

**GOVERNMENT OF INDIA
MINISTRY OF FINANCE, DEPARTMENT OF REVENUE
CENTRAL BOARD OF INDIRECT TAXES AND CUSTOMS
DIRECTORATE GENERAL OF SYSTEMS AND DATA MANAGEMENT
1st FLOOR TOWER 1&2, NBCC PLAZA, SECTOR-5 PUSHP VIHAR
NEW DELHI 110017**



**Industry Consultation
For
Selection of Service Provider for implementation &
management of Local Area Network (LAN) for CBIC**

1st September 2022

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1. Invitation for Industry Consultation

Directorate General of Systems and Data Management, Central Board of Indirect Taxes and Customs (hereafter referred to as CBIC), having its Office at 1st Floor Tower 1&2, NBCC Plaza, Sector-5, Pushp Vihar New Delhi - 110017, invites prospective & eligible participants for Industry Consultation for "Appointment of Service Provider for implementation & management of Local Area Network (LAN) for CBIC".

CBIC is looking to leverage the best solution & infrastructure available in the market to create a modern and state-of-art Local Area Network (LAN) in its offices to deliver a seamless experience to its stakeholders. To execute the same and with an endeavor to follow a consultative approach, CBIC has decided to engage with reputed industry participants by inviting written submissions to enable development of an informed RFP for implementation & management of LAN. This Industry Consultation is being organized to consult with organizations that have prior experience in providing similar service, their solutions for the given scope and to understand their suggestions and concerns, if any.

Please note that this consultation shall be non-competitive. Responses related to this Industry Consultation will not advantage or disadvantage any prospective Service Providers in any manner whatsoever. Also, response to this Industry consultation is not binding on any organization for responding to RFP at a later stage. The RFP will be shared with the entire industry and not only with the participants of this industry consultation.

Interested Participants are advised to study this document carefully and submit their response to this industry consultation in the format specified in Section 5 of this document by 21.09.2022 (till 5 PM) via email to LANRFP.IndustryConsultation@icegate.gov.in. The participants may also highlight any key suggestions/concerns regarding the scope of this Industry consultation.

CBIC reserves the right to further invite Organizations participating in this industry consultation for any presentations or discussions, if required.

Shri Chandra Madhav Singh
Deputy Director

Directorate of Systems & Data Management,
NBCC Plaza, 1st Floor, Tower-1&2
Sector -5, Pushp Vihar, Saket,
New Delhi- 110 017.
Tel. No. 011-29561544

2. Introduction to CBIC and its IT Initiatives

Central Board of Indirect Taxes and Customs (CBIC) is a part of the Department of Revenue under the Ministry of Finance, Government of India. CBIC was constituted under Section 3 of the Central Boards of Revenue Act, 1963 for matters relating to Indirect Taxation and mainly deals with the tasks of formulation of policy concerning levy and collection of Customs, Central Excise duties and GST, prevention of smuggling and administration of matters relating to Customs, Central Excise, GST and Narcotics to the extent under CBIC's purview. The Board is the administrative authority for its subordinate organizations, including Custom Houses, Central Excise and Central GST Commissionerates and the Central Revenues Control Laboratory.

The Central Board of Indirect Taxes and Customs has initiated a number of projects aimed at harnessing Information & Communication Technology (ICT) in achieving the objectives of Customs, GST and Central Excise administration. The Directorate General of Systems and Data Management (referred to as the Department) has been entrusted with the implementation of the projects related to Information & Communication Technology. For more information, refer to CBIC Website (<https://www.cbic.gov.in/>)

CBIC's Present IT Network & LAN Setup

CBIC's Present IT Network & LAN Setup has been segregated into 5 sections as below:

2.1. Field Location Connectivity with Data Centers

All CBIC locations are connected to CBIC Data Centers either through MPLS connectivity, VPN over Broadband (VPNoBB) or VPN over Internet (VPNol).

MPLS:

The two service providers for WAN MPLS connectivity are BSNL and TCL. 700+ CBIC locations are connected to CBIC data center primarily through MPLS connectivity.

