and the maintenance required and shall submit online reports of such Inspections to the Department through the PFT application.				
ERV.REQ.010	Manual	The application will store ERV manual, general ERV handling guides etc. in electronic format				
ERV.REQ.011	Maintenance of other Police records	System should be able to maintain all the other relevant Police records in Electronic format and should be readily available for Department's use at any point of time				
ERV.REQ.012	Authorized Service Centres	System should be updated with the List of Authorized Service Centres and should allow the update of this list by the user whenever required				

ERV Management Application- Functional Requirement Specifications						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
ERV.REQ.013	GPS	ERV management system should provide feature of integrating the Vehicle Tracking Device i.e. GPS receiver, which records the latitude/ longitude values and the device sends this information frequently to the server along with time and speed data. The frequency of sending this data can be set on the device at desired intervals. In absence of connectivity the device software can store the data and can later transmit when connectivity is available.				



**Item No. 26:** Inventory Management

<b>Inventory Management</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IM.REQ.001	General Requirement	Ability to Create unique item numbers for inventory items				
IM.REQ.002	General Requirement	Ability to Monitor inventory on an ongoing basis				
IM.REQ.003	General Requirement	Ability to Maintain accurate on-hand balances				
IM.REQ.004	General Requirement	Ability Capture “other” (unknown) stock items other than items pre-identified				
IM.REQ.005	General Requirement	Ability to add requirement				
IM.REQ.006	General Requirement	Ability to generate requisition form				
IM.REQ.007	General Requirement	Ability to Plan material replenishments, based on user requisition				
IM.REQ.008	General Requirement	Ability for E-tendering process and also capture item on rental basis				
IM.REQ.009	General Requirement	Ability to Perform online funds checking before creating requisitions				
IM.REQ.010	General Requirement	Ability to seek approval for payment online and E-check generation				
IM.REQ.011	General Requirement	Ability to generate quotation calling form				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.012	General Requirement	Ability to generate store entry information when item received in the store				
IM.REQ.013	General Requirement	Ability to create section master and issue the item to particular section				
IM.REQ.014	General Requirement	Ability to maintain list of available vendors or supplier for different items				
IM.REQ.015	General Requirement	Ability to generate comparison chart for a particular item				
IM.REQ.016	General Requirement	Ability to generate Supply Order Or Purchase Order				
IM.REQ.017	General Requirement	Ability to create supplier master				
IM.REQ.018	General Requirement	Ability to assign an item to the particular group				
IM.REQ.019	General Requirement	Ability to create group master				
IM.REQ.020	General Requirement	Ability to generate gate entry information when item received in the office				
IM.REQ.021	General Requirement	Ability to generate pending PO when item received is not in good condition				
IM.REQ.022	General Requirement	Ability to generate pending requisition				
IM.REQ.023	General Requirement	Ability to Add Attachments to Items				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.024	General Requirement	Ability to View Item Information				
IM.REQ.025	General Requirement	Ability to Assign Items to Catalogs				
IM.REQ.026	General Requirement	Ability to Define Item Relationships				
IM.REQ.027	General Requirement	Ability to Assign Sub-inventories to an Item				
IM.REQ.028	General Requirement	Ability to Assign Items to a Sub-inventory				
IM.REQ.029	General Requirement	Ability to Define Item Revisions				
IM.REQ.030	General Requirement	Ability to Delete Item after the approval from supervising authority Ability to generate alert, if not followed				
IM.REQ.031	General Requirement	Ability to Assign Lot Numbers				
IM.REQ.032	General Requirement	Ability to Maintain Lot Number Information				
IM.REQ.033	General Requirement	Ability to Establish lot control for an item				
IM.REQ.034	General Requirement	Ability to Establish lot expiration (shelf life) control				
IM.REQ.035	General Requirement	Ability to Establish lot number uniqueness				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.036	General Requirement	Ability to display item lot information				
IM.REQ.037	General Requirement	Ability to update expiration date and disable status information				
IM.REQ.038	General Requirement	Ability to view supplier lot information				
IM.REQ.039	General Requirement	Ability to view material transactions for an item lot:				
IM.REQ.040	General Requirement	Ability to view on-hand availability for an item lot:				
IM.REQ.041	General Requirement	Ability to Maintain Serial Number				
IM.REQ.042	General Requirement	Ability to Issue Material from Inventory				
IM.REQ.043	General Requirement	Ability to generate serial numbers				
IM.REQ.044	General Requirement	Ability to Enter Replenishment Count				
IM.REQ.045	General Requirement	Ability to Transfer Inter-Department				
IM.REQ.046	General Requirement	Ability to Return to Stores				
IM.REQ.047	General Requirement	Ability to Update Average Cost				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.048	General Requirement	Ability to see your changes reflected in the Interface Managers window				
IM.REQ.049	General Requirement	Ability to search an item by typing some of the initial letters				
IM.REQ.050	General Requirement	Ability to view Direct the Department transfer				
IM.REQ.051	General Requirement	Ability to view In-transit receipt				
IM.REQ.052	General Requirement	Ability to view In-transit shipment				
IM.REQ.053	General Requirement	Ability to capture issue voucher parameters				
IM.REQ.054	General Requirement	Ability to Define Shipping Methods				
IM.REQ.055	General Requirement	Ability to Define Movement Statistics Parameters				
IM.REQ.056	General Requirement	Ability to Link Movement Statistics to Invoices				
IM.REQ.057	General Requirement	Ability to View Material Transactions				
IM.REQ.058	General Requirement	Ability to View Transaction Summaries				
IM.REQ.059	General Requirement	Ability to maintain audit trail of entire Transaction				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.060	General Requirement	Ability to Viewing Pending Transactions				
IM.REQ.061	General Requirement	Ability to View On-hand Quantities along with expiry dates for consumables				
IM.REQ.062	General Requirement	Ability to raise an alert if balance quantity attains minimum level				
IM.REQ.063	General Requirement	Ability to View Item Supply Or Demand Information together with chart based increase Or decrease demand history of an item				
IM.REQ.064	General Requirement	Ability to Reserve Available Inventory				
IM.REQ.065	General Requirement	Ability to Summarize Demand History				
IM.REQ.066	General Requirement	Ability to maintain history of maintenance of Inventory items with alert facility to the concerned authority				
IM.REQ.067	General Requirement	Ability to seek approval for payment online and E-check generation				
IM.REQ.068	General Requirement	Ability to maintain service history of Inventory items with cost incurred previously				
IM.REQ.069	General Requirement	Ability to Define a Forecast Rule				

Inventory Management						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IM.REQ.070	General Requirement	Ability to Enter and Reloading Item Safety Stocks				
IM.REQ.071	General Requirement	Ability to Reorder Point Planning				
IM.REQ.072	General Requirement	Ability to Enter and Processing Replenishment Counts				
IM.REQ.073	General Requirement	Ability to Maintain Accounting Periods				
IM.REQ.074	General Requirement	Ability to support both process and discrete the Department				
IM.REQ.075	General Requirement	Dual Unit of Measure Tracking for on hand inventory and every Inventory transaction				
IM.REQ.076	General Requirement	Ability to search stock items by Name, Manufacturer, date of purchase etc.				
IM.REQ.077	General Requirement	Ability to view inbound in-transit material, summary view across the Department of inbound, receiving and on-hand material and availability by serial				

