

INSTRUCTIONS FOR INDUSTRY CONSULTATION

- 1. The contract period of the current Managed Service Provider (MSP) for GST system is nearing its completion. Hence, GSTN intends to execute a competitive bid to finalize an MSP for operating the GST System through the next term of 6 years starting 1st October 2024.
- 2. The industry consultation process is through which GSTN will interact with industry players who are may be desirous of participating in the GST System project (GST-SP) RFP.
- 3. This document provides background on some of the key design, technical and procurement related considerations of GSTN. GSTN seeks industry's expert inputs and views on these items, which will help in shaping the final design, technology, and procurement model for GST-SP.
- 4. Industry participants are requested to research on the agenda items provided to ensure that they are able to present an informed view on these items. Views presented and discussions during the industry consultation workshop are expected for the purpose of improvement in the RFP, as may be required.
- 5. GSTN website (<u>https://gstn.org.in/</u>) may also be referred for additional information related to existing services being offered.

Project Background

The Goods and Service Tax (GST) System was developed to redesign and modernize the way indirect taxes are filed and processed in India. The system was initiated with a vision to provide a single online digital platform that would simplify the process of GST compliance for taxpayers and streamline the tasks of tax officers.

The GST system has been designed with an architecture that includes several layers such as the database, middleware, API, view, processing layer, and external integration layer. It has been built on various key principles such as offering a platform approach, openness, avoiding vendor lock-in, use of commodity hardware, ensuring security and privacy, and prioritizing data-driven decision making, among others.

Features of the GST System

- 1. For taxpayers, it provides registration, payment of taxes, filing of returns, refund, and appeals in one platform.
- 2. For tax officers, it offers features for processing registration and refund applications, appeal handling, and assessment.
- 3. The system is designed in a way that enables role-based workflows, which permits the assignment of multiple roles and tasks to a single tax officer.
- 4. It offers an integrated assessment/audit-appeal process and allows for taxpayers to move across different jurisdictions in case of a change in location.
- 5. The system is complete with a dashboard for taxpayers and tax officers, offering a one-stop location for the status of various items.
- 6. Provide dashboards and analytical tools to add in policy planning, check-on tax evasion and other related MIS to tax administration.
- 7. Business Intelligence and Fraud Analytics (BIFA) is integrated with the GST system, enhancing tax administration through advanced analytics and fraud detection capabilities.



- Management Information System (MIS) is another component integrated with the GST system, providing tax officials with comprehensive performance metrics, compliance data, and financial insights.
- 9. Lastly, the GST System also helps in using the data for policy making and GDP estimation.
- 10. The purpose of industry consultation shall not be taken to mean an opportunity to project the specific tools /functionality/skills pertaining to a company.

Architecture Principles

The structure of the GST System as devised by GSTN comprises of the following:

- a) GST Common Portal, which interfaces with taxpayers.
- b) GST Back Office, dedicated to tax administration; and
- c) the central pivot, the GST Core Engine.

The GST system is composed of a network of microservices that work cooperatively via the use of shared libraries. GSTN has adopted a series of architecture principles to facilitate the functioning of the GST system which ensure that the system is secure, flexible, and user-friendly.



Current Application Architecture Landscape

Design Principles

- API-based development to ensure adaptability and seamless integration with other apps.
- API-based data sharing framework that allows on-demand pulling and robust reconciliation.
- API integration for at-scale invoice processing and, return and ledger functionalities enabling GST Suvidha Providers (GSP) and Application Service Providers (ASPs) to cater different taxpayer types, assisting them in GST compliance.

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- Horizontal scalability whereby the capacity of the GST system can be increased by adding more commodity-grade hardware, without impacting the existing application or the user experience. Automated Development Operations (DevOps) techniques have also been implemented which allow for the rapid deployment of additional resources during times of high demand, and equally the reduction of resources without causing downtime.
- Zero data loss whereby every component is deployed in pairs to avoid any disruption to the GST system. Data Center/Near Data Center (DC/NDC) and Data Recovery/Near Data Recovery (DR/NDR) across two distinct geographical locations have also been implemented to recover data in case of any disaster.
- Advanced security measures by employing high grade security software, robust integration with external systems via secure MPLS connectivity and the HTTPS protocol, as well as a unique authentication framework for APIs. Encrypted data is used to maintain taxpayer confidentiality, and a custom framework has been developed to safeguard stored data.
- Use of Artificial intelligence (AI) and Machine learning (ML) to develop more than 50 tools under project Business Intelligence and Fraud Analytics (BIFA).