There are 3 categories of locations having MPLS connectivity:

- a) Locations with Single BSNL MPLS,
- b) Locations with Single TCL MPLS and
- c) Locations with Dual MPLS connectivity from BSNL and TCL (Critical/Large Locations)

VPN Over Broadband (VPNoBB)

This connectivity is procured by local field formations and is not provided by DG Systems. The VPNoBB allows use of broadband connectivity (provided by BSNL only) to access the applications hosted at the Data Centre. The traffic for these links flow through the CBIC MPLS cloud provided by BSNL. The users are not required to use any VPN client in this case.

VPN over Internet (VPNol)

This connectivity is procured by local field formations and is not provided by DG Systems.

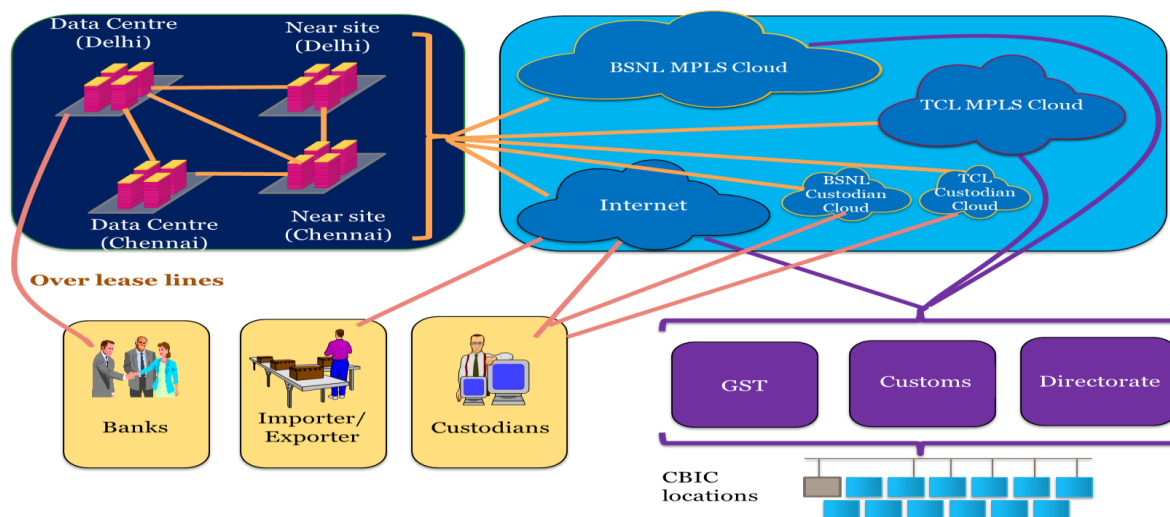
The VPNol allows use of internet connectivity provided by any Internet Service Provider (ISP) to access the applications hosted at the Data Centre by creating a Virtual Private Network (VPN) tunnel for secure access. The users use VPN IDs provided by CBIC to login through a VPN Client in this case. VPNoBB or VPNol connectivity is generally present in small/remote CBIC sites where the user strength is 4 or less. Approximately 700+ CBIC locations are currently using VPNoBB/VPNol connections.

Custodian locations

Custodian Locations (Ports, ICDs, CFS) are the locations where infrastructure elements and connectivity are procured and owned by Private Entities and not by CBIC directly. This is as per the Handling of Cargo in Customs Areas Regulations, 2009 (HCCAR), which stipulates that the Custodian (Customs Cargo Service provider) must provide requisite infrastructure & setup of network at such Customs areas.

However, CBIC Customs officers stationed at these locations access applications through the endpoints provided by Custodian for clearance of import & export consignments. The Custodian locations are connected to CBIC DC through separate cloud (Channel Partner MPLS cloud), each from BSNL & TCL, which are different from the CBIC MPLS clouds and connect to different zones in DC. There is a completely segregated infra setup in CBIC DC for any traffic coming for these locations to ensure that no traffic from these Custodian locations can reach CBIC locations and vice versa. The Setup of connectivity at Custodian locations and enablement to connect to Customs applications is governed by the CBIC Partner Connectivity Protocol which provides complete set of processes and guidelines to enable the Custodians locations to access Customs applications. Currently, there are currently approximately 300+ Custodian locations connecting to DC through MPLS/VPNoBB/VPNoI.

