

**STATEMENT OF CASE FOR WHITELISTING OF ENTERPRISE LEVEL LOGISTICS  
MANAGEMENT APPLICATION FOR IA : VIKALP  
(VITAL INVENTORY KEEPING AND LOGISTICS PORTAL)**

**INTRODUCTION**

1. Integrated Quartermaster Package (IQMP) is a web appl, dply on unit LAN by IA units to automate the entire business process/ functions of 'Q' branch. Since PAN IA rel of IQMP in 2017, the appl has undergone numerous amdts incorporating policy changes and indn of new units, rk, wpn, veh, eqpt & ord items in IA. IQMP is being used by majority of IA units for maintaining various Ledgers and requisite auditable documents pertaining to 'Q' branch.
2. The IQMP was developed during the year 2013 to 2016 by M/S TCS under the aegis of Army Software Development Centre. Based on the latest technology avbl at that time and network limitations, IQMP was devp as a LAN based web appl on Dot Framework 4.0 architecture.
3. With the proliferation of unified ADN on NFS and obsolescence of IQMP tech stack, there is a reqmt to upgrade it's technical stack including the incorporation of new features based on user feedback.

**PROPOSAL**

4. In order to provide a centralised web based software solution to automate the critical functions of 'Q' branch and logistics mgt for all IA units, it is proposed that based on the business logic of IQMP, an enterprise level logistics management appl for IA to be developed on latest tech stack for utilisation by units/ formations/establishments on ADN.

**JUSTIFICATION**

5. The Integrated Quartermaster Package (IQMP) is a web appl, developed during the year 2013 to 2016 by M/S TCS under the aegis of Army Software Development Centre. Based on the latest technology avbl at that time and network limitations, IQMP was devp as a LAN based web appl on Dot Framework 4.0 architecture. With the proliferation of unified ADN on NFS and obsolescence of IQMP tech stack, there is a reqmt to upgrade it's technical stack including the incorporation of new features based on user feedback.
6. In order to provide a centralised web based software solution to automate the critical functions of 'Q' branch and logistics mgt for all IA units, it is proposed that based on the business logic of IQMP, an enterprise level logistics management appl (**VIKALP**) for IA to be developed (in house) on latest tech stack for utilisation by units/ formations/establishments on ADN.
7. **VIKALP** (Vital Inventory Keeping And Logistics Portal) will include Ration Module, MT Module, Clothing Module, Ordnance Module, Arms Module, Amn Module, FOL Module and Audit Module to automate the routine functioning and logistics management in all the IA units.
8. The architecture of the web appl **VIKALP** (Vital Inventory Keeping And Logistics Portal) is simple and robust. The appl runs on Tomcat web server & PostgreSQL Database at the back-

end with Java, HTML & CSS at the front-end. The appl will be integrated with IAM for access control, rendering the intended users with read access and the admin/auditor account with read & write access.

9. Advantages of the ibid web application are as under:-

- (a) Latest Tech Stack used for devp.
- (b) Centralised architecture for dply on ADN.
- (c) Role based Access Control.
- (d) Renders paperless office functioning.
- (e) Integration with other appl like MISA, CICG, AICP, HRMS and MISO.
- (f) Online Indenting for Ration/Clothing/Ordnance/FOL items.
- (g) Provn for transfer of indl profiles (personal details, Ration Card, Clothing Card, etc) to other units in case of posting in/out.
- (h) Real time stock monitoring.
- (j) Online reports and returns.
- (k) Provn for onboarding of CGDA for online audit by LAO.

10. The application needs minimal bandwidth and it can be hosted on **ADN**.

#### FINANCIAL EFFECT

11. There are no financial implications as the application has been developed in-house by Army software Development Centre / Dte Gen Info Sys in collaboration with BISAG-N.

#### SUMMARY

12. It is recommended that **VIKALP** (Vital Inventory Keeping And Logistics Portal) an enterprise level logistics management appl be whitelisted for utilization by units/ formations/ establishments on ADN. The same will immensely assist in automating the routine functioning and logistics management in all the IA units.

Station: New Delhi

Dated:



(Ashish Tomar)

Maj

Project Offr

for Offg Comdt

✓  
RECOMMENDED/NOT RECOMMENDED BY COMMANDANT, ASDC

ले. कर्नल  
Lt Col  
परियोजना अधिकारी  
Offg Commandant  
74/आर्मी साफ्टवेयर विकास केंद्र  
Army Software Development Centre

**Appx 'C'**

(Ref para 9(a) of DDG IT letter No  
B/04001/Policy/Sw/DDG IT (T&P)  
dt 19 Jul 23)