**Item No. 27:** Document Management System

<b>Document Management System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
DMS.REQ.001	General Requirements	The solution should support enterprise class RDBMS such as MS SQL Server/ Oracle/DB2/Postgress SQL, etc.				
DMS.REQ.002	General Requirements	The Solution should be multi-tier, web-based solution (having web-based front-end for users and as well as for system administrative functions) having centralized database, web and application server with support for clustering.				
DMS.REQ.003	General Requirements	The solution shall support versioning of documents with facility to write version comments				
DMS.REQ.004	General Requirements	The solution shall allow locking of documents for editing and importing it back into the system				
DMS.REQ.005	General Requirements	Repository should be format agnostic				
DMS.REQ.006	General Requirements	The solution should support configuration of approval processes. . While processing a file, all the data and images for each transaction should be displayed to processing users and competent authority should be allowed to accept, reject or send the files for review				



<b>Document Management System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
DMS.REQ.007	General Requirements	The solution should manage lifecycle of documents through record retention, storage and retrieval policies.				
DMS.REQ.008	General Requirements	The Solution should support managing and tracking of physical location of documents				
DMS.REQ.009	General Requirements	The solution shall support page by page view for multi-page document.				
DMS.REQ.010	General Requirements	The solution shall facilitate zoom-in Or zoom-out feature. The user shall be able customize the zoom percentage, zoom and pan feature along with other image operations like Invert, rotate etc.				
DMS.REQ.011	General Requirements	The solution should support archival & view of PDF Or A format documents (open ISO standard for long term archival of documents)				
DMS.REQ.012	General Requirements	The solution shall support for viewing documents in native application.				
DMS.REQ.013	General Requirements	The solution shall provide facility of putting text, graphic and image annotations on scanned document pages.				
DMS.REQ.014	General Requirements	The solution shall support comprehensive annotation features on images like highlighting, marking text, underlining putting sticky notes on documents, and support for text and image stamps etc.				

<b>Document Management System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
DMS.REQ.015	General Requirements	The solution shall support automatic stamping of annotations with user name, date and time of putting annotations.				
DMS.REQ.016	General Requirements	The solution shall store annotations as separate file and at no time, the original image shall be changed. The system shall provide facility of taking print outs with or without annotations				
DMS.REQ.017	General Requirements	The solution shall provide facility to index folders, files and documents on user-defined indexes like department, ministry, file number, year etc.				
DMS.REQ.018	General Requirements	The solution shall facilitate manual and automatic indexing using OCR functionality or from other applications				
DMS.REQ.019	General Requirements	The solution should support automatic full text indexing for textual search				
DMS.REQ.020	General Requirements	The solution shall support saving of search queries and search results				
DMS.REQ.021	General Requirements	The solution shall support search for documents or folders on document or folder on profile information such as name, created, modified or accessed times, keywords, owner etc.				

Document Management System						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
DMS.REQ.022	General Requirements	The solution shall support definition of Users, Groups and Roles relation in the system along with multiple levels of access rights (Delete or Edit or View or Print or Copy or Download).				
DMS.REQ.023	General Requirements	The solution shall provide LDAP support for integrating with directory services and shall support single sign on				
DMS.REQ.024	General Requirements	The solution shall support audit-trails with user name and date and time stamp for every activity				
DMS.REQ.025	General Requirements	The solution shall support integration with database-based authentication.				
DMS.REQ.026	General Requirements	The solution shall support integration with PKI infrastructure for enhanced security.				
DMS.REQ.027	General Requirements	The solution shall support web-based administration module for the complete management of system.				
DMS.REQ.028	General Requirements	It should be based on open standards and have API support for data import & export.				
DMS.REQ.029	General Requirements	The System shall support integration with Email Servers.				
DMS.REQ.030	General Requirements	The System shall provide fully functional APIs for Integration with external application				

Document Management System						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
DMS.REQ.031	General Requirements	SI to propose a DMS solution that has been successfully tested and implemented in India in any State/Central Government/ PSU organization. Proof of such an implementation should be submitted with the bid				

**Item No. 28:** Identity and Access Management Software (IAMS)

Identity and Access Management Software (IAMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IMS.REQ.001	General Requirement	The Identity Manager architecture should be an N Tier Architecture to allow portability between Operating systems and Application servers.				
IMS.REQ.002	General Requirement	Solution must be comprehensive with user provisioning, de-provisioning and password management tools				
IMS.REQ.003	General Requirement	Solution should be able to authenticate platforms proposed by the Bidder as part of the solution				

Identity and Access Management Software (IAMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IMS.REQ.004	General Requirement	Both the User Provisioning and Access Management (SSO and Operating System Access Control) solution must be a part of an integrated "Identity and Access Management" solution. Bidder should own the responsibility for the Identity & Access Management Suite. As the current solution involves both provisioning tools and Access Management tools, it is required that tighter integration and ease of administration is available				
IMS.REQ.005	General Requirement	The solution for identity lifecycle management should support Web Services standards				
IMS.REQ.006	General Requirement	Provisioning tool must support and provide business role based provisioning.				
IMS.REQ.007	General Requirement	Solution must support "Delegated" model of administration to support user administration based on department, type of user (intranet or extranet), location etc.				
IMS.REQ.008	General Requirement	Solution should use Workflow engine to define workflow to the user management processes.				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IMS.REQ.009	General Requirement	Solution must provide flexibility to allow users (only internal) to self-register for less sensitive applications or modules with a pre-defined workflow. Solution must also allow users to reset their passwords on those applications or modules that they have accounts on without the intervention of the administrators or helpdesk.				
IMS.REQ.010	General Requirement	Must provide password management capabilities like, password resets, password synchronization				
IMS.REQ.011	General Requirement	Solution should support for delegation of authority and mechanisms to review delegations				
IMS.REQ.012	General Requirement	It is required that all provisioning activities are tracked by the provisioning tool for subsequent analysis if the need arises.				
IMS.REQ.013	General Requirement	Solution should support generation of audit reports without the target resources being available				
IMS.REQ.014	General Requirement	Solution should support offline reporting. Reporting should be available for target systems where provisioning is done even when the target systems are not available.				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IMS.REQ.015	General Requirement	Support for automatic detection of accounts which haven't been used or not owned by anyone etc.				
IMS.REQ.016	General Requirement	Historical data should be readily available with minimal customization. Support historical reports such as who has or had what, when why and how, privilege reports, Access Reports, delegations, exceptions etc.				
IMS.REQ.017	General Requirement	Solution for single sign on should integrate with LDAP server and products that are part of solution.				
IMS.REQ.018	General Requirement	Solution should provide Single Sign On (SSO) for login and authentication into various multiple applications and systems.				
IMS.REQ.019	General Requirement	Solution should be comprehensive to include both web based and client server applications				
IMS.REQ.020	General Requirement	The solution must provide central configuration of client.				
IMS.REQ.021	General Requirement	The Solution should provide integrated Identity Management, smart provisioning, business role management, access management (web single sign-on), OS access Management, client server single sign-on				

Identity and Access Management Software (IAMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
IMS.REQ.022	General Requirement	Solution should provide real-time visibility into the end-to-end operation of Access Management infrastructure. It should monitor the availability, health and performance of policy servers and back end data stores that are used by the access management solution.				
IMS.REQ.023	General Requirement	<p>The solution should monitor web access management infrastructure around the clock, detect availability and performance problems proactively, and enable quick analysis when issues arise.</p> <p>The solution should provide comprehensive, real-time metrics such as:</p> <ul style="list-style-type: none"> <li>- Officer availability</li> <li>- Officer performance per operation</li> <li>- Officer cache status</li> <li>- Policy server availability, policy server performance per operation, policy server queue, thread, socket, and cache</li> <li>- Errors generated by back end data stores</li> <li>- Performance of calls to back-end data stores</li> </ul> <p>The solution should collect this information and provides a single view that enables administrators to gain visibility into their</p>				