High-level diagram for DC Connectivity Architecture



2.2. Infrastructure

In 2016, the Cabinet Committee on Economic Affairs (CCEA) had approved an IT Consolidation Project for New Indirect Tax Network (Systems Integration) of CBIC ('Project SAKSHAM') with M/s TCS & its Consortium partners M/s HPE & M/s TCL (hereinafter referred to as SI). The project is valid for 7 years till December 2023. With the planned introduction of GST in 2017, it was expected that there would be a several-fold increase in the number of taxpayers and resultant document load on the system. Therefore, the aim of Project Saksham was to build a robust IT infrastructure which would help in:

- Implementation of Goods and Services Tax (GST),
- Extension of the Indian Customs Single Window Interface for Facilitating Trade (SWIFT) and
- Other taxpayer-friendly initiatives under Digital India and Ease of Doing Business of CBIC

It was under this Project Saksham (Oct 2016-Dec 2023), that LAN Infrastructure has been deployed in all the CBIC locations. Generally, the sites where user strength is 4 or less has been provided with desktops only and use VPNoBB or VPNoI connection as explained above. The other sites having

more than 4 users have been provided LAN setup with AIO desktops, switches, nodes, centralized UPS, Line Printers, Rack etc. There are some infrastructure for earlier contract like UPS, Line printer & Print Server & nodes (Electrical Point + LAN Point) which are still being utilized at certain sites and maintained under AMC contract.

There are approximately 1400 CBIC locations divided across 6 Zones as below:

Zone-wise distribution of States/UTs	
Zone	States/UTs
East	Bihar, West Bengal, Jharkhand, Odisha, Chhattisgarh, Andaman & Nicobar Islands
North-East	Assam, Tripura, Mizoram, Meghalaya, Manipur, Nagaland, Arunachal Pradesh, Sikkim
West	Maharashtra, Gujarat, Goa, Dadra & Nagar Haveli & Daman & Diu
South	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Pondicherry, Telangana, Lakshadweep Island
North	Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Uttarakhand, Chandigarh, Ladakh
Central	Madhya Pradesh, Rajasthan, Uttar Pradesh

The details of LAN infrastructure currently deployed are shown in table below. Please note that while most of the infrastructure deployed in field locations are procured under the current contract (2016-2023), some infrastructure procured in earlier contract are still being used in field locations and maintained under AMC.

Infrastructure procured under current contract (Project Saksham):

Items	OEM	Model	Quantity
DESKTOPS	HP	HP ProOne 400 G2/G4 AIO	23538
LAPTOPS	HP	HP ProBook 440 G4/G6 Notebook PC	1070
MOBILITY DEVICES (HANDHELD)	HP	HP Pro 8 Advanced Rugged Voice	1115
LINE PRINTERS FOR CUSTOMS	Printronix	Wep P8000	100
SWITCHES - 8 PORT	HP Aruba	ARUBA/HPE 2530 - 8G	189
SWITCHES - 24 PORT	HP Aruba	ARUBA 3810M 24G 1- SLOT	909
SWITCHES - 48 PORT	HP Aruba	ARUBA 3810M 48G 1- SLOT	290
AGGREGATION/ DISTRIBUTION SWITCH	HP Aruba	HPE 5900AF 48XG	43
WIRELESS IPS ACCESS POINT	HP Aruba	Aruba AP-103	20
WIRELESS LAN (ACCESS POINTS)	HP Aruba	Aruba Instant IAP-224	36
WAN OPTIMIZER (STEELHEAD 3070)	Riverbed	STEELHEAD 3070	9
UPS - 4 KVA WITH 30 MINUTES BACKUP	Schneider	SYA8K16I/ 4KVA	150
UPS - 4 KVA WITH 01 HOURS BACKUP	Schneider	SYA8K16I/ 4KVA	3
UPS - 8 KVA WITH 30 MINUTES BACKUP	Schneider	SYAF16KXR91/ 8KVA	51
UPS - 12 KVA WITH 30 MINUTES BACKUP	Schneider	SYA12K161XR/ 12 KVA	13
UPS - 16 KVA WITH 30 MINUTES BACKUP	Schneider	SYA16K161XR/ 16KVA	8
UPS - 20 KVA WITH 30 MINUTES BACKUP	Schneider	SY16K48H-PD/ 20KVA	3

