Chapter III: Information Technology Audit of GSTN (Phase-II)

3.1 Introduction

Goods and Services Tax Network (GSTN) is a private limited company incorporated under Section 25 of the Companies Act, 1956 (now Section 8 of the Companies Act 2013), as a 'Not for Profit Organisation'. GSTN has been set up primarily to provide Information Technology (IT) infrastructure and services to the stakeholders[26] for implementation of GST. The main objectives of GSTN include:

* To assist and engage with various stakeholders in preparing IT and communications related infrastructure for smooth roll out of any IT driven initiatives and other e-governance initiatives of the Government or any department or agency of the Government, specifically for the roll out of GST;

* To provide for smooth transitioning of the legacy indirect tax regime to the GST regime;

* To provide IT and communications related services to various stakeholders for implementation and management of various initiatives, including e-governance initiatives like implementation of GST, taken by the Government or any department or agency of the Government; and

* To provide IT and communications related services to various stakeholders in order to prepare them for aligning their IT and communications infrastructure and processes with those e-governance initiatives undertaken by the Government or any department or agency of the Government.

3.2 Organisational setup of GSTN

According to the Articles of Association, the Board of Directors of GSTN (the Board) should have at least two and maximum 14 directors. The Chairman of GSTN shall be nominated through a joint approval mechanism of Central Government and State Governments, and the Board shall appoint a Chief Executive Officer (CEO) for the management of the business of the Company subject to the control and supervision of the Board. Under the present organisational setup, the CEO is being assisted by Executive Vice Presidents

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[26] Finance departments of Government of India and State Governments, Taxpayers, Central Board of Indirect Taxes and Customs (CBIC), State Tax Authorities, Principal Chief Controller of Accounts (PCCA), State Treasuries, Reserve Bank of India and Authorised Banks.

(EVP) and Senior Vice Presidents (SVP) looking after different functions of the company.

3.3 GST IT Portal

GST IT Portal has been at the core of the entire GST ecosystem, providing a single interface for over a crore taxpayers for their GST compliance functions. It has facilitated integration of tax administration across the Union and the States. The common GST Portal developed by GSTN has been functioning as the front-end interface of the overall GST IT eco-system and provides for filing of registration application, filing of return, creation of challans for tax payment, payment of GST, settlement of IGST payment, and generation of Business Intelligence (BI) and analytics. M/s Infosys has been engaged as the system developer and Managed Service Provider (MSP). The back-end IT systems of CBIC and State Tax Departments are used to handle tax administration functions such as registration approval, assessment, audit, appeal enforcement and adjudication. While six[27] States and CBIC have been developing their own IT systems for tax administration, GSTN has been entrusted with the development of the same for 25 other States / UTs.

3.4 IT audit of GSTN (Phase-II)

3.4.1 Background – IT audit (Phase-I)

IT audit of GSTN has been conducted in two phases. Phase-I of the audit was conducted during May-August 2018. The main objectives of audit were to assess whether the IT modules for Registration, GST Payment and settlement of Integrated GST (IGST) among Union and States were in line with the provisions of the Acts and Rules governing the GST regime. Aspects of Business Continuity Plan (BCP) and Change Management Process (CMP) were also covered. Audit findings were reported in CAG's Audit Report No. 11 of 2019. Major findings are mentioned below:

3.4.1.1 Major findings – IT audit (Phase-I)

3.4.1.1.1 Registration module: System validations were not aligned to the provisions of the GST Acts and Rules in many cases, leaving crucial gaps in GST Registration module such as the system failing to validate and debar ineligible taxpayers from availing Composition Levy Scheme, lack of validation of key fields in Registration (Legal Name, Type of Business and Corporate Identity Number) with Central Board of Direct Taxes (CBDT) and Ministry of Corporate Affairs (MCA) databases, etc.