Identity and Access Management Software (IAMS)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		access management operations and take action when problems arise.				
IMS.REQ.024	General Requirement	Solution provide capabilities to define password policies e.g. password expiration, composition etc.				
IMS.REQ.025	General Requirement	Solution should monitor Policy Server and Officer performance and availability, correlates Web application performance with access management performance, and determines if access management solution is impacting application performance				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IMS.REQ.026	General Requirement	The solution should provide Monitoring and management and various reports and metrics for administrators like success or failed logins , response time etc.				
IMS.REQ.027	General Requirement	The solution should provide for SLA management including: - Define service levels - Single view of SLA compliance, service status, performance, and usage - Manage system availability and performance from single dashboard				
IMS.REQ.028	General Requirement	Solution should have facilities for enforced-change of password after first-time login including after password reset, automatic password outage after a fixed period of time, maintenance of unique passwords that neither resemble login ID nor any of the previously used passwords (last 3 passwords), a combination of upper & lower cases, numbers and special characters, etc.				
IMS.REQ.029	General Requirement	Solution should have ability to detect and report in near real-time local administrator account maintenance (creation, deletion, changes) made directly on local resources natively.				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IMS.REQ.030	General Requirement	Solution should have ability to notify designated personnel of access-rights changes made outside the provisioning Solution				
IMS.REQ.031	General Requirement	Solution should allow customization of the “Look and Feel” of the User Interfaces. Solution should also allow customization of the user entry screens which determine the fields and the layout of each task screen.				
IMS.REQ.032	General Requirement	System shall provide web access management should provide a centralized Single Sign-On for web users requesting for accessing various modules as per their roles and policy.				
IMS.REQ.033	General Requirement	Solution should support for the latest Web standards, such as Transport Layer Security (TLS), SOAP transactions and Web Services Security.				
IMS.REQ.034	General Requirement	Solution should provide OS security hardening and extra levels of access control to the platform.				
IMS.REQ.035	General Requirement	Solution should provide protection against Back Doors and Trojan Horses				
IMS.REQ.036	General Requirement	Solution should allow administrators to construct logical host groups and				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
		deployment rules for streamlined policy deployment				
IMS.REQ.037	General Requirement	Solution must be able to centrally manage policy				
IMS.REQ.038	General Requirement	Solution should provide centralized security policy enforcement of user entitlements by leveraging role- and rule-based access control				
IMS.REQ.039	General Requirement	Solution must control the number of sessions a user may have open simultaneously on one or more workstations				
IMS.REQ.040	General Requirement	Solution should be able to prevent highly privileged users, including application DBAs and others, from accessing sensitive applications and data in the databases outside their authorized responsibilities. For e.g. Central data store that consolidates system audit information and reports for IT auditing				
IMS.REQ.041	General Requirement	Solution should provide high availability and failover capabilities to eliminate any single point of failure				
IMS.REQ.042	General Requirement	Solution should use multiple load-balanced policy servers, policy Officers, and directory instances to do so				

<b>Identity and Access Management Software (IAMS)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
IMS.REQ.043	General Requirement	Bidder should provide an integrated solution to deliver authentication, authorization, federation, Single Sign on & web services security				
IMS.REQ.044	General Requirement	Solution should support multi-factor authentication technologies (tokens, certificates etc.)				
IMS.REQ.045	General Requirement	Out of the box reports should be available for user creation, deletion, assignment of access, approvals done, pending violations, password resets etc.				
IMS.REQ.046	General Requirement	Solution should provide real time fraud and risk management including but not limited to behavioural analysis, key loggers, Trojans and should allow monitoring on transactions and raise alerts in case of suspicious activities as defined by the security policy of the Department.				

**Item No. 29:** Antivirus Solution

<b>Antivirus Solution</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
AVS.REQ.001	General Requirement	<p>The Solution should provide 5-layers of protection into a single agent. The solution must be provided for minimum 1000 endpoints. MSI needs to provision for the incremental licenses as per their solution:</p> <ul style="list-style-type: none"> <li>o Network threat protection should analyze incoming data and blocks threats while they travel through the network before hitting the system. Rules-based firewall and browser protection should be included to protect against web-based attacks.</li> <li>o Signature-based antivirus should eradicate malware on a system to protect against viruses, worms, Trojans, spyware, bots, adware, and rootkits.</li> <li>o Correlate different linkages between users, files, and websites to detect rapidly mutating threats. By analyzing key file attributes. The solution should accurately identify whether a file is good and assign a reputation score to each file, effectively protecting against targeted attacks.</li> <li>o Have artificial intelligence to provide zero-day protection and stop new and unknown</li> </ul>				

Antivirus Solution						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		<p>threats by monitoring more than 1000 file behaviors while they execute in real-time to determine file risk.</p> <ul style="list-style-type: none"> <li>Remediation and side effect repair engine should aggressively scans infected endpoints to locate Advanced Persistent Threats and remove tenacious malware. Administrator should remotely be able to trigger this and remedy the infection remotely from the management console.</li> </ul>				
AVS.REQ.002	General Requirement	The Solution should check for the existence for antivirus software, patches, hot fixes, and other security requirements. For example, the policy may check whether the latest patches have been applied to the operating system.				
AVS.REQ.003	General Requirement	The solution should enhance protection for business critical systems by only allowing whitelisted applications (known to be good) to run or by blocking blacklisted applications (known to be bad) from running. Finger printing of all applications should from centralized console.				
AVS.REQ.004	General Requirement	The solution should help prevent internal and external security breaches by monitoring application behavior and controlling file access,				

Antivirus Solution						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		registry access, processes that are allowed to run, and devices information can be written to.				
AVS.REQ.005	General Requirement	The solution should allow administrator to run custom scripts on their endpoints to verify and report compliance; quarantine location and peer-to-peer enforcement lockdown and isolate a non-compliant or infected system.				
AVS.REQ.006	General Requirement	The solution should automatically detects what location a system is connecting from, such as a hotspot, wireless network, or VPN and adjusts the security to offer the best protection for the environment.				
AVS.REQ.007	General Requirement	The solution should have the ability to find whether the endpoint is out of compliance and should accomplish remediation, either via self-contained capabilities or integration with external resources				
AVS.REQ.008	General Requirement	The solution should automatically engage in an aggressive scan mode if it detects large number of malware or high-risk threats on windows clients.				
AVS.REQ.009	General Requirement	The solution should auto-protect kernel module especially for Linux variants.				
AVS.REQ.010	General Requirement	The solution should have incident investigation and response utilizing the integrated EDR capabilities in endpoint protection				



Antivirus Solution						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
AVS.REQ.011	General Requirement	If any endpoint is having more than three days older virus definition and if such endpoint tries to connect the network, then the solution must immediately install latest virus definition by connecting to the endpoint management server and blocking all connections to the other network resources like internet, intranet applications etc				
AVS.REQ.012	General Requirement	The solution must automatically initiate remedial action, which may include isolating it from network. The solution should recheck host for compliance after remediation and grant access for the compliant host to the network.				
AVS.REQ.013	General Requirement	The solution must be able check whether required software, security patches and hot fixes have not been installed on the endpoint as mandated by organization, the solution should be set to connect to an update server to download and install the required software based on the policy.				
AVS.REQ.014	General Requirement	The solution must have reports that incorporate multi-dimensional analysis and robust graphical reporting in an easy-to-use dashboard.				
AVS.REQ.015	General Requirement	The solution must have group update provider reduces network overhead and decreases the time it takes to get updates by enabling one				