Items	OEM	Model	Quantity
RACKS	NA	NA	450
Nodes (Electrical Point + LAN point)	NA	NA	13355

Infrastructure procured in earlier contract and maintained under AMC:

Items	OEM	Model	Quantity
Line Printers	Printronix	Wep P7-2000	47
Print Servers	HP	ML 350 G5/G6	69
UPS - 4 KVA WITH 15 MINUTES BACKUP	Schneider	4 KVA APC Hyddra Single Phase	445
UPS - 8 KVA WITH 15 MINUTES BACKUP	Schneider	8 KVA APC Symmetra Single Phase	167
UPS - 12 KVA WITH 15 MINUTES BACKUP	Schneider	12 KVA APC Symmetra Single Phase	62
UPS - 16 KVA WITH 15 MINUTES BACKUP	Schneider	16 KVA APC Symmetra Single Phase	47
UPS - 20 KVA WITH 15 MINUTES BACKUP	Schneider	20 KVA APC Symmetra Three Phase	44
UPS - 30 KVA WITH 15 MINUTES BACKUP	Schneider	30 KVA APC Symmetra Three Phase	4
UPS - 40 KVA WITH 15 MINUTES BACKUP	Schneider	40 KVA APC Symmetra Three Phase	2

2.3. Resident Engineers (RE)

CBIC has a team of 750 Resident Engineers to maintain & locally support issues reported by sites, deployed across 634 dedicated locations – with certain larger sites maintained by multiple Resident engineers (REs). The current distribution of REs is shown below:

No of Resident Engineer	No of Dedicated Locations
1	558
2	51
3	14
4	7
5	4
Total	634

These Resident Engineers also support to resolve issues at nearby locations (Cluster Locations) which does not have a dedicated RE deployed. In order to ensure that each RE is able to support their cluster sites diligently, the maximum number of cluster sites assigned to a single RE is 5. Further, all cluster sites are within 150 Km from the base locations of the RE, subject to exceptions.

The total locations covered under RE support (Dedicated + Cluster) is shown below:

Description	NORTH	EAST	NORTH-EAST	WEST	SOUTH	CENTRAL	Total
States & UT Covered	8	6	8	4	7	3	36
No of Locations	148	219	91	248	437	229	1372
No of RE	102	112	40	183	203	110	750

At present, the minimum qualification for an RE deployed for CBIC is to be a Graduate in Science/ IT with at least 1 year experience of providing IT support, preferably as site IT Engineer. Additionally, the RE

should have a Diploma in Networking from an ISO certified institute and should be able to Read/Speak/Write in English and Hindi/ Regional Language.

2.4. Centralized Management & Monitoring Team

CBIC has a management team of 35 resources from SI to manage the entire LAN support operations. The resources are deployed both in central locations as well as regional locations and has specific domain wise roles. The distribution of the Management & Monitoring team is shown below:

Domain	Central Resources		Regional Resources	
	Role	Count of Resources	Role	Count of Resources
Overall Management & Administration	National LAN Manager	1	-	0
Regional Service Management	-	0	Regional Manager	6
	-	0	Regional Coordinator	4
Service Desk Management	Lead	2	L1 Resource	4
Network Management	Lead	1	L2 Resource	4
End-Point Management	Lead	1	L2 Resource	4
Power Quality & Distribution	-	0	L2 Resource	2
Resource Management	Resource Coordinator	2	-	0
Asset Management	Asset Coordinator	1	-	0
MIS, AUDIT & SLA	MIS Manager & Auditor	1	-	0
	MIS Coordinator	2	-	0
Total		11		24

2.5. Services

- All infrastructure (New & Old) deployed at field offices are maintained under AMC
- Quarterly Asset Audit for all infrastructure deployed at field locations
- Centralized Monitoring and Management of all equipment
- Resolution of all incidents and interactions raised through the Central Helpdesk
- Periodic configuration revalidation/patching/upgrade/bug fixes of deployed infrastructure (Hardware & Software) including OS & MS Office upgrades

3. Indicative Broad Scope of Work and Deliverables

The Service Provider has to setup and maintain Local Area Network (LAN) in the field offices of CBIC along with provisioning of new IT infrastructure and its maintenance. The Scope also includes maintenance of existing LAN and IT infrastructure and carrying out necessary IT infrastructure refresh/ augmentation in existing LAN Locations, providing a team of Resident Engineers to be deployed in the field offices and a Central team for Management & monitoring.

