

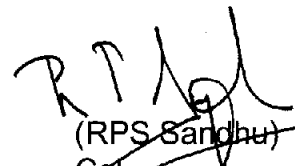
**IHQ OF MOD (ARMY)/QMG'S BRANCH/DGST APO(REGN CELL)**

**FWD OF STATEMENT OF CASE FOR OBTAINING 'IN PRINCIPLE APPROVAL (IPA) OF  
VENDOR REGISTRATION APPLICATION TO BE DEVELOPED THROUGH BISAG-N**

1. Please refer Para 7 of SOP issued by DDGIT letter No B/04001/Policy/Whitelisting/SOP/DDGIT (T&P) dated 28 May 2024.
2. Statement of Case for obtaining '**In Principle Approval (IPA)**' of Vender Registration Application to be developed through BISAG-N duly recommended by DGST is fwd herewith.
3. For your further necessary action pl.

**Encls:** As above

**DGIS (DDGIT)**

  
(RPS Sandhu)  
Col  
Col APO  
For Brig (Proc)

**STATEMENT OF CASE FOR OBTAINING 'IN PRINCIPLE APPROVAL (IPA) OF VENDOR REGISTRATION APPLICATION TO BE DEVELOPED THROUGH BISAG-N**

1.	<b>Unit/ Directorate/Office initiating the SOC</b>	-	IHQ of MoD (Army), QMG/DGST/APO Dte
2.	<b>Name of the Items/Services being Procured</b>	-	Vendor Registration application based upon Blockchain Technology
3.	<b>Aim</b>	-	To develop a Vendor Registration application for registration of vendors/firms with Army Purchase Organisation (APO).
4.	<b>Justification</b>	-	Army Purchase Organisation is responsible for conclusion of central contracts for Dry Ration items for the Armed Forces. As a part of the contract conclusion process, Vendor management forms an important aspect, wherein, endeavor at APO level is to ensure participation from sound vendors with adequate financial, production & experience and timely conclusion of contracts. Towards this a Registration Cell has been established within the APO which is responsible for registration of vendors/firms for all dry ration articles (including tinned, packaged, and animal rations). Firms are registered with the APO based on documents sought from the firms, qualification of quantitative requirement and being declared Technical & Hygienically Fit by DGST (ST-7/8). At present the entire registration process is manual, wherein, the documents submitted by the firm are being checked manually. This also includes documents being issued by Government/Private agencies egs Memorandum of Articles of Association, FSSAI License, GS-1 India Certificate, ISO 22000:2018 or higher, PAN Card, GST Certificate, Trade Mark Certificate, UDYAM Certificate, CA Certificate, Registration Certificate with Tea Board, ITR Acknowledgements, Balance Sheets, Pollution Certificate etc which are checked online by visiting the official sites of the issuing authority/government agency. The process is time consuming and prone to human errors. Hence, there is a need to automate the entire registration process to ensure efficient, faster, accurate and transparent system of registration of vendors with the APO.
	(a) <b>Broad Purpose</b>	-	To develop a Vendor Registration application with Blockchain technology for efficient, faster, accurate and transparent system of vendor registration with the APO.
	(b) <b>Category of Proposal</b>	-	Vendor Registration application - Web based application based on blockchain technology.
	(c) <b>Current System</b>	-	Manual receipt and checking of documents which is time consuming and prone to human errors.
5.	<b>Estimated Cost and Timelines</b>		
	(a) <b>Phase I</b>	-	After whitelisting & obtaining necessary ACG clearances, Vendor Registration application will be launched on open domain (Civil Internet) for usage by APO.
	(b) <b>Cost</b>	-	Being developed through BISAG-N (No cost)
	(c) <b>Timelines</b>	-	6-12 Months
	(d) <b>AMC</b>	-	Through BISAG-N
	(e) <b>Total Software Devp Cost</b>	-	Cost Neutral
6.	<b>Availability of Funds</b>	-	NA
7.	<b>Competent Financial Authority</b>	-	NA
8.	<b>Mode of Tendering</b>	-	NA

**DETAILS OF SOFTWARE**

1. **Short Brief.** Army Purchase Organisation is responsible for conclusion of central contracts for Dry Ration items for the Armed Forces. As a part of the contract conclusion process, Vendor management forms an important aspect, wherein, endeavor at APO level is to ensure participation from sound vendors with adequate financial, production & experience and timely conclusion of contracts. Towards this a Registration Cell has been established within in the APO which is responsible for registration of vendors/firms for all dry ration articles (including tinned, packaged, and animal rations). Firms are registered with the APO based on documents sought from the firms, qualification of quantitative requirement and declared Technical & Hygienically Fit by DGST (ST-7/8). At present the entire registration process is manual, wherein, the documents submitted by the firm are being checked manually. This also includes documents being issued by Government/Private agencies egs Memorandum of Articles of Association, FSSAI License, GS-1 India Certificate, ISO 22000:2018 or higher, PAN Card, GST Certificate, Trade Mark Certificate, UDYAM Certificate, CA Certificate, Registration Certificate with Tea Board, ITR Acknowledgements, Balance Sheets, Pollution Certificate etc which are checked online by visiting the official website sites of the issuing authority/government agency. The process is time consuming and prone to human errors. Hence, there is a need automate the entire registration process to ensure efficient, faster, accurate and transparent system of registration of vendors with the APO.