Antivirus Solution						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		client to send updates to another, enabling more effective updates in remote locations.				
AVS.REQ.016	General Requirement	The solution should pre-emptively block exploits using heap spray techniques, abuse of java security manager etc. and must be signature-less and works regardless of flaw/bug/vulnerability				
AVS.REQ.017	General Requirement	Solution should collect and share the threat intelligence from / to external sources using industry formats such as STIX ,TAXII, etc.				
AVS.REQ.018	General Requirement	Solution should detect command and control traffic activity with IP level events, URL events, and DNS activity using detection mechanisms like static analysis, behavioral analysis, and reputation analysis from intelligence network.				
AVS.REQ.019	General Requirement	The solution should utilize multiple detection approach by combining virtualization and emulation to capture more malicious behavior across a wider range of custom environments.				
AVS.REQ.020	General Requirement	The solution should use techniques to unmask cleverly disguised malware.				
AVS.REQ.021	General Requirement	Solution should perform analysis on "known" & "unknown" content. Scanning files using whitelisting, file hash reputation, & static code analysis looking for known good & known bad content and send unknown files & URLs to				

Antivirus Solution						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
		sandbox for determination in a customized sandbox environment.				
AVS.REQ.022	General Requirement	Solution should have dashboard to include the latest high risk tasks, search capabilities, recent samples, multiple processing stats, e.g. queue size, sandbox execution time, event count, tasks complete, and risk scores over say last 24 hours				
AVS.REQ.023	General Requirement	The solution must prevent clients from downloading full definition packages.				
AVS.REQ.024	General Requirement	The solution should manage single license for windows, linux and mac Operating Systems and management server should not be separate.				
AVS.REQ.025	General Requirement	The solution should detect malware that evades detection with no performance overhead.				
AVS.REQ.026	General Requirement	The solution should have dashboard with search capabilities, sandbox execution time, event count, tasks complete and risk scores over say last 24 hours.				

<b>Antivirus Solution</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
AVS.REQ.027	General Requirement	Solution should provide anomaly detection to detect and report on suspicious information found in a file. Preferable capabilities to include, call-back activity, CVE and exploit detection, shell-code detection.				
AVS.REQ.028	General Requirement	The solution should set up peer-to-peer authentication policy, which can grant or block inbound access to the remote computers that have the client installed.				
AVS.REQ.029	General Requirement	The Solution should provide manage windows, Linux and mac agents from same centralized console.				
AVS.REQ.030	General Requirement	The solution should download content updates from the central server when computers are idle so that it does not affect bandwidth				
AVS.REQ.031	General Requirement	If the endpoint client detects a network attack, solution must automatically activate active response to block all communication to and from the attacking computer				
AVS.REQ.032	General Requirement	The solution should have the ability to find whether the endpoint is out of compliance and should accomplish remediation, either via self-contained capabilities or integration with external resources				

<b>Antivirus Solution</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
AVS.REQ.033	General Requirement	The Solution must have a layer of protection that protects organization from advanced threats/features to identify attackers intent and ability to take corrective action to enhance security posture.				
AVS.REQ.034	General Requirement	The solution should provide incident investigation and response utilizing the EDR capabilities in endpoint.				
AVS.REQ.035	General Requirement	The solution's EDR should be able expose advanced attacks with precision machine learning, behavioral analytics and threat intelligence minimizing false positives.				
AVS.REQ.036	General Requirement	The Solution should provide report over email, CSV, html or pdf.				

**Item No. 30: Endpoint Encryption for Hard drives**

<b>Endpoint Encryption for Hard drives</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
EEHD.REQ.001	General Requirement	Encryption Policy Server should manage thousands of devices with a single server and management console which includes Full Disk and File and Folder and support Failover support and load-balancing capabilities Encryption.				
EEHD.REQ.002	General Requirement	Solution should integrate with Directory Services/AAA and should support Single sign on. GPO-based policy deployment should be available				
EEHD.REQ.003	General Requirement	Full Disk encryption module should support multiple recovery option like stand alone and on line.				
EEHD.REQ.004	General Requirement	Full Disk Encryption Solution should support Advanced Pre-boot Authentication				
EEHD.REQ.005	General Requirement	Tamper Proof & Fault Tolerant				
EEHD.REQ.006	General Requirement	Should support Single Sign-On				
EEHD.REQ.007	General Requirement	Remote & Self Help for Password Reset				
EEHD.REQ.008	General Requirement	Device & User Specific Auditing & Reporting				

Endpoint Encryption for Hard drives						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
EEHD.REQ.009	General Requirement	Built-In Recovery Console				
EEHD.REQ.010	General Requirement	Automatic policy sync at Pre-Boot				
EEHD.REQ.011	General Requirement	File Folder Encryption should have following features: Strong AES Encryption for Files and Folders on Local Hard Drives, Shared Folders, USB Flash Drives, CDs/DVDs, and Email Attachments				
EEHD.REQ.012	General Requirement	Centralized Policy Administration and Key Management				

**Item No. 31:** Directory Services

<b>Directory Services</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviations/ Remarks</b>
DS.REQ.001	General Requirement	Support for LDAP-based mechanism for storing and accessing identity data and should be provided in high availability to avoid any single point of failure				
DS.REQ.002	General Requirement	Console or Web Based interface to navigate or update LDAP identity data				
DS.REQ.003	General Requirement	Support for addition of custom logics into LDAP operation processing				
DS.REQ.004	General Requirement	Support to integrate with identity and access management as per proposed solution				
DS.REQ.005	General Requirement	Should support directory virtualization				
DS.REQ.006	General Requirement	Support for configuration changes using GUI				
DS.REQ.007	Synchronizati on	Support for data synchronization with third party identity stores (Active directory etc.)				
DS.REQ.008	Standards	Adherence to LDAP Standards like RFC 2696, RFC 3671 etc.				
DS.REQ.009	Failover mechanism	Support for server failover and failback				
DS.REQ.010	Security	Support for protection against any kind so external threat				



Directory Services						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviations/ Remarks
DS.REQ.011	Security	Support for SSL digital certificate for secure encrypted communication between LDAP client and server				
DS.REQ.012	Scalability	Support for high scalability into the largest environment				

**Item No. 32:** Backup Software

<b>Backup Software</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
BS.REQ.001	General Requirement	The proposed Backup Solution should be available on various OS platforms such as Windows and UNIX platforms, Open Source and be capable of supporting SAN based backup Or restore from various platforms including UNIX, HP-UX, Linux and Windows.				
BS.REQ.002	General Requirement	Proposed backup solution shall be offered with Cluster license of server.				
BS.REQ.003	General Requirement	Proposed backup solution shall support industry leading cluster solution such as MSCS or etc.				
BS.REQ.004	General Requirement	Proposed backup solution shall have same GUI across heterogeneous platform to ensure easy administration. The proposed backup solution software has inbuilt Java or Web based GUI for centralized management of backup domain.				
BS.REQ.005	General Requirement	The proposed Backup Solution should support tape Mirroring.				