Overview of Scope of Work

GSTN intends to select a Managed Service Provider (MSP) through a competitive bidding process to develop and maintain the GST system for a period of six years. The project would encompass the transition, maintenance, and enhancement of the existing GST System, along with the development of additional functionalities.

The summary of key components of the scope of work, which are not limited to the following, is as mentioned below:

- 1. Operations and Maintenance of the existing GST System, where the maintenance phase will be for a period of six years. Post-completion of the six-year period, including the transition period, the contract can be extended at the discretion of GSTN.
- 2. The transition phase includes shadow and reverse shadow phases.
- 3. The MSP needs to operate the GST system project, design, and implement it on turnkey basis. For any new procurement, MSP needs to provide an appropriate solution design and sizing for the project as per the scope of work and other terms and conditions of the RFP.
- 4. The MSP needs to operate and maintain the existing Information Security, the GRC requirements of the GST-SP ecosystem, and address any new or additional requirements specified in the RFP.
- 5. The MSP needs to manage DC/DR Hosting Services, including providing bandwidth for the project, and maintain the GST-SP Cloud System.
- 6. The MSP needs to manage Helpdesk Setup and Operations Management.
- 7. The MSP needs to manage Training and Capacity Building.
- 8. The MSP needs to provide enhancements, which include design, development and implementation of new modules, functionalities, and services in GSTN, along with enhancements to existing modules of GSTN.

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Modules part of the GST Portal

Overview of Payment Landscape

GST-SP Payment Model

GSTN adopts a systematic approach to its payment model structure. Payments for Operations and Maintenance (O&M) are processed on a quarterly basis to ensure continuous support. Application Change Requests (CRs) are invoiced upon production rollouts, and Infrastructure Change Requests (CRs) adhere to a milestone-based payment schedule as stipulated in the contract, ensuring transparent accountability throughout the duration of the project. This methodical model ensures that payments are aligned with the delivery of value.



Payment model process

Payment Cycle

The payment analysis below provides insights into the timing of payments from the date of receipt of invoice with complete documentation over the past 12 months, which is categorized into three distinct time frames: 0-15 days, 15-30 days, and 30-45 days.

0-15 days: Payments processed within 0-15 days of receiving the invoice. This category accounts for 36% of the total payments.

15-30 days: Payments processed within 15-30 days, processing time ranging from two to four weeks after invoice receipt. This category represents the majority of payments, comprising 54%.

30-45 days: Payments processed within 30-45 days of invoice receipt. This category, totaling 10% highlights instances where payments required additional processing time to ensure accuracy and completeness.

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Payment Cycle Analysis



Key Questions / inputs / requirements / expectations from industry

1. Knowledge and Understanding of GSTN

To ensure a seamless integration with the GSTN framework, what inputs are required to gain a comprehensive understanding of the GST system? What insights, data, or documentation are necessary for the MSP to effectively assess GSTN's operations, data flows, compliance requirements, security, and technological infrastructure?

2. Hardware

As part of the procurement process, the MSP must provide a detailed plan regarding hardware requirements, for provision and replacement, over a five-year period. This involves provisioning the necessary hardware infrastructure and implementing a cost structure with a locked-in pricing model. How can the MSP guarantee the validity of the locked-in cost provided for the duration of the contract?

3. Scalability Model

The MSP should be able to optimize resource allocation while maintaining optimal performance and cost-efficiency. Given the dynamic nature of GSTN's operational requirements, can the MSP provide a scalability model to adapt to fluctuating resource demands, allowing for provisioning or de-provisioning of resources in response to GSTN's needs?

4. Service Level Agreements (SLA)

For Service Level Agreements (SLAs), which areas require stringent performance metrics and are there any specific clauses or provisions recommended to incorporate into the Request for Proposal (RFP) to ensure adherence to service quality standards?

5. Discount received from Cloud partner

What would be the % discount that GSTN can reasonably demand to be passed on for Cloud services?



6. Transition

Transition plan in place to ensure a seamless handover between the existing provider and MSP services.

- What key challenges are foreseen in transitioning from the current provider to the new MSP services?
- What specific steps will be taken to minimize disruption to ongoing operations during the transition period?
- What approach will be adopted for migrating existing data and systems to the new GSTN platform and how will data integrity, security, and accuracy be ensured during the migration process?

7. Outsourced Agencies

For components of the GST system that could be outsourced to separate vendors, how will collaboration, integration, and compatibility be ensured between the services provided by the MSP and the outsourced agencies?

