

Tele : 2863

Through ASIGMA

2 Corps Sig Regt (AREN)

PIN - 916902

C/o 56 APO

2512/OIC/Sigs/ Misc /

07 Mar 24

DDG IT, Dte Gen of Info Sys
General Staff Branch
Integrated HQ of MOD (Army)
DGIS Enclave, RTR Marg
New Delhi - 110010

**WHITELISTING OF APPLICATION SOFTWARE : INMS (INDIGENOUS NETWORK
MANAGEMENT SYSTEM) SW DEVP BY CAIR, DRDO (PRE APPROVAL STG)**

1. Please ref your Dte letter No B/0400/Policy/Sw/DDG IT (T&P) dt 19 Jul 2022.
2. The docu(s) as per checklist (Pre approval Stg) for whitelisting of '**INMS (Indigenous Network Management System)**' Software devp by CAIR, DRDO is submitted for whitelisting for 2 Corps Sig Regt (A).
3. For further necessary action please.


(AK Singh)
Lt Col
2IC
for CO

Encl : (As above)

Tele (दुरभाष) :2712

BY ASIGMA

HQ 2 Corps (Sigs)

मुख्यालय 2 कोर (संकेत)

PIN - 908502

पिन-908502

c/o 56 APO

मार्फत 56 सेना डाकघर

12109/Rev/Sigs 1/

08 Mar 2024

2 Corps Sig Regt (AREN)

IN PRINCIPLE APVL FOR WHITELISTING OF INMS : PRE APVL STG

1. PI ref your Noting Sheet No 2512/OIC/Sigs/Misc dt 24 Feb 2024.
2. Noting Sheet is returned herewith, You are requested to take up the case directly with DDG IT.

duly perused.

Saptarshi Chakrabarty

(Saptarshi Chakrabarty)

सप्तर्षि चक्रवर्ती

Col

कर्नल

Offg Col Sigs (Proj Mgt)

कर्नल सांकेतिक

(परियोजना प्रबन्धन)

for CSO

कृते मुख्य संकेत अधिकारी

Encl: As Above

**IN PRINCIPLE APVL FOR WHITELISTING OF INMS (INDIGENOUS NETWORK
MANAGEMENT SYS) SW DEVP BY CAIR, DRDO: PRE APVL STAGE**

1. Name of Proj : Indigenous Network Management System
2. Name of sponsor : 2 Corps Signal Regiment (AREN)
3. Type of Software : Customised
4. **Brief Justification**. Post implementation of NFS and UADN across the fmns/Units/Subunits, the spread of network elements has increased manifolds. To ensure the reliable, and failsafe comn, it is essential for fmn signallers to have tools to monitor, control and optimize the performance and functionality of computer network. Network administrator should be empowered to oversees network resources, detect and address issues, and ensure the smooth operation of the network.
5. **INMS (Indigenous Nw Mgt Sys)**. INMS is the Nw mgt tool developed by CAIR Lab, DRDO, Bengaluru. It is intellectual property rights are owned by DRDO. INMS is built on open standards and protocol with no proprietary software. It is being offered license free to all Govt of India networks. It supports mgt of heterogeneous Nw elements.
6. **Aim**. To dply Nw mgt sys on ADN for visibility fault detection/ troubleshooting and monitoring of network elements at Ambala Access Nw, and on AREN Nw of 2 Corps.
7. **Scope**. The proposed INMS will be dply on Ambala access Nw and AREN Nw of 2 Corps during ops in centralised mgt architecture for health monitoring of Nw elements, Config mgt, Nw Discovery and Nw view to include fault, configuration, accounting, performance, security (FCAPS) mgt.
 - (a) WAN Mgt
 - (b) LAN mgt
 - (c) HOST mgt
 - (d) Application/ Services mgt
 - (e) Inventory mgt
 - (f) Non IP device mgt
 - (g) Nw planning with integrated GIS
8. **Hosting**. Proposed INMS will be hosted on Ambala Nw & Nw of 2 Corps in a centralised mgt architecture. It will be dply as a common interface with Edge router/Metro Aggregation router (MAR) of Ambala access Nw and NFS Bricks of 2 Corps. Interfacing with MAR of Access Nw and AREN Nw will provide high level overview of the network elements such as MER (Metro Ethernet ing) switches, MSAN, ADN subs and end point clients. The INMS has the capability to manage heterogeneous network elements, devices of any technology and any make/ model which has the standard management interface can be monitored and managed.

9. **Devp.** The INMS software is already developed and being offered license free by DRDO for all GOI networks.

10. **Usability by other Arms/Services.** The INMS Sw is suitable for any IP / non-IP based layer 2 devices such as RRF & BEU. Also, it can be dply and explored for svl devices/UAVs managed by SATA regts.

11. **Hw and IT infrastructure.** The IT infrastructure reqmts are as under

(a) **Hardware.** 8 GB RAM, 500 GB Internal Storage, 1/10/100/1000 E

(b) **Software.**

(i) Operating System – Linux RHEL 6.0 (32- bit)

(ii) Database Mgt – PostgreSQL 9.1 (32-bit)

(iii) Programming language – C++

(iv) GIS Library – CAIR GIS (32- bit)

12. **Brief details of the content of the Sw appl.** Contents of the Sw appl are as under :-

(a) **Functional features.** INMS offer the following features :-

(i) WAN /LAN Mgt

(aa) Network Discovery

(ab) Network View

(ac) Monitoring of Nodes & links

(ad) Notifications on devices status changes, Link up/ Link down, Threshold violations, config change alerts, Notification through alarm, message, Email, SMS.

(b) **Mgt.**

(i) **Health Mgt.**

(aa) Tfc load balancing

(ab) Alternate routing

(ii) **Configuration Mgt.**

(aa) Config backup

(ab) Config upload

(c) **Reporting.**

(i) Real time reporting of faults and performance

(ii) Historical reports of faults and performance

(iii) Customisable reports

(iv) Nw status report, Nw Query report

- (d) **Graphs/ Views/ Maps.** Performance graphs, Topology view, WAN view, LAN view, VLAN view, Trending graphs on dashboard
- (e) Host Mgt
- (f) Applications/Services mgt
 - (i) Nw planning with Integrated GIS.
- (g) Inventory mgt
- (h) Non- IP device mgt (BEU monitoring, Radio Relay mgt)