2. **Special Details wrt Software Proposed to be Developed :-**

(a) **Software ID/Name.** Vendor Registration application for APO.

(b) **Establishment/Sponsor (incl detls of PDMG).**

(i) **Sponsor.** DGST.

(ii) **PDMG.**

(aa) Chairman - Maj Gen Ashish R Sirsikar, ADGST(SM)

(ab) Member No 1 - Brig D N Rao, Brig (Proc)

(ac) Member No 2 - Col RPS Sandhu, Col APO

(ad) Member No 3 - Lt Col Jaspreet Singh, GSO-1, APO

(ae) Member No 4 - Lt Col SS Seghal, Proj Offr, ST-16(MISA)

(c) **Type of Software.** Blockchain based Vendor Registration Application for APO (To be hosted on open domain on civil internet).

(d) **Purpose/Utility (incl beneficiaries & target user).**

(i) **Purpose.** To develop a Vendor Registration application for APO to ensure efficient, faster, accurate and transparent system of registration of vendors with the APO.

(ii) **Beneficiaries & Management User.** DGST, ADGST (SM), Brig (Proc), Col APO

(e) **Name of Devp Org/Vendors Name & Contact Detls.** Bhaskaracharya National Institute for Space Applications and Geo-informatics-National (BISAG-N).

- (f) **Is IPR held with Sponsor.** Yes.
- (g) **Is the Software already Cleared/Approval by ACG?** No
- (h) **OS & System Software Reqmts**
- (i) **Server.** Cent OS 2008 & above.
- (ii) **On Client Machine.** Window 7 and above.
- (j) **Language/Platform of SW development & deployment.** JAVA/Python
- (k) **Database reqmts (Software ver etc).** Postgre SQL Ver 12.
- (l) **Technology Dependencies (if any).** Nil
- (m) **Cost incl AMC.** Nil.
- (n) **Architecture of dply.**
- (i) To develop Registration application for better and effective registration procedure and time saving
- (o) **Details of licensisng.** NA.
- (p) **Hardware specifications**

Software Name	Vendor Registration application
Type of software	Registration
Purpose	To develop a Vendor Registration application for APO to ensure efficient, faster, accurate and transparent system of registration of vendors with the APO
Beneficiaries and Mgt Users	DGST, ADGST (SM), Brig (Proc), Col APO
Name of Organization	IHQ of MoD (Army), ST Dte (APO)
<b>OS requirement</b>	
Server	Cent OS windows 8 or above (32 bit or 64 bit)
Client	Windows 10 or above (32 bit or 64 bit)
<b>RAM</b>	
Server	Min 8 GB, Recommended 16GB
Client	Min 8 GB
<b>UPS</b>	UPS required for all PC with a good power backup
<b>LAN</b>	Optional Software can also work in standalone mode
Other optional hardware	-
Bar Code	-
UHF	-
Language used	Microsoft. Net framework 4.5 using C#
Database reqmt	Microsoft SQL Server 2008 R2 or above.

(q) **Blockchain details :-**

Blockchain Platform	Hyperledger Fabric
Block Size	upto 2MB
Efficiency/ Approximate Transactions Per Second (TPS)	Greater than 3,000 TPS
Hashing Algorithm	SHA-256
User Authentication Procedures	User Login Credentials and OTP/DSC Token (MFA) along with Role-Based Access Control
Use of Sidechains/ Layer 2 Solutions	For scalability and efficiency, sidechains or Layer 2 solutions may be used.

(r) **Data Seek/API Integration Mechanism** : To integrate with various government stakeholders like MSME, FSSAI, ICAI, MoCA, a RESTful API-based architecture will be used :-

MSME Integration	API to validate vendor information like Udyam registration
FSSAI Integration	For checking compliance with food safety licenses
ICAI Integration	Validate Chartered Accountant details
MoCA Integration	For information related to vendors from the Ministry of Corporate Affairs database.

(s) **Data Analytics for Vendor Registration** : Once data is collected from multiple sources, analytics can be performed for Dashboard Visualisation, Audit, Secuting and compliance.

(t) **Hosting of Application on the Internet** : Hosting the application will be done in a cloud-based NIC infrastructure to ensure scalability, availability, and security.