Backup Software						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
BS.REQ.006	General Requirement	The proposed backup solution should allow creation of additional backup copies, within the same Library or over the network to another tape library Or standalone drive of different format medium (e.g. Ultrium to SDLT etc.) to allow easy valuating operation				
BS.REQ.007	General Requirement	The proposed Backup Solution supports the capability to write up to 32 data streams to a single tape device or multiple tape devices in parallel from multiple clients to leverage the throughput of the Drives using Multiplexing technology.				
BS.REQ.008	General Requirement	The proposed backup solution support de-multiplexing of data cartridge to another set of cartridge for selective set of data for faster restores operation to client Or servers.				
BS.REQ.009	General Requirement	The proposed backup solution should allow creating tape clone facility after the backup process. The backup solution must support integration of backup and restore with hardware cloning and snapshot features into the GUI, eliminating the traditional need to write user scripts				

<b>Backup Software</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
BS.REQ.010	General Requirement	Offered Backup software shall support granular recovery for Microsoft share point to provide single document, Directories or entire site recovery from backup repository.				
BS.REQ.011	General Requirement	The proposed Backup Solution should have in-built calendar based scheduling system and supports Clustering the Backup Server on Windows and Unix.				
BS.REQ.012	General Requirement	The backup software should provide SAN based (LAN-FREE) Backup. Also should not have any restrictions on the number of drives that can be attached in tape library.				
BS.REQ.013	General Requirement	Bidder should provide the backup software module on all quoted servers with functionality as below				
BS.REQ.014	General Requirement	Online SAN based backup agent on all the database servers				
BS.REQ.015	General Requirement	LAN based backup agent on rest other servers				
BS.REQ.016	General Requirement	The proposed Backup Solution Software has inbuilt Java Or Web based GUI for centralized management of backup domain.				

Backup Software						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
BS.REQ.017	General Requirement	Backup Software shall support encryption and all encryption keys shall be stored on to backup server for effective management.				
BS.REQ.018	General Requirement	The proposed solution also supports advanced Disk staging.				
BS.REQ.019	General Requirement	The proposed Backup Solution has in-built media management and supports cross platform Device & Media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media.				
BS.REQ.020	General Requirement	Backup Software shall support Synthetic backup so that Full backup can be constructed directly from the disk & tape based incremental backups. Solution should also provide forever full incremental backup to eliminate full backups after periodic interval.				
BS.REQ.021	General Requirement	Backup software shall also support disk based Incremental Forever or Virtual full backup whereas every incremental backup shall be equivalent to Full back up without actually copying the actual data blocks of previous full backup.				
BS.REQ.022	General Requirement	Backup Software is able to rebuild the Backup Database Or Catalogue from tapes in the event of catalogue loss Or corruption.				

<b>Backup Software</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/ Remarks</b>
BS.REQ.023	General Requirement	The proposed Backup Software shall offer OPEN File Support for windows and Linux				
BS.REQ.024	General Requirement	The proposed Backup Solution has certified “Hot-Online” backup solution for different type of Databases such as Oracle, MS SQL, Sybase etc.				
BS.REQ.025	General Requirement	Backup software shall also support Microsoft Share point Portal server				
BS.REQ.026	General Requirement	The Proposed backup solution shall provide granularity of single file restore.				
BS.REQ.027	General Requirement	Backup Solution shall be able to copy data across firewall.				
BS.REQ.028	General Requirement	Backup Solution shall support automatic skipping of backup during holidays.				
BS.REQ.029	General Requirement	The proposed backup solution must support MS Exchange single mailbox restore.				
BS.REQ.030	General Requirement	The backup software should support object level restore.				
BS.REQ.031	General Requirement	Shall support restoration of Single document, collection of documents or entire site in directly from the share point GUI				
BS.REQ.032	General Requirement	The proposed backup solution must support full automated transfer of disk backup images to tape on a scheduled basis.				

Backup Software						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/ Remarks
BS.REQ.033	General Requirement	The proposed backup solution shall also support disk based virtual full backup approach.				
BS.REQ.034	General Requirement	The proposed backup solution must support at least AES 256-bit encryption capabilities.				
BS.REQ.035	General Requirement	The internal backup catalogue database should not have a big foot print.				
BS.REQ.036	General Requirement	The backup software should support object based restore option as one of the most granular options to restore data.				
BS.REQ.037	General Requirement	The backup software should support instant recovery of Exchange, SQL and Oracle databases.				

**Item No. 33:** GIS Application and MAPs

<b>GIS application and Map data</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
GIS.REQ.001	General Requirement for GIS (Geographical Information System ) Requirements	The GIS application shall have the ability to plot the objects on maps based on location coordinates.				
GIS.REQ.002	General Requirement	The GIS application system shall request the citizen/ERV location and process the same to be transferred to dispatcher automatically.				
GIS.REQ.003	General Requirement	The GIS POI which is collated through PFT devices and GIS Data collection mobile application shall be added on incremental basis at centralized GIS data. An application that enables incorporation of GIS Point of interest (POI) captured through a PFT device in field and passed on to NOC into centralized GIS. This feature should enable capture and incorporation of ground features resulting in real-time updation of GIS data, thereby making it current at all times.				



GIS application and Map data						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
GIS.REQ.004	General Requirement	6000 sq. km to be considered as city area for 1:1000 mapping and rest can be considered as rural area. The positional accuracy of + or- 10 m for 1:1000 maps and accuracy of + or- 50m for 1:5000 maps in rural areas.				
GIS.REQ.005	General Requirement	The system shall have GIS Maps, Geo fencing tools and GIS engine.				
GIS.REQ.006	General Requirement	The GIS maps shall be compatible and shall support AVLS and vehicle navigation system with routing and capable of integration with driving direction based on Live Traffic Based Routing				
GIS.REQ.007	General Requirement	GIS map for CAD and Navigation on PFT and handheld should support for visual and, voice (preferably) based turn by turn direction and visual should support English and Hindi.				
GIS.REQ.008	General Requirement	GIS Map is a base layer on which GIS map data will be rendering				
GIS.REQ.009	General Requirement	The representation for GIS application architecture will comprehend GIS application deployed at DC, DRC and Call 100 and field level devices. Majorly 3 components would be				

GIS application and Map data						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		involved to implement GIS functionality i.e. GIS map, GIS map data and GIS Server				
GIS.REQ.010	General Requirement	GIS Map Data is a raw data of multiple point of interest in form of latitude and longitude				
GIS.REQ.011	General Requirement	GIS Server will render the caller / Vehicle location and identify the GIS map and GIS map data and will send to the dispatcher desktop and to PFT devices				
GIS.REQ.012	General Requirement	GIS Data capture mobile application shall be used to collect the field location data of different areas in the state. This application will be installed in the mobile devices on Android, Apple and Windows OS and shall be provided to the field officer. Field officer will capture the Point of Interest as per Police requirement (POIs) at field level like location address, near landmark detail etc. and store the data in the application. Once the data is stored, the officer will then push the data to the Data center GIS database through the mobile application. The diagram given above depicts this process				

GIS application and Map data						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
GIS.REQ.013	General Requirement	The GIS application shall have the ability to plot the objects on maps based on location coordinates				
GIS.REQ.014	General Requirement	The GIS application system shall request the citizen/ERV location and process the same to be transferred to dispatcher automatically				
GIS.REQ.015	General Requirement	The system shall have GIS Maps, Geo fencing tools and GIS engine				
GIS.REQ.016	General Requirement	It should feature all the layers and symbols as mentioned in above section of scope				

