

MINUTE SHEET
5014 ASC BN (MT)

Case No: 5014/401/Accts

Sheet No: One

1

E-TAG SYSTEM FOR MILITARY CONVOY IN 14 CORPS ZONE

1. Currently, a huge quantum of forces are dply in 14 Corps Z. Move, maint and sustainance of tps in the Corps Z is primarily dependent on two axis ie. Rohtang and Zozila. In addn to the same, large no of accretion forces too are indn and deindn every yr along the same.

2. Movement of the tps along with the AWS, road space mgt along the two axis assumes prime importance. At present cvy and road space mgt is time consuming, manpower intensive and a tedious task which is being undertaken by TCPs dply in the AoR which are manned by the CMP pers. Functioning at TCPs is manual which causes unprecedented delays in the cvy as same has to halt at every TCP thereby also posing security risk and road space mgt issues.

3. HQ 14 Corps (Q) has initiated a RFID tag and scanner based proj which will facilitate Cvy mgt incl requisite permissions, loc of cvy vehs, qty and type of load. The proj aims at automating the functionality at TCP incl checking of veh and dvrs to overcome the shortcomings of existing manual procedure and facilitate the same with inclusion of state-of-art tech. The appl is reqd to be extn to all TCPs of the Corps AoR with servers at the Corps HQ and hosted on ADN, it is reqd to be whitelisted post AoN/ IPA by DG IS, followed by vetting from ACG (Cyber Security), AHCC (layout and architecture) and DG MI (content). Fwg docus are encl herewith for the same: -

(a) Checklist.

Flag A

(b) Statement of Case (As per DPM 2009).

Flag B

(c) RFP.

Flag C

(d) Bill of Material.

Flag D

(e) Op Necessity Cert.

Flag E

(f) Vendor Matrix (03 x Firms).

Flag F

(g) Comparative Statement.

Flag G


(h) GeM availability report.

Flag H

(j) Details of Software and Hardware.

Flag J

4. Case file is submitted for accord of AoN/ IPA by DG IS pl.


(Rohit Choudhary)
Maj
Project Officer

18 Jul 2024

24:
Commanding Officer, 5014 ASC BN (MT)

1. Ref note ante.

2. Proposal for incorp RFID Tag & Scanner based sys in mil Cvy for better monitoring of Cvy's & efficient Cvy Mgt is PU here with along with Connected Documents.

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Sheet No: Two

3. For perusal & AOW sanction please.

3.

18 July 27.

COL Q (ops & tk), HQ 14^{xxx}
(Through AQM4 (ops))

Para 4 Note 1 recommended

Shawat 06/08
Offg Brig Q

CHECKLIST TO BE ATT WITH SOC FOR THE PROPOSAL

S No	Mandatory Details	Remarks
1.	Name of Proj (incl ver)	E-Tag System for Military Convoy in 14 Corps Zone
2.	Name of Sponsor	5014 ASC Bn (MT)
3.	Type of Sw (Bespoke/COTS/Customized)	Customized
4.	Brief justification/ endorsement on reqmt for devp of Sw appl	E-Tag systems will be utilised to automate the process of veh iden, cvy mgmt and road space mgt for entire formation. The sw will facilitate Cvy mgt incl requisite permissions, loc of cvy vehs, qty and type of load.
5.	Aim, Scope and Purpose incl utility, beneficiaries and tgt users.	<p>Aim. To automate the process at TCP for veh iden, check, registration and data entry.</p> <p>Scope. The appl will be used for all cvys at all TCPs of 14 Corps Z.</p> <p>Purpose. The web appl will be utilised to automate the process of veh iden, cvy mgmt and road space mgt for entire formation. The sw will facilitate Cvy mgt incl requisite permissions, loc of cvy vehs, qty and type of load.</p> <p>Beneficiaries. The tool will affect all ranks of IA, Mil cvys and primarily help TCP, ASC Bns and Q Br of fmn.</p> <p>Tgt Users. All ranks of IA.</p>
6.	To be hosted on internet/ADN with brief justification	<p>(a) To be hosted on ADN.</p> <p>(b) Avbl of this tool over ADN will ensure easy access to the appl to all ranks in office complex.</p> <p>(b) Cvy detls of the fmn is a sensitive info which cannot be risked to be hosted on civil internet.</p>
7.	Being devp in-house or through IT funds	Being devp Through ACSFP fund.
8.	Usability of proposed appl by other arms/services/org/est	E-Tag systems can be utilised by all arms and services.
9.	Hw and IT infrastructure reqd in the form of Virtual Machines at Data centre (incl memory, storage and processing capb)	<p>Fwg infra is reqd:-</p> <p>(a) UHF Prime reader – 70 units</p> <p>(b) Fast Tag 42 - 6000 units</p> <p>(c) RFID Reader – 3</p> <p>(d) Existing IT infra (ADN PCs & local contv)</p>
10.	Brief detls of the content of the proposed Sw appl	E-Tag systems will automate the process at TCP for veh iden, check, registration and data entry.