<b><u>S.No</u></b>	<b><u>Mandatory Details</u></b>	<b><u>Remarks</u></b>
1.	Name of proj (incl ver).	<b>VIKALP</b> (Vital Inventory Keeping And Logistics Portal)
2.	Name of Sponsor.	ASDC (DGIS)
3.	Type of appl (Bespoke/COTS/Customized).	Bespoke
4.	Brief justification/ endorsement on reqmt of devp of Sw appl.	There is a reqmt to upgrade the technical stack of existing IQMP and incorporation of new features for devp of a centralised appl to be hosted on ADN.
5.	Aim & Scope Purpose incl utility, beneficiaries and tgt users.	To devp a centralised web based software solution to automate the critical functions of 'Q' branch and logistics mgt for all the IA units.
6.	To be hosted on Internet/ ADN with brief justification.	ADN (to ensure centralised architecture and accessibility by all IA units)
7.	Being devp in house or through IT funds.	Devp in-house by ASDC in collaboration with BISAG-N.
8.	Usability of proposed apps by other arms/ services/ org/ est.	The appl will be avbl for use by PAN IA units.
9.	HW and IT infrastructure reqd.	64 GB RAM, 24 CORE Processor and 2 TB Server space.
10.	Brief details of content of the proposed Sw appl.	Ration Module, MT Module, Clothing Module, Ordnance Module, Arms Module, Amn Module, FOL Module and Audit Module
11.	Endorsement by Head of Br/ Svc/ Fmn.	DG IS
12.	Details of user base	PAN IA units
<b><u>Addl Details (Optional in Pre Apvl Stg : Mandatory in Post Apvl Stg)</u></b>		
13.	Envisaged cost of entire proj incl license fees and maint.	Devp in-house by ASDC in collaboration with BISAG-N.
14.	Projected dt of completion incl maj timelines.	The Iterative and Incremental Model of Software Devp will be emp for devp of <b>VIKALP</b> . The various modules of the appl will be devp & released for the envt in iterations and subsequently integrated with previous iterations/versions.
15.	Brief details of Sw platform and tech stack proposed for devp of appl incl op sys dependencies (if any).	Spring MVC Framework with JAVA ver 1.8 and Back-end as Postgre SQL 16


16.	Brief details of proposed network and bandwidth reqmts.	Max payload size of URL contents of the appl is likely to be 3 to 4 MB. This can be throttled to user with existing BW of ADN.
17.	Brief details of OS & Sys software reqmts.	Win OS/Linux, Software Postgres 16, Tomcat 9.0.89
18.	Brief details of proposed data security measures incl backup of data.	Security enforcement as per latest spring security framework. TLS 1.3 ( <a href="https://">https://</a> ) Port 443 (As per Data Governance Policy)
19.	Brief details of Proposed Database Engine to be used in the appl.	PostgreSQL 16
20.	Details of Sw architecture and COTS Sw proposed to be utilised.	Centralised Architecture
21.	Details of proposed architecture Centralised/ Federated/ Hybrid	Centralised Server at AHCC
22.	Brief details of proposed utilization of Public Key Infra (PKI) and Iden and Access Mgt (IAM).	IAM (integration at final dply stage in-conjunction with AHCC
23.	Technology dependencies (if any)	As per Para 15-22
24.	Database reqmts.	As per Para 19
25.	Enhancements/ upgradation (incl patch mgt/ Sw updt procedure and mechanism).	Enhancements and patch updt (Mgt / Sw) In house (ASDC/DGIS)
26.	Details of licensing (if any).	NA



## NOTING SHEET

Sheet No:

Subject: Whitelisting of VIKALP (Vital Inventory Keeping And Logistics Portal) for hosting on ADN

Appt	Content	Ref
<u>GSO-1,</u> <u>ASDC</u>	<p style="text-align: center;"><b>1</b></p> <p>1. PI ref DDG IT, Dte Gen Info sys letter No B/04001/Policy/Whitelisting SOP/DDGIT (T&amp;P) dt 19 Jul 2022.</p> <p>2. <b><u>Introduction.</u></b> Integrated Quartermaster Package (IQMP) is local LAN based web appl, dply by IA units to automate the entire business process/ functions of 'Q' branch. The IQMP was developed during the year 2013 to 2016 by M/S TCS under the aegis of Army Software Development Centre. Based on the latest technology avbl at that time and network limitations, IQMP was devp as a LAN based web appl on Dot Framework 4.0 architecture.</p> <p>3. <b><u>Need for Upgradation.</u></b> With the proliferation of unified ADN on NFS and obsolescence of IQMP tech stack, there is a reqmt to upgrade it's technical stack including the incorporation of new features based on user feedback.</p> <p>4. <b><u>Justification.</u></b> In order to provide a centralised web based software solution to automate the critical functions of 'Q' branch and logistics mgt for all IA units, it is proposed that based on the business logic of IQMP, an enterprise level logistics management appl (<b>VIKALP</b>) for IA, to be developed (in house) on latest tech stack for utilisation by units/ formations/establishments on ADN. <b>VIKALP</b> (Vital Inventory Keeping And Logistics Portal) will include Ration Module, MT Module, Clothing Module, Ordnance Module, Arms Module, Amn Module, FOL Module and Audit Module to automate the routine functioning and logistics management in all the IA units.</p> <p>5. <b><u>Technical Overview.</u></b> The architecture of the web appl <b>VIKALP</b> (Vital Inventory Keeping And Logistics Portal) is simple and robust. The appl runs on Tomcat web server &amp; PostgreSQL Database at the back-end with Java, HTML &amp; CSS at the front-end. The appl will be integrated with IAM for access control.</p> <p>6. <b><u>Proposal for Approval.</u></b> In light of the above points, it is proposed that the <b>VIKALP</b> (Vital Inventory Keeping And Logistics Portal) be granted In-principle approval for whitelisting on the ADN. This approval is sought as part of the pre-approval stage of software deployment, following the Standard for Software Development as stipulated in the DGIS policy.</p> <p>7. Apropos, there is a requirement of <u>In-principle approval</u> from the appropriate automation committee for whitelisting.</p> <p>8. The fwg docus are fwd for whitelisting of proposed web application as per policy u/r -</p> <p style="margin-left: 40px;">(a) Statement of Case (Flag A).</p> <p style="margin-left: 40px;">(b) Check List for Pre-Apvl Stg (Flag B).</p> <p>9. Fwd for necessary approval pl.</p> <div style="text-align: right; margin-top: 20px;">               (Ashish Tomar)              Maj              GSO-1              13 Jun 2024           </div>	<p><u>PUC</u></p> <p><u>Flag 'A'</u></p> <p><u>Flag 'B'</u></p>