**Item No. 34:** Data Leakage Prevention

<b>Data Leakage Prevention (DLP)</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
DLP.REQ.001	Make					
DLP.REQ.002	Model					
DLP.REQ.003	General Requirement	Solution should address the risks associated with the storage and use of confidential/sensitive data on laptops and desktops across organization. The DLP solution should be dedicated solution not be part of UTM/NGFW and Proxy.				
DLP.REQ.004	General Requirement	Solution should discover confidential data wherever it resides and identifies those endpoints with the highest risk.				
DLP.REQ.005	General Requirement	Solution should actively monitor the ways confidential data can be used on the endpoint and flags any activity not in accordance with policy defined from the centralized console.				
DLP.REQ.006	General Requirement	Solution should provide choices to address and remediate incidents and use technology specifically designed to operate in the most efficient and unobtrusive manner possible.				
DLP.REQ.007	General Requirement	Solution should scan laptop and desktop hard drives for confidential/Sensitive data in order to inventory, secure or relocate it and provide over 60 templates or equivalent to enable out-				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		of-the-box discovery of sensitive data mapped to different industry and regulatory directives.				
DLP.REQ.008	General Requirement	Solution should scan for confidential/sensitive data when endpoint is idle and subsequent scans must run on only those things that have changed since the previous scan.				
DLP.REQ.009	General Requirement	Solution must have Indexed Document Matching to evaluate documents for exact content matches on endpoints in real-time to provide greater control over data use when users are off the network.				
DLP.REQ.010	General Requirement	<p>"Solution should provide following detection technologies to address different types of data:</p> <ul style="list-style-type: none"> <li>o Describe content which looks for data matching keywords, expressions or patterns, file type recognition, and other signature-based detection technologies.</li> <li>o Fingerprinting which looks for exact matches of whole or partial files, coming from structured sources (e.g., databases) and unstructured sources (e.g., design documents) that are fingerprinted with a hashing algorithm.</li> <li>o Learning technology to identify unstructured data such as source code, Intellectual</li> </ul>				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		Property (IP), or legal contracts by building a statistical model based on uploading positive and negative example documents."				
DLP.REQ.011	General Requirement	Solution should prevent confidential/sensitive files from downloading, copying to CD/ DVD/ USB/ iPod®/ Bluetooth®, and other removable media; print screens, communications over email, Instant Messaging (IM), and the Web; printing and faxing, and cloud storage (e.g., Dropbox) and virtual Citrix® environments.				
DLP.REQ.012	General Requirement	Solution should monitor and prevent data transfer OS and mobile devices using mobile transfer protocol (MTP).				
DLP.REQ.013	General Requirement	Solution should monitor and prevent data using HTTP/HTTPS over browsers like Chrome, FireFox and Explorer.				
DLP.REQ.014	General Requirement	Solution should monitor data being copied and pasted from the clipboard to prevent confidential/sensitive data from being pasted to specific application and ability to detect screen captures or picture formats.				
DLP.REQ.015	General Requirement	Solution should provide trusted device support enables organizations to define specific removable media devices that can be used with confidential data, providing a more granular level of protection while still enabling				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		required business functions and solution should encrypt information copied to removable media at any endpoint etc.				
DLP.REQ.016	General Requirement	Solution should provide application file access control to secure the use of confidential/sensitive data in endpoint applications such as Facebook, LinkedIn, Cisco WebEx, IM, and Twitter.				
DLP.REQ.017	General Requirement	Solution should provide broad remediation capabilities: onscreen pop-up notifications; quarantining or relocating data to a secure location; blocking endpoint events; and applying custom responses via remediation scripts.				
DLP.REQ.018	General Requirement	Solution should automatically notify data owners of this policy violation.				
DLP.REQ.019	General Requirement	Solution should have a central web-based management console and incident repository that must be included with Endpoint or Suite.				
DLP.REQ.020	General Requirement	Solution should have a web base management for defining, deploying, and enforcing data loss policies, responding to incidents, analyzing and reporting policy violations, and performing system administration.				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
DLP.REQ.021	General Requirement	Solution should allow policies that can be exported or imported individually or in bulk.				
DLP.REQ.022	General Requirement	Solution should detect whether data has been entered in forms such as tax, medical, or financial forms in various image formats, including PDF, JPEG, BMP, PNG and TIFF.				
DLP.REQ.023	General Requirement	Solution should be able to restrict the number of files and/or total size of files attached to different email solutions and protocols like SMTP, POP3, MS-Exchange etc.				
DLP.REQ.024	General Requirement	Solution should enable to set limits on the size of indexes and to choose partial matching on specific profiles.				
DLP.REQ.025	General Requirement	Solution should be able choose to scan all Box user accounts, or select the accounts including administrative and co-administrative accounts.				
DLP.REQ.026	General Requirement	Solution should be able to exclude specific printers from being monitored, including local, network, and PDF printers.				



Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
DLP.REQ.027	General Requirement	Solution should be able to be deployed on a computer with a generic 10 GB Ethernet interface card to monitor data loss on your 10 GB Ethernet network.				
DLP.REQ.028	General Requirement	Solution should be able to detect PDF files that contain electronically fillable fields.				
DLP.REQ.029	General Requirement	Solution should be able to detect files that are encrypted using Microsoft Rights Management Services (RMS) administered through Azure or Active Directory.				
DLP.REQ.030	General Requirement	Should able to discover shares on servers with CIFS and DFS file servers in the domain and configure automatic scanning on them.				
DLP.REQ.031	General Requirement	Solution should provide broad integration support for enterprise messaging gateways, Mail Transfer Agents (MTAs), and hosted email solutions such as Microsoft® Online Services.				
DLP.REQ.032	General Requirement	Solution should detect anomalous changes of users' behaviors from their normality in order to isolate the actual high risk data incident scenarios.				
DLP.REQ.033	General Requirement	Solution should allow to define user-based data classification and labelling configurable by policy/tools.				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
DLP.REQ.034	General Requirement	Solution should integrate with HTTP/HTTPS, or FTP proxy servers using ICAP to detect and prevent confidential data in outbound web communications.				
DLP.REQ.035	General Requirement	"Solution should discover and protect confidential data stored on file shares, databases, and repositories in data centers including : o File servers: Windows, Linux, Unix, Novell, Solaris, NAS filers. o Databases: Oracle, Microsoft SQL Server, IBM DB2. o Collaboration platforms: Lotus Notes, Microsoft Exchange, Microsoft Outlook .pst, SharePoint, Documentum, LivLink. o Web sites: public web sites, intranets, extranets, wikis, web-based applications. o Desktops and laptops"				
DLP.REQ.036	General Requirement	Solution should provide fast and efficient scanning with minimal impact on the network, is managed by scan filters, schedule windows, scan throttling, and incremental scanning.				
DLP.REQ.037	General Requirement	Solution should investigate capabilities and response workflows built into a comprehensive graphical user interface.				

Data Leakage Prevention (DLP)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
DLP.REQ.038	General Requirement					
DLP.REQ.039	General Requirement	Solution should detection of risky user behaviors and unusual activities, and identify of malicious insiders and outsiders via user based risk scoring.				