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27   Goa, Haryana, Karnataka, Kerala, Sikkim and Tamil Nadu

3.4.1.1.2 Payment module: The Payment module, despite being in operation since 1 July 2017, was fraught with operational deficiencies such as delay in updating the Electronic Cash Ledger (ECL) even after successful payment of tax by the taxpayer, issues in reconciliation of GST receipts etc.

3.4.1.1.3 IGST Settlement reports: All the IGST Settlement Ledgers were not being generated due to non-implementation of corresponding GST modules, like imports and appeals. This, coupled with the inaccuracies in the settlement algorithm and limitation of the GSTR-3B return in capturing all the information required for settlement, had a bearing on the settlement of funds to the Centre and various States.

3.4.1.1.4 Other findings: In addition, there were system design deficiencies. BCP was not finalised and CMP was deficient.

3.4.2 Scope of IT audit of GSTN (Phase-II)

∗ **Audit Objectives**

− To assess whether the Refund and Returns modules implemented by GSTN were in line with the provisions of the Acts and Rules governing the GST regime and the System Requirements Specification (SRS)[28].

− To review E-Way Bills (EWB) module in GST ecosystem which has been developed by National Informatics Centre (NIC) under the supervision of GSTN.

− Follow-up audit on the action taken on audit findings noted in Phase-I of IT audit.

∗ **Audit Methodology**

We conducted (October 2019) an entry conference with the GSTN senior management to discuss audit plan and programme followed by discussions, presentations and walkthrough to understand business processes and flow of information through GSTN IT application.

Our testing of important forms and functionalities, as envisaged in relevant Acts and Rules governing GST and SRS, was first conducted on training environment of the GST system. Data from production environment was requested for validation of various audit checks. For majority of the audit

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[28] A System Requirements Specification (SRS) (also known as a Software Requirements Specification) is a document or set of documentation that describes the features and behavior of a system or software application. It includes a variety of elements that attempts to define the intended functionality required by the customer to satisfy their different users.

checks, we analysed data of a selected state for a few months as provided by GSTN. Integration with Indian Customs Electronic Data Interchange (EDI) System (ICES) was covered as part of audit of IGST refund on exports.

We also reviewed the roll out plan and instructions issued by Department of Revenue (DoR), and leading causes that resulted in delayed / non-implementation of various modules. Audit was conducted during October, 2019 to June, 2020. We conducted (10 July 2020) an exit conference with GSTN senior management to discuss main IT audit findings. GSTN responses on audit findings (11-20 July 2020) have been suitably incorporated in this report. Module-wise audit findings have been reported in succeeding paragraphs.

∗ **Audit Criteria**

Sources from where audit criteria for this IT audit was derived include

- − Relevant provisions of CGST Act, IGST Act, UTGST Act, SGST Acts and their associated rules and regulations
- − Notifications of the tax authorities like CBIC
- − Business process of Refund, Returns and e-way Bills modules
- − SRS

∗ **Acknowledgement**

   Audit acknowledges the co-operation of the GSTN, NIC and Directorate General of Systems & Data Management, CBIC (DGS) in providing necessary information and records to audit and for furnishing replies to the audit observations. Draft Audit Paragraph on observations discussed in this chapter was issued to the Ministry on 27 August 2020. However, Ministry's reply is awaited (December 2020).

3.5   Overview of findings – IT audit (Phase-II)

3.5.1   Overview of IT audit findings

Our examination of Refund module, Returns module, EWB System and BCP revealed lack of controls and validations pointing towards risk areas in implementation of these modules. In this regard, we issued audit observations pertaining to 56 issues related to all the modules audited. Out of these, 29 were accepted by GSTN. GSTN didn't accept 17 issues raised by Audit. In 5 cases, GSTN explained that the issues pertain to policy and will be taken up with DoR / Law Committee for further directions. Replies to five audit observations are still awaited.

In 14 cases (Appendix-II), the key validations / functionalities as existing in the rolled out modules were not found aligned to the applicable provisions even though SRS was correctly framed.

Audit findings on Refund module, Returns module, EWB and BCP have been given in the following four parts.