S No	Mandatory Details	Remarks
11.	Endorsement of Head of Br/ Svc/ Fmn	Yes
12.	Detls of user base.	All ranks of IA.
13.	Envisaged cost of entire proj incl license fees and maint	₹ 49,95,500.00
14.	Projected date of completion incl major timelines	
15.	Brief detls of Sw platform and tech stack proposed for devp of appl incl op sys dependencies (if any)	The web appl is based on: - (a) HTML and CSS (b) Bootstrap (c) JS (d) Kestral (e) Dot Net Core 8.0 (f) MVC Pattern
16.	Brief detls of proposed nw and Bw reqmts	The web appl can run on regular user Bw
17.	Brief detls of OS and Sys software reqmts	(a) <u>OS</u> . Windows (b) <u>Software</u> . Dot Net Core 8.0
18.	Brief detls of data security measures incl backup of data	(a) Encryption of all data being stored in database is ensured. (b) Weekly backup of complete database. (c) Logging of all activities on the web appl is implemented. (d) SSL.
19.	Brief detls of proposed database engine to be used in the appl	SQL Server Express Edition
20.	Detls of Sw architecture and COTS Sw proposed to be utilised	(a) Sw architecture will be based on Dot Net Core 8.0, MVC Architecture. (b) Sw is being devp by M/S Newrom Software Solution
21.	Detls of proposed architecture – centralised/ federated/ hybrid	Centralised architecture
22.	Brief detls of proposed user of Public Key Infra (PKI) and Iden and Access Mgt (IAM)	User registration and logging in has been devp (similar to MySpace)
23.	Technology dependencies (if any)	NA
24.	Database reqmts.	SQL Server Express Edition
25.	Enhancement/ upgradation (incl patch mgt/ Sw updt procedure and mechanism)	Can be upgraded upon user reqmts.
26.	Detls of licensing	NA

**STATEMENT OF CASE FOR E-TAG SYSTEM FOR MILITARY CONVOY IN 14 CORPS
ZONE THROUGH ACSFP FOR THE FY 2024-25"**

1.	Unit/ Directorate/ Office initiating the SOC	5014 ASC Bn (MT)/ HQ 14 Corps PIN – 917823, c/o 99 APO
2.	Name of the item(s)/services being procured category {Ex-ordnance, Medical, IT, Engineering, MT, Electrical, Electronic, Clothing, Aviation, General FOL, Machinery, Spares, Communication, Navigation, Provisions, Weapons, Armament, Ammunition, Repairs, Service and other categories (to be specified) Nomenclature of items with details shown in S of C.	E-Tag System for Military Convoy in 14 Corps Zone
3.	Justification for procurement: -	
	(a) Board purpose of items being procured	E-Tag systems should be developed for Military convoy in 14 Corps Zone. On success of the system, it may be incorporated for all Mil convoys in Northern Command and thereafter all formations of Indian Army.
	(b) <u>Authority if any under which the proposal is being initiated</u> Govt Rules/Orders Service specific instruction subsidiary instructions etc to be quoted.	"Non-Scaled".
	(c) <u>If it is a non - scaled item</u>	Non scaled
	(d) <u>If it is a non - scaled item the fwg information to be provided:-</u>	
	(i) Which item was serving the purpose till the date?	No item was serving the purpose till date.
	(ii) How the present proposal will serve the purpose?	(a) Availability of a system with n E-Tag placed on the Defence Depot vehicles which contains all vehicle related info. (b) A receiver station at the check point which scans the e-Tag for the information. (c) Army Data Network connectivity at all Traffic check posts/halts/Transit Camps.
	(iii) Whether scaling action has been initiated? If yes, reference number to be given. If not reasons for not doing so to be given	No