**Item No. 35:** Location Based System – LBS (Location Detection System)

Location Based System – LBS (Location Detection System)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
Call Location Detection						
LDS.REQ.001	Call Location Detection	System should be capable to detect the location of the caller through subscriber detail record (SDR) database and call detail record (CDR).Bidder shall create the database for SDR and CDR details also.				
LDS.REQ.001A	Call Location Detection	The system shall be closely integrated with CAD platform to provide Location of the distress caller with 5-15 seconds arrival of call to the CAD platform. The location passed onto CAD platform shall include current location of the caller, his metadata from SDR, i.e. his name address etc. In case of call from landline the locator system shall convert his address information, into coordinates and provide this information to CAD platform				
LDS.REQ.001B	Call Location Detection	The system shall support continuous location tracking of victim as per configurable frequency, and shall provide this location information to CAD/PFT on continuous basis.				
LDS.REQ.001C	Call Location Detection	The locator platform shall be integrated with TSP for GMLC integration, MNP Database, HLR/Signalling N/W Integration, SDR Data to ensure location of victim is always available				

Location Based System – LBS (Location Detection System)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
		for every caller to CAD, even in absence of LBS platform at some of the TSPs				
LDS.REQ.001D	Call Location Detection	The system shall integrate with GMLCs at TSPs as and when they are live. Till then shall use alternative methods to still query location of subscriber through Telecom Network and provide his location to CAD				
LDS.REQ.001E	Call Location Detection	System shall have integrated security mechanism to ensure every request is logged and complete audit trail is maintained. System shall be secure, and only authorised systems, users shall be allowed to integrate/query depending on pre-approval				
Device Location Detection						
LDS.REQ.002	Location	User will register on Haryana 100 portal with their device information. If any case comes into CAD through registered devices. System should be capable to capture the latitude & longitude coordinates from registered devices (which are connected to the internet) and detect the location of the user.				
Mobile Application Location Detection						
LDS.REQ.003	Mobile Apps	System should be capable to receive the latitude & longitude coordinates and detect the location of the user and Also should be				

Location Based System – LBS (Location Detection System)						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
		able to integrate with CAD to send the location.				
SMS Location Detection						
LDS.REQ.004	SMS	System should be capable to receive the SMS with mobile number and text message. It should detect the location of the sender based on SDR and CDR database				

**Item No. 36:** Security Incident and Event Monitoring (SIEM)

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
SIEM.REQ.001	Make					
SIEM.REQ.002	Model					
SIEM.REQ.003	Security Incident & Event Management	The SIEM solution should be a virtual or physical				
SIEM.REQ.004	Security Incident & Event Management	The solution should support the event throughput rate of minimum 10000 EPS (events per second) and should have capability to upgrade up to 20000 EPS.				
SIEM.REQ.005	Security Incident & Event Management	The solution should be scalable by adding additional receivers and still be managed through a single, unified security control panel.				
SIEM.REQ.006	Security Incident & Event Management	The solution should be capable of real time analysis and reporting.				
SIEM.REQ.007	Security Incident & Event Management	The platform should not require a separate RDBMS for log collection, web server or any kind of application software for its installation.				
SIEM.REQ.008	Security Incident &	The solution should support risk analysis in the network infrastructure. It should perform				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management	risk analysis by correlating threat data with identified vulnerability and counter measure information to determine what is at risk.				
SIEM.REQ.009	Security Incident & Event Management	The solution should support risk based correlation in addition to rule based correlation.				
SIEM.REQ.010	Security Incident & Event Management	The solution must have Self Learning Asset Inventory feature and create CMDB based on it				
SIEM.REQ.011	Security Incident & Event Management	The solution must enable unified and cross-correlated analytics from diverse information sources including logs, performance metrics, SNMP Traps, security alerts and configuration changes.				
SIEM.REQ.012	Security Incident & Event Management	The solution should be able to assign risk scores to your most valuable asset. The risk value could be assigned to a service, application, specific servers, a user or a group. The solution should be able to assign and consider the asset criticality score before assigning the risk score.				
SIEM.REQ.013	Security Incident &	The relative risk of each activity should be calculated based on values assigned by the Asset Administrator.				



Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management					
SIEM.REQ.014	Security Incident & Event Management	The activities should be separated by levels of risk for the company: very high, high, medium, low and very low.				
SIEM.REQ.015	Security Incident & Event Management	The SIEM receiver/log collection appliance must be a virtual or Physical solution to store the data locally, if communication with centralized correlator is unavailable.				
SIEM.REQ.016	Security Incident & Event Management	The solution should provide a data aggregation technique to summarize and reduce the number of events stored in the master database.				
SIEM.REQ.017	Security Incident & Event Management	The solution should provide a data store which is compressed via flexible aggregation logic.				
SIEM.REQ.018	Security Incident & Event Management	The data collected from the receiver should be forwarded in an encrypted manner to SIEM log storage.				
SIEM.REQ.019	Security Incident & Event Management	The solution should provide pre-defined report templates. The reports should also provide reports out of the box such as PCI-				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
		DSS, HIPAA, SOX, NERC, FISMA, ISO, GLBA, GPG13, SANS Critical Controls.				
SIEM.REQ.020	Security Incident & Event Management	The solution should have single integrated facility for log investigation, incident management etc. with a search facility to search the collected raw log data for specific events or data.				
SIEM.REQ.021	Security Incident & Event Management	A well-defined architecture along with pre and post installation document need to be shared by the bidder.				
SIEM.REQ.022	Security Incident & Event Management	The solution should have a scalable architecture, catering multi-tier support and distributed deployment.				
SIEM.REQ.023	Security Incident & Event Management	The solution should support collection of events/logs and network flows from distributed environment(s).				
SIEM.REQ.024	Security Incident & Event Management	The solution should correlate security/network events to enable the SOC to quickly prioritize it's response to help ensure effective incident handling.				
SIEM.REQ.025	Security Incident &	The solution should integrate asset information in SIEM such as categorization, criticality and business profiling and use the				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management	same attributes for correlation and incident management.				
SIEM.REQ.026	Security Incident & Event Management	The solution should provide remediation guidance for identified security incident.				
SIEM.REQ.027	Security Incident & Event Management	The solution should have an exhaustive incident tracking system that can track, investigate and resolve events in work-flow like environment				
SIEM.REQ.028	Security Incident & Event Management	The solution should be able to import the vulnerability information from scanning and assessments tools on real time basis and correlates them / provide contextual information on vulnerability data to incidents for all possible implications.				
SIEM.REQ.029	Security Incident & Event Management	The solution should be able to facilitate customized dashboard creation, supporting dynamic display of events graphically.				
SIEM.REQ.030	Security Incident & Event Management	The solution should support storage of raw logs for forensic analysis.				
SIEM.REQ.031	Security Incident &	The solution should be able to integrate logs from new devices into existing				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management	collectors without affecting the existing SIEM processes.				
SIEM.REQ.032	Security Incident & Event Management	The solution should have capability of displaying of filtered events based on event priority, event start time, end time, attacker address, target address etc.				
SIEM.REQ.033	Security Incident & Event Management	The solution should support configurable data retention policy based on the Department requirement.				
SIEM.REQ.034	Security Incident & Event Management	The solution should provide tiered storage strategy comprising of online data, online archival, offline archival and restoration of data. Please elaborate on log management methodology proposed.				
SIEM.REQ.035	Security Incident & Event Management	The solution should compress the logs by at least 70% or more at the time of archiving.				
SIEM.REQ.036	Security Incident & Event Management	The solution should have capability for log purging and retrieval of logs from offline storage.				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
SIEM.REQ.037	Security Incident & Event Management	The solution should support networked and scalable storage using SAN, NAS, DAS etc.				
SIEM.REQ.038	Security Incident & Event Management	The solution should provide capability for configuration backup.				
SIEM.REQ.039	Security Incident & Event Management	The solution should support automated scheduled archiving functionality into file system.				
SIEM.REQ.040	Security Incident & Event Management	The solution should support normalization of real time events.				
SIEM.REQ.041	Security Incident & Event Management	The solution should provide a facility for logging events with category information to enable device independent analysis.				
SIEM.REQ.042	Security Incident & Event Management	The solution should support aggregation techniques that consolidate multiple identical raw events into one processed event.				
SIEM.REQ.043	Security Incident &	The platform should be supplied on Hardened OS embedded in Hardware /				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management	Virtual Appliance. The storage configuration should offer a RAID configuration to allow for protection from disk failure.				
SIEM.REQ.044	Security Incident & Event Management	The SIEM platform should have necessary components to ensure there is no single point of failure.				
SIEM.REQ.045	Security Incident & Event Management	The solution should ensure the integrity of logs. Compliance to regulations should be there with tamper-proof log archival.				
SIEM.REQ.046	Security Incident & Event Management	Solution should have inbuilt query analysis capability without requiring any third party solution.				
SIEM.REQ.047	Security Incident & Event Management	The solution should be able to continue to collect logs during backup, de-fragmentation and other management scenarios.				
SIEM.REQ.048	Security Incident & Event Management	The solution should support collection of logs from all the devices quoted in RFP.				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
SIEM.REQ.049	Security Incident & Event Management	The solution should have native audit capability for end to end incident management. Complete audit trail of incident life cycle (like incident alerting, action taken by each user, final outcome of incident, closing of incident) should be maintained.				
SIEM.REQ.050	Security Incident & Event Management	The solution should allow a wizard / GUI based interface for rules (including correlation rules) creation as per the customized requirements. The rules should support logical operators for specifying various conditions in rules.				
SIEM.REQ.051	Security Incident & Event Management	The solution should support all standard IT infrastructure including Networking & Security systems, OS, RDBMS, Middleware, Web servers, Enterprise Management System, LDAP, Internet Gateway, Antivirus, and Enterprise Messaging System etc.				
SIEM.REQ.052	Security Incident & Event Management	The solution should support the following co- relation: Statistical Threat Analysis – To detect anomalies, Susceptibility Correlation - Raises visibility of threats against susceptible hosts, Vulnerability Correlation				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
		- Mapping of specific detected threats to specific / known vulnerabilities				
SIEM.REQ.053	Security Incident & Event Management	The solution should also support historical correlation and have capability to analyse historical data using a new correlation rule and carry out trend analysis on collected data.				
SIEM.REQ.054	Security Incident & Event Management	Solution should have capability to correlate based on the threat intelligence for malicious domains, proxy networks, known bad IP's and hosts.				
SIEM.REQ.055	Security Incident & Event Management	The solution should provide ready to use rules for alerting on threats e.g., failed login attempts, account changes and expirations, port scans, suspicious file names, default usernames and passwords, High bandwidth usage by IP, privilege escalations, configuration changes, traffic to non-standard ports, URL blocked, accounts deleted and disabled, intrusions detected etc.				
SIEM.REQ.056	Security Incident & Event Management	The proposed solution must be able to collect network configuration files, stored in a versioned repository, collect installed				



Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
		software versions, stored in a versioned repository				
SIEM.REQ.057	Security Incident & Event Management	The solution should offer a user interface that is capable of providing the Information Security team an intuitive way of using recognized network tools e.g. who is, nslookup, ping etc. to assist in analysis and response work.				
SIEM.REQ.058	Security Incident & Event Management	The solution should have the capability to send notification messages and alerts through email, SMS, etc.				
SIEM.REQ.059	Security Incident & Event Management	Solution should support report designing capability without using any third party product.				
SIEM.REQ.060	Security Incident & Event Management	The tool should provide facility for separate alerting and reporting console for different asset groups.				
SIEM.REQ.061	Security Incident & Event Management	Solution should provide inbuilt dashboard for monitoring the health status of all the SIEM components, data insert/retrieval time, resource utilization details etc.				
SIEM.REQ.062	Security Incident &	In case of both hardware and virtual proposal, it must be compatible with at				

Security Incident and Event Monitoring						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS products Or component if relevant	Bidder's Comments
	Event Management	least 60 TB storage OR minimum 365 days of log retention period as quoted in the SAN storage for the project.				
SIEM.REQ.063	Security Incident & Event Management	The SIEM solution should be customizable with Multitenant support to manage overlapping systems and networks from a single dashboard				

**Item No. 37:** Visitor Management System

<b>Visitor Management System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
VMS.REQ.001	General Requirement	Make				
VMS.REQ.002	General Requirement	Model				
VMS.REQ.003	General Requirement	The system shall run on a single PC/ Workstation				
VMS.REQ.004	General Requirement	The system shall have authentication mechanism for the user to operate it				
VMS.REQ.005	General Requirement	The system must facilitate Registration of the Person				
VMS.REQ.006	General Requirement	The system must provide field/s for entering the purpose of visit				
VMS.REQ.007	General Requirement	The system shall have a provision to enrol visitor identification details				
VMS.REQ.008	General Requirement	The system shall have a provision to capture Photograph of the visitor				
VMS.REQ.009	General Requirement	The system must have fields to record in time and out time of the visitor				

<b>Visitor Management System</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
VMS.REQ.010	General Requirement	The system must have the provision to restrict pass issue permission by supervisor				
VMS.REQ.011	General Requirement	The system shall have the facility to generate pass on Daily, Weekly, Fortnightly, Monthly or more based on the requirement				
VMS.REQ.012	General Requirement	The system shall have a provision to create a database of the visitor/s				
VMS.REQ.013	General Requirement	The system shall have the facility to blacklist visitors				
VMS.REQ.014	General Requirement	The system must generate summary report of all activities by operators on shift wise, daily, weekly, & monthly basis				

**Item No. 38:** Speech To Text (STT) Software

<b>Speech To Text (STT) Software</b>						
<b>Sr. No.</b>	<b>Nature of Requirement</b>	<b>Minimum Requirement Description</b>	<b>Requirement available (Yes Or No)</b>	<b>Standard Or Customized Or Bespoke</b>	<b>Provide Name of COTS product Or component if relevant</b>	<b>Deviation/Remarks</b>
STT.REQ.001	General Requirement	Make				
STT.REQ.002	General Requirement	Model				
STT.REQ.003	General Requirement	System should be able to generate a text data corresponding to a recorded voice data provided				
STT.REQ.004	General Requirement	System should be able to support WAV audio file format for transcription				
STT.REQ.005	General Requirement	System should be able to support the conversion of voice data into text data for Indian English, Hindi				
STT.REQ.006	General Requirement	System should be able generate the output file of transcription process in Unicode format				
STT.REQ.007	General Requirement	System should be able to configure the path and naming pattern of input and output files				
STT.REQ.008	General Requirement	System should be able to allow the logging of transcription activities in database				
STT.REQ.009	General Requirement	At initial level, system should have the capacity of transcription of the voice data of				

Speech To Text (STT) Software						
Sr. No.	Nature of Requirement	Minimum Requirement Description	Requirement available (Yes Or No)	Standard Or Customized Or Bespoke	Provide Name of COTS product Or component if relevant	Deviation/Remarks
		1800 hours per month. This capacity should be extendable according to the requirement.				
STT.REQ.010	General Requirement	System should be able to provide necessary API to transcript a voice file into text (with the path of input and output file names)				
STT.REQ.011	General Requirement	System should be able to provide necessary API to manage various configuration settings if any				
STT.REQ.012	General Requirement	System should analysis of phone calls immediately and flags, if some process is not followed correctly, helping agents to correct themselves.				