3.6 Follow-up on Phase-I audit observations

We conducted follow-up audit to assess whether GSTN has taken effective action on audit findings and recommendations reported in Phase-I audit. GSTN intimated that it had already implemented corrective action in 25 out of 42 observations. Audit reviewed the corrective action and noticed that GSTN had fixed the deficiency successfully in 19 cases. The status of remaining 23 audit observations is given below (*Appendix-III*):

Status of corrective action	Number of observations	Module-wise breakup
Corrective action successfully implemented.	19	Registration:15 Payments: 2 IGST Settlement: 2
Issues still persist despite GSTN assuring corrective action	6	Registration: 2 IGST Settlement: 4
Corrective action is being taken up by GSTN and will be implemented in due course	12	Registration:7 Payments: 1 IGST Settlement: 4
Rectificatory action is pending at the end of other agencies	5	Payments: 3 IGST Settlement: 2

The important observations where corrective action has not been implemented so far are listed in **Appendix-III**.

3.7 Refund Module

3.7.1 About Refund module

Under GST, refund refers to any amount that is due to the taxpayer from the tax administration. The provisions pertaining to refund contained in the GST law aim to streamline and standardise the refund procedures under GST

regime. The relevant provisions embodied in Section 54 and Section 77 of the CGST Act, 2017 and in Rules 89(1) and 89(2) of CGST Rules, 2017 give an overview of the various situations that may necessitate a refund claim. Following table shows the major categories under which refund can be claimed, and the details of refund applications filed through RFD-01A[29] up to 29 September 2019.

Table No. 3.1: Status of refund applications filed up to 29 September 2019

Refund category	Number	Amount (in crore)[30]
Export of goods / services- Without payment of Tax, i.e., ITC[31] accumulated	2,13,309	78,751
ITC accumulated due to inverted tax structure (clause (ii) of proviso to section 54(3))	1,06,245	23,683
Excess balance in ECL[32]	2,05,866	5,349
Export of services- With payment of Tax	19,252	3,901
On account of supplies made to Special Economic Zone (SEZ) unit/ SEZ developer (without payment of tax)	8,253	3,136
On account of supplies made to SEZ unit/ SEZ developer (with payment of tax)	21,727	1,850
Excess payment of tax, if any	5,916	561
Supplier of deemed exports	1,521	542
Recipient of deemed export	2,024	492
Tax paid on an intra-State supply which is subsequently held to be inter-State supply and vice versa (change of Place of Supply)	130	156
On account of assessment/provisional assessment/ appeal/ any other order	919	60
Others	22,507	3,772
Total	**6,07,669**	**1,22,253**

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[29]   Application for Refund (Manual) for casual taxable person or Non Resident Taxable Person (NRTP), tax deductor, tax collector and other registered taxable person

[30]   Data in table taken from GSTN Summary Report dated 29 September 2019

[31]   Input Tax Credit (ITC) means reducing the taxes paid on inputs from taxes to be paid on output.

[32]   Any GST payment made in cash or through bank refects in ECL. The balance in ECL can be claimed as a refund by submitting a refund application form RFD-01

3.7.2 Audit Objectives

IT audit of GST Refund module was conducted to

a) assess whether Refund module, rolled out by GSTN, was properly planned and effectively implemented as per the timelines

b) assess whether the Refund module, rolled out by GSTN, is in line with relevant provisions of the GST Act / Rules / notifications as amended

c) assess whether integration between the two IT systems (GST and Customs) as regards to refund of IGST on export of goods has been effectively operationalized

d) assess whether the rollout of Refund module has positively impacted the taxpayers in ease of doing business

3.7.3 Rollout of Refund module

Refund module of GST Portal envisaged online filing of refund application by taxpayer and subsequent electronic processing of the claims by the tax department. Refund is a core taxation functionality and therefore, this functionality was supposed to be rolled out from the early days of rollout of GST itself. However, there was no Refund module when the GST was rolled out in July 2017. Refund module was rolled out as per the following timelines:

(a) In case of refund of IGST paid on exports, the automated route of refund sanction was deployed in GST Portal in October, 2017. This involved integration with ICES that uses automated verification of refund claims.