(e)	Detailed Justification from user: -	Attached as Appendix 'A'
(i)	Category of proposal: -	
(aa)	Fresh purchase	Yes
(ab)	Upgradation	-
(ac)	Replacement	-
(ad)	Maintenance	-
(ae)	Repair	-
(af)	Any other (to be specified)	-
(ii)	If it is a fresh purchase, the following information to be provided: -	
(aa)	How was the purpose being served till date?	The item is being purchased first time and there is no any this of item purchased before.
(ab)	Why it can't be served with up-gradation of the existing items?	-
(iii)	If any other, the following information to be provided: -	
(aa)	Details of original purchase viz, year cost of quantity residual life after up gradation, etc	Not Applicable
(ab)	Confirmation that issues of standardization and compatibility have been taken care of	Not Applicable
(iv)	If it a case of replacement the fwq information to be provided :-	
(aa)	What will be done with the items being replaced	Not Applicable
(ab)	Details of proposal for disposal of existing items (BER certificate, etc to be enclosed)?	Not Applicable
(ac)	Possibility of buy-back or other-wise, alongwith reasons	Not Applicable
4.	Quantity: -	
(a)	Basis for working out the quantity against each item – (formula, methodology, etc).	Not Applicable
(b)	Details like authorized holdings, existing holdings, Dues-in, Dues-out etc.	Not Applicable
(c)	Calculation sheets / PR documents to be enclosed with the SOC.	Not Applicable
(d)	Proposed distribution of items being bought with justification	-

5.	Estimated cost of proposal – various elements of cost, such as the basic cost taxes, transportation cost training cost AMC, etc should be shown separately and the grand total should also be indicated. Basis for working out the estimated cost of proposal to be indicated as follows :-	Estimate cost for the proj procurement is RS 49,95,500.00 (Rupees forty nine lakh ninety five thousand five hundred only) (Appendix 'B')
(a)	Last Purchase Price (LPP) - Year, Escalation factor, source, quantity to be mentioned	NA
(b)	Budgetary quotes - Source, period, etc to be mentioned along with copy of budgetary quotes.	Nil
(c)	Market Intelligence-Source, period etc to be mentioned alongwith relevant enclosures	Yes Attached as vendor Matrix (Appendix 'C')
(d)	Rates obtained from other organizations-Sources, period quantity etc to be mentioned alongwith relevant enclosures	Nil
(e)	Professional Officers Evaluation – detailed reasoning and inputs used to be enclosed.	Nil
(f)	Any other method adopted (to be specified and explained, along with the reasons)	NA
6.	Details of the last purchase: -	
(a)	The Quantity and dates on which similar items were procured in last one year	First time
(b)	If it is a recurring item, the total period for which the items are being procured	Not Applicable
(c)	The mode of tendering in respect of last purchase	Not Applicable
(d)	The source of last purchase	Not Applicable
(e)	Any other relevant information	Not Applicable
7.	Availability of funds: -	
(a)	Is it included in the CPPP (if applicable)?	-
(b)	If yes, relevant serial number of PPP to be quoted	-
(c)	Major Head, Minor Head, Sub Head and Detailed Head under which expenditure in respect of the instant proposal is to be booked	Major Head 2076 Minor Head 110 C
(d)	Code Head, as mentioned in Classification Hand Book	-
(e)	Fund Availability certificate as per format given.	Chapter 5, Para 5.2.4 of DPM-2009
(f)	Name of the paying agency	PCDA, Northern Comd, Jammu.

8.	<u>Competent Financial Authority: -</u>	
(a)	Particulars of the Schedule/Sub-Schedule and the Serial Number thereof under which powers are being exercised	Schedule-20 of DFPDS-2021
(b)	Name/Level of the CFA as mentioned in the Schedule, under whom the proposal falls	GOC-in-C Northern Comd.
9.	<u>Mode of Tendering: -</u>	
(a)	Open tendering-mention the website and newspapers in which the advertisement is proposed to be published (Draft advertisement to be enclosed)	Opening Tendering
(b)	Limited Tendering – Mention the reasons for LTE if value of the proposal is more than Rs 25 lakhs (The list of vendors for LTE and reasons for including them to be enclosed)	Not Applicable
(c)	PAC tendering – Enclose draft PAC certificate alongwith detailed justification for PAC tendering	Not Applicable
(d)	Single tendering – mention the grounds of urgency/ operation reasons/ technical requirements etc on which STE is being proposed	
(e)	GeM	Yes
10.	<u>Draft RFP: -</u>	
(a)	Draft RFP to be enclosed	Attached as Appendix 'D'
(b)	Special conditions applicable to the proposal which have been proposed which in draft RFP to be highlighted in the SoC	
11.	Technical details with technical parameters	Attached as Appendix 'E'
12.	Operational Necessity	Attached as Appendix 'F'
13.	Vendor Matrix	Attached as Appendix 'G'
14.	Quotations	Attached as Appendix 'H'
15.	GeM Availability Report and past Transaction Summary	Attached as Appendix 'J'