The Scope of work has been divided into various segments as below:

Section A – Infrastructure & Services

Section B –Field IT Support

Section C - Centralized Management & Monitoring

Section D - General requirements

3.1. Section A – Infrastructure & Services

1. The Service Provider has to conduct site surveys at field locations of CBIC (including feasibility for Wifi solution deployment) and has to supply, install, configure, upgrade, commission and maintain the new IT infrastructure at various field locations as per CBIC requirement, which includes desktops, switches, laptops, UPSs, Wireless Access Points & Wireless Intrusion Prevention System (WIPS), line printers, print servers etc.
2. The Service Provider create and maintain a Server Room at new locations and also redesign and maintain the server room in existing locations, if it is not as per industry best practices.
3. The Service Provider should create & maintain (both existing & New) Structured Network cabling (LAN) & electrical cabling at field locations as per CBIC requirement following the best practices in the industry.
4. The Service Provider must maintain & support the existing IT infrastructure that will be re-deployed at new CBIC locations and make necessary upgrades for same.
5. Complete LAN implementation including provisioning of VLANs and the integration of LAN-WAN will have to be carried out by the Service Provider.
6. Provisioning & maintenance of dedicated earthing of adequate load at field locations for all equipment provided by CBIC for the duration of the engagement.

3.2. Section B –Field IT Support

1. The Service Provider is required to provision a team of Resident Engineers (REs) to be deployed at various field locations of CBIC, on multiple shifts or 24x7 as per requirement of CBIC. Some smaller locations which may not have a dedicated Resident Engineer deployed at the location also must be physically supported by the Resident Engineers from nearby locations in case the reported issue is not resolved remotely.
2. The Resident engineers deployed for CBIC must be on the payroll of the Service Provider or it's consortium partners (Contractual resources are also allowed)

3. The Service Provider must provide all Resident Engineers with Laptops & necessary toolkit, along with regular induction/refresher trainings

3.3. Section C – Centralized Management & Monitoring

1. The Service Provider shall provide a Management team for Centralized Management & Monitoring of the entire LAN solution, which must operate from designated CBIC offices
2. The resources deployed in the management team for CBIC must be on the payroll of the Service Provider and will be exclusively for this project and cannot be shared by the Service Provider for any other purpose during contract period.
3. The Service Provider shall be responsible for providing regular training programs to all resources, focusing on ensuring that they understand the operations and administrative landscape of CBIC
4. The Service Provider has to deploy an Asset Management tool and use the same to track and monitor CBIC as well as Custodian infrastructure during the engagement duration.
5. The Service Provider has to deploy a file sharing solution
6. The Service Provider has to deploy all OEM provided management & maintenance tools in CBIC environment to manage all the deployed infrastructure

3.4. Section D – General Requirements

Hardware & Solution

1. The Service Provider has to ensure that all offered infrastructure should be of the same make / OEM for the same asset class (eg. All desktops must be from the same OEM and all switches must be from same OEM, but the desktop OEM & the switch OEM may be different)
2. The Service Provider has to ensure that all Hardware provided under this contract have support from OEM for minimum period of 7 years from the date of supply to CBIC & back-to-back OEM support is available for all Hardware/appliance, software, licenses etc.
3. The Service Provider should perform configuration revalidation/patching/upgrade/bug fixes of deployed infrastructure (Hardware & Software) on regular intervals including Pro-active product health status check-up (on-site) and submit the report annually.

Additional Activities

1. The Service Provider should perform Asset Audit every quarter and submit report to CBIC for same.
2. CBIC reserves the right to shift the existing equipment at locations or new equipment provided by the Service Provider to a suitable location depending upon the need. The Service Provider will arrange uninstalling, packing, safe & secure shifting of the equipment from old location, re-installing, configuring and commissioning of the same at the shifted location and making the entire system operational to CBIC.
3. CBIC reserves the right to ask Service Provider for buyback of existing old infrastructure at CBIC locations, which will be replaced with new equipment. The Service Provider will be responsible for

erasing data, removal, cartage and transportation of infrastructure out of CBIC premises, and their subsequent disposal following standard norms of e-waste management.