(u) **Minimum VM Requirements : 7**

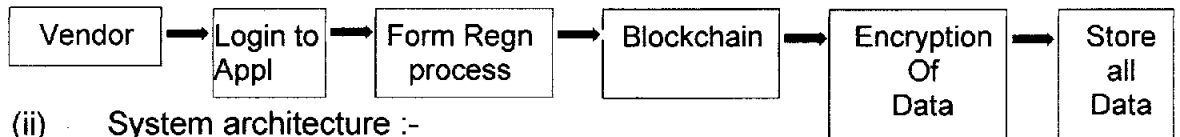
CPU	16 cVPUs
Memory	File Server-8 GB RAM; App Server-16GB RAM; DB Server-64 GB RAM
Storage	File Server-5 TB ; App Server-100 GB; DB Server-500 GB SSD (or more, depending on network growth and data retention policies)
Operating System	Ubuntu 20.4 LTS

(v) **Additional Considerations**

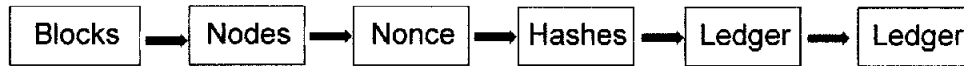
- (i) SSL Certificates
- (ii) Firewalls and VPNs
- (iii) Load Balancers

(w) **Private Blockchain**

(i) Mechanism :-



(ii) System architecture :-



(x) **Enhancement/Up-gradation (incl patch mgt/SW apdt product) and mechanism.** It will be released as & when required.

(y) **Recommendation, Special Instructions and Requirements.** The said Software is an urgent requirement for speedy procedure of registration of vendor.

3. **Intended Usage & Deployment.** Web application will be hosted on open domain on civil internet.

**TIMELINES FOR COMPLETION OF THE PROJECT**

(a) After necessary whitelisting and necessary ACG clearance APO vendor registration application will be launched at ST Dte.

(b) Tentative timelines :-

- |       |  |   |           |
|-------|--|---|-----------|
| (i)   | IPA, Design, Stakeholders concurrences | - | 02 Months |
| (ii)  | Devp & UAT                             | - | 02 Months |
| (iii) | Whitelisting & Dply                    | - | 02 Months |

**DETAILS OF PDMG**

1. **Sponsor.**     IHQ of MoD (Army), DGST Dte (APO)
2. **PDMG**
  - (a)    Chairman                    - Maj Gen Ashish R Sirsikar, ADGST (SM)
  - (b)    Member No 1                - Brig D N Rao, Brig (Proc)
  - (c)    Member No 2                - Col RPS Sandhu, Col APO
  - (d)    Member No 3                - Lt Col Jaspreet Singh
  - (e)    Member No 4                - Lt Col SS Seghal, Project Officer, ST-16(MISA)



**RECOMMENDATION OF BRIGADIER PROCUREMENT ON THE STATEMENT OF CASE**  
**STATEMENT OF CASE FOR OBTAINING 'IN PRINCIPLE APPROVAL (IPA) OF**  
**VENDOR REGISTRATION APPLICATION FOR ARMY PURCHASE**  
**ORGANISATION TO BE DEVELOPED THROUGH BISAG-N**

**Recommended/~~Not recommended~~**

Station : New Delhi

Dated : 04 Oct 2024

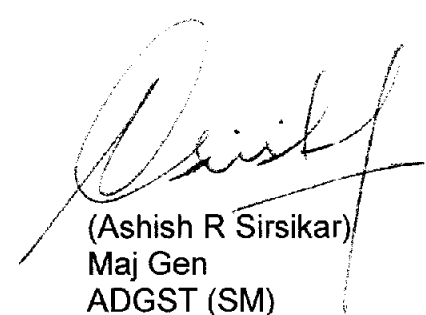
  
(D.N. Rao)  
Brig  
Brig (Proc)

**RECOMMENDATION OF ADDITIONAL DIRECTOR GENERAL SUPPLIES AND  
TRANSPORT ON THE STATEMENT OF CASE FOR OBTAINING  
'IN PRINCIPLE APPROVAL (IPA) OF VENDOR REGISTRATION  
APPLICATION FOR ARMY PURCHASE ORGANISATION  
TO BE DEVELOPED THROUGH BISAG-N**

  
**Recommended/Not recommended**

Station : New Delhi

Dated 08 Oct 2024

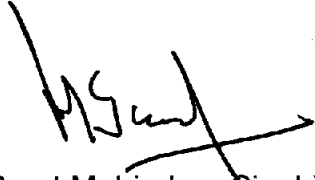
  
(Ashish R Sirsikar)  
Maj Gen  
ADGST (SM)

**RECOMMENDATION OF DIRECTOR GENERAL SUPPLIES AND TRANSPORT ON THE  
STATEMENT OF CASE FOR OBTAINING 'IN PRINCIPLE APPROVAL (IPA) OF  
VENDOR REGISTRATION APPLICATION FOR ARMY PURCHASE  
ORGANISATION TO BE DEVELOPED THROUGH BISAG-N**

**Recommended/Not recommended**

Station : New Delhi

Dated 14 Oct 2024

  
(Preet Mohindera Singh)  
Lt Gen  
DGST