Place: C/o 56 APO

Date: 18 Jul 2024

Maj
Project Officer
5014 ASC Bn (MT)

DETAILED JUSTIFICATION

1. The present system of checks for all vehicular move along an axis involves carriage of car diaries, road worthiness certificate, move authority and other documents by the drivers, producing the same at the Traffic Check Posts (TCPs) and making entries in the log books. Maintenance of the logs, passing information to the next Check Post and physical checking of the documents for each vehicle entails huge wastage of time and resources and also ties down Corps of Military Police personnel to the Check Posts which can be utilized for mobilization duties along the route. In addition to the above problems, the large Staff Duties move and Advance Winter Stocking convoys (100-150 vehicles) standing along the road not only hinders the civil traffic move along the route but also pose as a potential static target especially in Counter Insurgency infested areas and during operations.

2. The system would be akin to the present **fast tag** systems being employed at civil toll booths wherein the required information of the vehicle is captured automatically and the convoys can proceed towards its destination/halt timely. The system would require a software and a hardware component which enables storing of data related to vehicle, transmit it to the receiver (hardware) and the receiver transmits the data to the Army Data Network Computer of the Traffic Check Posts. The following features are envisaged:-

(a) **Software.**

- (i) An E-Tag similar to the Radio Frequency Identification tags on the vehicle.
- (ii) The E-Tag should contain data such as car dairy, Traffic Check Post permission, details of load carried in the vehicle, driver and passenger details, road worthiness certificate etc. The entire data should be encrypted.
- (iii) The E-Tag should be enabled for reprogramming for every trip.
- (iv) The software should be compatible with windows.
- (v) It should emit the data to the server immediately on receipt of info on vehicles passing the check post.

(b) **Hardware.**

- (i) A receiver antenna similar to fast tag receivers at all Check Posts.
- (ii) It should be able to receive encrypted data and feed it to the connected Army Data Network Computer.
- (iii) It should be able to op in temp range of (-)30 degree to (+)50 degree C.
- (iv) It should have inherent protection against wind, dust and rains.
- (v) It should be connected to the boom barrier. The barrier should open automatically on receiving every legitimate vehicle data.

(c) The requirement of Corps of Military Police should be precluded for mobile tasks. The Traffic Check Posts to be manned by Guard Duty persons of units/formations closest to the Traffic Check Posts who would be trained for the task.

(d) Outsourcing of the Traffic Check Posts may be considered. These may be regularly checked by mob Corps of Military Police personnel.

(e) **Accessibility.**

(i) Main window of all data accessible for viewing by all users (Traffic Check Posts and formations enroute responsible for convoy movement).

(ii) No data changes permissible by any user.

(iii) Download facility only available to admin. Download is also permitted of respective data sheets by users.

(f) The repository of the convoy data will be with the highest formation under which the convoy movement is being undertaken.

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Appendix 'B'

(Ref Para 5 of S of C)

BILL OF MATERIAL

Ser No	Nomenclature	Qty	Price (INR) (Excl GST)	Total (INR) (Excl GST)
1.	Development of Cost	01	22,44,000.00	22,44,000.00
2.	UHF Prime reader	70	35,000.00	2,70,000.00
3.	Fast Tag 42 + (6000 units)	6000	45.00	2,70,000.00
4.	RFID Reader	03	10,500.00	31,500.00
5.	Training and Deployment - Remote	01	0.00	0.00
			Total	49,95,500.00



TO BE FILLED BY THE ORIGINAL UNIT

FORMAT FOR QUANTITY AND COST OF PROPOSAL AS PER DPM 2009

Ser No	Nomenclature	Brand Name	Mfd Dt	Marked By	Rater per Qty (in Rs)	Total Price (per unit) (in Rs)	Total Cost (Excl GST)
1.	E-Tag System For Mil Convoy	-	-	-	49,95,500.00	49,95,500.00	49,95,500.00
(Rupees forty nine lakh ninety five thousand five hundred only)							