4. For any IT related issues faced at the locations, incidents/interactions must be logged in the Central Service Desk by the Service Provider. The Service Provider has to continuously monitor & resolve the issues recorded in the Service Desk.
5. The Service Provider has to implement best security practices in coordination with CBIC's System Integrator to prevent CBIC from any malicious attack/activity from external sources.

3.5. Training

As part the capacity building of CBIC Officials, the Service Provider shall impart training to selected CBIC Officials/Resources. In addition to building the content, Service Provider shall also be required to provide classroom training (wherever applicable) & the learning material to the participants as identified for training in soft copy.

4. Proposed Solution

CBIC is expecting Service Providers to design & propose a state-of-art solution, leveraging the latest market offerings and industry best practices. In designing the solution, some of the key focus areas should be on intelligent devices including IoT enabled devices and building solutions leveraging automation in monitoring & management, thereby reducing manual intervention. It is also expected that Service providers create an effective management & monitoring model, leveraging industry best practices to provide seamless service to the users.

The interested Service Provider may submit their response covering the following sections:

- Overall Solution Architecture
- Features & Technical specifications of equipment
- Tools & Software including key features
- Central Management Team structure & management model
- Resident Engineer Deployment structure & management practices
- Key Suggestions
- Any Additional points/concerns

5. Response Formats

5.1. Covering Letter

To,

Additional Director General (Systems), CBIC
1st Floor Tower 1&2, NBCC Plaza
Sector-5, Pushp Vihar
New Delhi - 110017

Subject: Submission of the Industry Consultation Response for Appointment of Service Provider for implementation & management of Local Area Network (LAN) for CBIC

Dear Sir,

We, the undersigned, offer to submit a Proposal on implementation & management services of Local Area Network (LAN) to CBIC with reference to your Request for Industry Consultation dated <insert date>. We are hereby submitting our Proposal in the prescribed format, which includes our key suggestions.

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents delivered to CBIC is true, accurate, verifiable, and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the CBIC in their intent of this Industry Consultation.

We agree to unconditional acceptance of all the terms and conditions set out in the Invitation for Industry Consultation and understand that CBIC may or may not use the information submitted by us in the final RFP scope.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Yours sincerely,

(Authorised Signatory)

Signature:

Name:

Designation:

Address:

Seal:

Date:

5.2. General Information of the Organization

S. No.	Item	Service Provider's Response
1.	Organization Name	
2.	Year Established	
3.	Incorporated in India (Yes or No)	
4.	Contact Person's Name (Authorized Signatory)	
5.	Address	
6.	Mobile	
7.	Telephone	
8.	Fax Number	
9.	Email Address	
10.	Brief Description of the Organization	

Financial Details:

	FY 2019-20	FY 2020-21	FY 2021-22
Turnover from business in India (in INR crores)			
Turnover from LAN implementation/Support Projects in India (in INR crores)			

5.3. Experience of the Organization in LAN related projects (enclose separate sheet for each project)

S. No.	Item	Service Provider's Response
1.	Name of Organization	
2.	Project Name	
3.	Name of Project Client	
4.	Country	
5.	Contact Details of Project Client <i>(Contact Name, Address, Telephone Number)</i>	
6.	Role of Organization in the Project (Please indicate clearly whether any outsourcing/consortium was involved in the execution of the work)	
7.	Value of the Project	
8.	Duration of Project (months)	
9.	Award Date (month/year)	
10.	Completion Date (month/year)	
11.	Narrative Description of the Project	
12.	Details of Work that defines the scope relevant to the requirement	

5.4. Proposed Solution to the Indicative scope of Work

This section should provide the detailed response of the organization regarding the proposed solution covering the various areas as mentioned in Section 4.

In addition to the mentioned areas, the participants may also provide any other suggestions/information/concerns related to the scope of this Industry consultation, which will enable CBIC to develop an informed RFP for implementation & management of LAN.

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