

VETTING OF SURYA ERP SOLN (SERPS) PH-I

1.	Unit/ Directorate/ office initiating the vetting	Central Command Signal Regiment
2.	Name of proj (incl ver) :	Surya ERP Soln (SERPS) ver 1.0 (Ph-I)
3.	Name of sponsor. :	HQ Central Comd (Sigs)
4.	Type of Sw (Bespoke/COTS/Customized)	Customized software appln
5.	Brief justification/ endorsement on reqmt for Sw appl	Purpose of SERPS is to enhance the overall op efficiency as well as lgs and adm of fmn and units under HQ CC through devp of a comprehensive, collaborative and integrated ERP Sw to address the auto reqmts across the verticals of ops, Op Lgs and adm. The soln will encompass the spectrum of fns incl comn state monitoring, lgs, land mgt, VC resource mgt, band mgt, etc. SERPS will provide and auto various platform of various processes for all stake holders of HQ CC and fmn/units.
6.	Aim, Scope & Purpose incl utility, beneficiaries and tgt users	<p>As an ERP soln to automate fn of various entities. The details of auto fun are as under:-</p> <p>(a) <u>VC Scheduler</u>. Application aims to automate the VC scheduling at fmn level. The appln accepts the VC requests, analyses the available resources, books the VC slot after approvals and automatically updates the VC details in daily comn state.</p> <p>(b) <u>Comn State Appln</u>. Application aims to automate the Comn state compiling process for the fmn. Comn State Appln, automates the comn state filing mechanism where the actual circuit state is filled by the end user at unit level and the compiled state is available to all users at higher levels upto Comd HQ.</p> <p>(c) <u>Band Mgt Appln</u>. Optimize tasking of mil bands of HQ Central Comd. Transparent detailment of mil bands for the yr with flexibility to amend the same at apex level only. Tasking centralised to ensure optimisation of mil band tasking.</p>
7.	To be hosted on internet/ ADN with brief justification.	The appln will be hosted on ADN to enable automation of VC Scheduling, Comn state compiling and effective mgt of mil bands. Hosting on ADN would enable use by all users effectively.

8.	Being devp in house or though IT funds	The appln has been developed by BISAG Soln, Gandhinagar, Gujarat.				
9.	Usability of proposed appls by other arms/services/org/est.	Application will be beneficial to all units and frmn HQ.				
10.	Hw and IT infrastructure reqd (for dply of SERPS soln).		Qty	# of cores	RAM (GB)	Storage
		Appln VM	2	8	16	100 GB
		DB VM	2	16	32	1 TB
		Backup VM	1	8	8	5 TB
11.	Brief details of content of the proposed Sw appl.	<p>(a) <u>Privilege Based Access</u>. The soln has central user database and provides privilege based access to users. Admin defines the access to various components of SERPS.</p> <p>(b) <u>VC Scheduler</u>. The scheduler allows the users and branches to register their VC requests specifying time, location, out stations and appointments required to attend the VC. The request is processed depending on availability of resources, VC load of that specific day and final check by the branches managing the media and VC rooms. Once the request is approved, all necessary appointments are intimated via a mail.</p> <p>(c) <u>Comn State Appln.</u> The Daily Communication State Application is a web-based application hosted on ADN, designed to streamline the Communication State reporting process between Signal Units and Higher Headquarters for daily updates. It provides an organized and efficient platform for the units to submit their daily updates, facilitates collaboration with higher Head Quarters, and enables effective decision-making.</p> <p>(d) <u>Band Mgt Appln.</u> Dynamic reqmt of the 17 mil bands under the jurisdiction of HQ Central Comd coupled with lve mgt of band pers places demands upon staff offr at all levels to seek an updated holistic view of the entire Comd mil band engagement prior to committing fresh detailment of the mil band. The proposed band mgt software (BMS) will facilitate efficient transparent engagement of all mil bands in the Comd.</p>				

12.	Endorsement by Head of Br/Svc/Fmn	HQ Central Comd (Sigs)
13.	Details of user base.	The appln will be of benefit to all users.
14.	Envisaged cost of entire proj incl license fees and maint	The appln is being developed by BISAG Soln Pvt Ltd, Gandhinagar, Gujarat. The cost of application is Nil.
15.	Projected dt of completion incl maj timelines.	The appln is under development and testing phase.
16.	Brief details of Sw platform and tech stack proposed for devp of appl incl op sys dependencies (if any)	(a) The apln uses Spring Framework, JAVA. (b) The application will be deployed on the virtual Machines on two Physical Servers. (c) The backup VM will be configured on a separate machine located far from the production systems.
17.	Brief details of proposed network and bandwidth reqmt.	Application is to be dply on ADN and max bandwidth reqmt is 1Mbps.
18.	Brief details of OS & Sys software reqmts.	The S/W will be hosted on a server running Ubuntu OS. However, the clients can access the S/W using any OS presently in use with Indian Army.
19.	Brief details of proposed data security measures incl backup of data.	(a) Application uses SSL (Secure Sockets Layer), TLS(Transport Layer Security) for Data Security and Column Encryption at Database side. (b) Data Backup is taken automatically everyday on a 7 Day Rotation Policy.
20.	Brief Details of proposed Database Engine to be used in the appl.	The appln requires PostgreSQL, an ACID-compliant Object Relational Database Management System (ORDBMS).
21.	Detls of sw architecture and COTS Sw proposed to be utilized.	(a) <u>Framework to be Used</u> . Spring Framework, Java (b) <u>Frontend Tool</u> . JSP, HTML, CSS, JavaScript (c) <u>Database</u> . PostGreSQL (d) <u>Web-hosting Tool</u> . Tomcat (Application Server), Nginx (Web Server). (f) <u>Supporting Browsers</u> . Firefox, Edge, Chrome.
22.	Detls of proposed architecture – Centralised/ Federated/ Hybrid	Centralised
23.	Brief details of proposed utilization of public key infra (PKI) and iden and Access Mgt (IAM).	SERPS Project will incorporate features of Public Key Infra (PKI) and Iden and Access Mgt (IAM).

24.	Technology dependencies (if any).	NIL
25.	Database reqmts.	PostgreSQL Ver 14
26.	Enhancement/ upgradation (incl patch mgt/ Sw updt procedure and mechanism	Qtrly/ on-occurrence
27.	Details of licensing (If any).	BISAG Soln Pvt Ltd, Gandhinagar, Gujarat