STATEMENT OF CASE FOR WHITELISTING OF STUDY LEAVE MANAGEMENT SOFTWARE APPLICATION

INTRODUCTION

1. Study Leave is medium available to regular officers of Indian Army to upgrade/ enhance their knowledge for benefit of the organisation. Annually, more than 1000 officers apply for Study Leave against approximate 500 vacancies. Entire process of Study Leave including application, approval and subsequent management of officers is paper based and involves enormous secretarial work. There is felt need to automate the Study Leave management process by leveraging the available technology.

PROPOSAL

2. It is proposed to automate the Study Leave application and management process through a software application hosted on Army Data Network (ADN).

DETAILED JUSTIFICATION

3. A software application has been developed by BISAG-N for automation of the Study Leave application and management process. The application, developed in JAVA script, will be deployed on ADN. It will enable officers to apply for Study Leave through the software application using IAM, precluding requirement of physical applications.

4. The web application leverages existing technology to modernise the Study Leave management process, bringing it in line with contemporary best practices. Deployment of the software application on ADN will automate the processes and accrue following benefits to the organisation:-

(a) **Reduced Paperwork**. The software application will replace physical forms, significantly reduce paper consumption and associated storage. It will also enable digital storage of all documents leading to easy access & accounting.

(b) **Reduced Processing Time**. Automation will streamline the entire process from application submission to approval and record keeping. Officers will be able to track the status of their application in real time.

(c) **Economical**. Automation will minimise the need for manual data entry, processing and storage leading to significant cost saving in terms of personnel and resources.

(d) **Improved Systemic Efficiency**. The software application will enhance transparency and accountability. Centralised electronic records will enable better data management, facilitating improved analysis.

(e) **Better Monitoring Post Grant of Study Leave**. Automation will preclude the requirement of sending periodic feedbacks by officers to ARTRAC in physical form. Officers will be able to upload the feedbacks (semester results) on the software application. It will result in better tracking of officer's progress on Study Leave.

5. Check list for the proposed software application is attached as **Appendix**.

FINANCIAL IMPLICATIONS

6. The software application has been developed by BISAG-N on no cost basis. It will be hosted on AND, providing access through existing connected terminals. Thus, there are no financial implications involved in hosting the Study Leave management software application on ADN.

CONCLUSION

7. Deployment of a software application for Study Leave management for officers of IA offers numerous benefits. By leveraging the technology, the proposed application will modernise the entire Study Leave management processes, enhancing systemic efficiency and bringing cost effectiveness.

RECOMMENDATIONS OF MGGS TRAINING BRANCH (B) ON THE STATEMENT OF CASE FOR WHITELISTING OF STUDY LEAVE MANAGEMENT WEB APPLICATION

Software application developed by BISAG-N will automate the entire process of Study Leave management. It will lead to improved systemic efficiencies and bring transparency in the processes. Whitelisting of the web application for hosting on Army Data Network is endorsed and strongly recommended.

Station : c/o 56 APO

Date : 24 Jan 2025

(Ajay Feroze Shah)
Maj Gen
MGGS Trg 'B'
HQ ARTRAC

Appx
(Refer Para 5 of Statement of Case on Whitelisting of SL Mgt Web Application)

CHECKLIST TO BE ATT WITH SOC FOR THE PROPOSAL

<table>
<tr><th>S No</th><th>Mandatory Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Name of proj (incl ver)</td><td>Study Leave Mgt (ver 1.0)</td></tr>
<tr><td>2.</td><td>Name of sponsor</td><td>PME (SL) Sec / HQ ARTRAC</td></tr>
<tr><td>3.</td><td>Type of Sw (Bespoke/ COTS/ Customized).</td><td>Customised</td></tr>
<tr><td>4.</td><td>Brief justification/ endorsement on reqmt for devp of Sw appl.</td><td>Proposed web appl will automate all aspects of the Study Lve incl appl, documentation and monitoring of progress. This will lead to improved systemic efficiency.</td></tr>
<tr><td>5.</td><td>Aim, Scope and Purpose incl utility, beneficiaries and tgt users.</td><td>Aim. To automate Study Lve appl, documentation and monitoring processes.

Scope. The web appl is designed to cover all aspects of Study Lve i.e. from appl till completion.

Purpose. Approx 1000 offrs apply for Study Lve every yr. Presently entire docu from receipt of appl till completion is being done in paper form. It leads to systemic inefficiencies, enhanced secretarial work and wastage of paper. Proposed web appl will lead to automation of the entire process.</td></tr>
<tr><td>6.</td><td>To be hosted on internet/ ADN with brief justification.</td><td>ADN</td></tr>
<tr><td>7.</td><td>Being devp in house or through IT funds.</td><td>Through BISAG-N</td></tr>
<tr><td>8.</td><td>Usability of proposed appls by other arms/ services/ org/ est.</td><td>By all Offrs of IA</td></tr>
<tr><td>9.</td><td>Hw and IT infrastructure reqd in the form of Virtual Machines at Data Centre (incl memory, storage and processing capb).</td><td>
<table>
<tr><th>Purpose</th><th>Qty</th><th># of Cores</th><th>RAM (GB)</th><th>Storage</th></tr>
<tr><td>Appl VM</td><td>2</td><td>8</td><td>16</td><td>100 GB</td></tr>
<tr><td>Database VM</td><td>2</td><td>16</td><td>32</td><td>100 GB</td></tr>
<tr><td>File VM</td><td>1</td><td>8</td><td>8</td><td>1 TB</td></tr>
<tr><td>Backup VM</td><td>1</td><td>8</td><td>8</td><td>2 TB</td></tr>
</table>
</td></tr>
<tr><td>10.</td><td>Brief details of content of the proposed Sw appl.</td><td>Spring Framework, JAVA. The web appl will have various fields to be filled by applicant offrs.</td></tr>
<tr><td>11.</td><td>Endorsement by Head of Br/ Svc/ Fmn.</td><td>MGGS Trg Branch (B)</td></tr>
<tr><td>12.</td><td>Details of user base.</td><td>PAN IA</td></tr>
<tr><td>13.</td><td>Envisaged cost of entire proj incl license fees and maint.</td><td>Nil</td></tr>
</table>

S No	Mandatory Details	Remarks
14.	Projected dt of completion incl maj timelines.	30 Apr 2025
15.	Brief details of Sw platform and tech stack proposed for devp of appl incl op sys dependencies (if any).	Spring Framework, JAVA. The web appl will be dply on the VM on two Physical Servers. The backup VM will be configured on a separate machine loc far fron the production sys.
16.	Brief details of proposed network and bandwidth reqmts.	ADN & minimum 1Mbps
17.	Brief details of OS & Sys software reqmts.	MS Server 2019/ 2022
18.	Brief details of proposed data security measures incl backup of data.	SSL and TLS for data security. Column encryption at database side. Automatic data backup every day (seven days rotation policy).
19.	Brief Details of Proposed Database Engine To Be Used In The Appl.	PostgreSQL
20.	Detls of Sw architecture and COTS Sw proposed to be utilised.	(a**) Framework** : Spring Framework, Java. (b**) Frontend Tool** : HTML, CSS, Javascript. (c) **Database** : PostgreSQL. (d) **Web-hosting Tool** : Tomcat (Appl Server), Nginx (Web Server). (e) **Operating System** : Ubuntu. (f) **Supporting Browsers**: Firefox, Edge, Chrome
21.	Detls of proposed architecture - Centralised/ Federated/ Hybrid.	Centralised
22.	Brief details of proposed utilisation of Public Key Infra (PKI) and Iden and Access Mgt (IAM).	IAM
23.	Technology dependencies (if any).	Nil
24.	Database reqmts.	PostgreSQL Ver 16
25.	Enhancement upgradation (incl patch mgt/ Sw updt procedure and mechanism.	Qtrly/on-occurrence. Centrally pushed through AHCC
26.	Details of licensing (if any).	MS Window/ Server & MS SQL