(b) For other categories of refunds, functionality was not provided on GST Portal till November 2017. From November 2017 onwards, provision was made in the GST Portal to file refund application online by taxpayer. Thereafter, the taxpayer would take a printout of the application form and submit to the tax officer along with supporting documents. The tax officer would subsequently process the refund claim in files instead of the portal and sanction refunds. This was essentially manual processing of the refund approval process necessitating avoidable interface with tax officer instead of a faceless IT interface. This system continued till December 2018.

(c) Subsequently in December 2018, a feature was enabled in the GST Portal wherein refund application form GST RFD - 01A, along with all supporting documents, were to be submitted electronically. Thereafter, the documents were to be pushed to the tax officer's dashboard electronically. However, various post submission stages for processing of the refund application continued to be manual as shown in Chart 3.1.

(d) This manual processing of refund continued till 26 September 2019 when GSTN provided a complete electronic refund processing environment starting from the refund processing by the tax department to single authority disbursement through Public Financial Management System (PFMS). The process flow is shown in Chart 3.2.
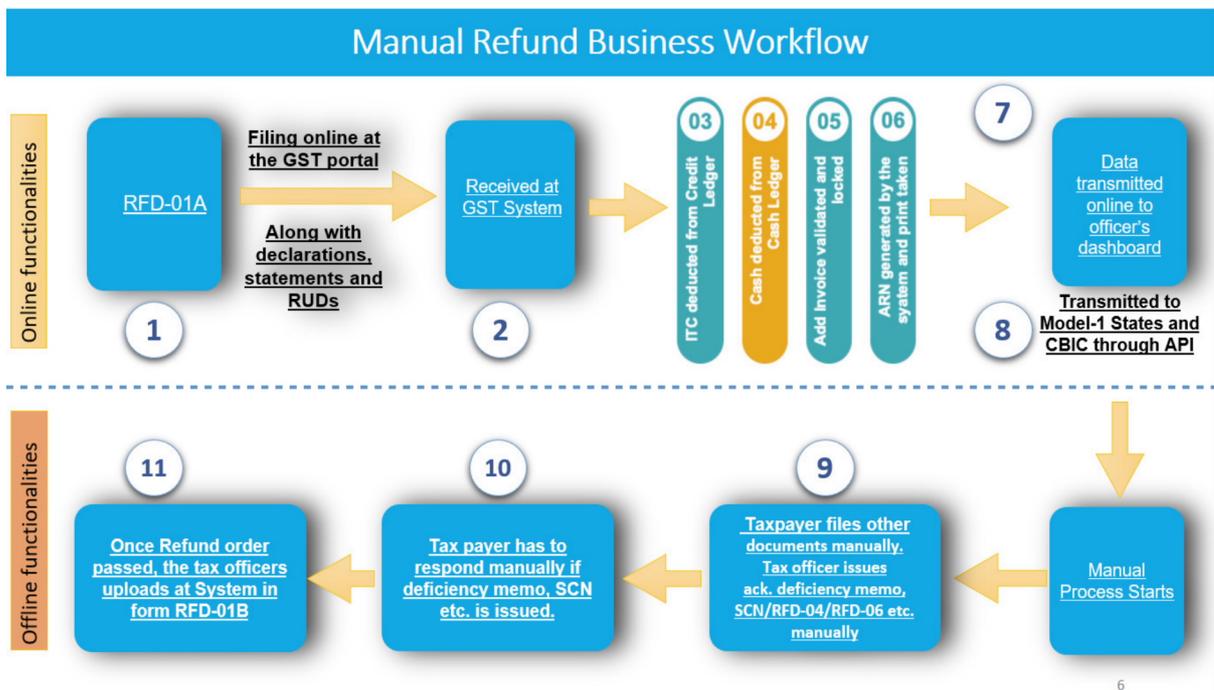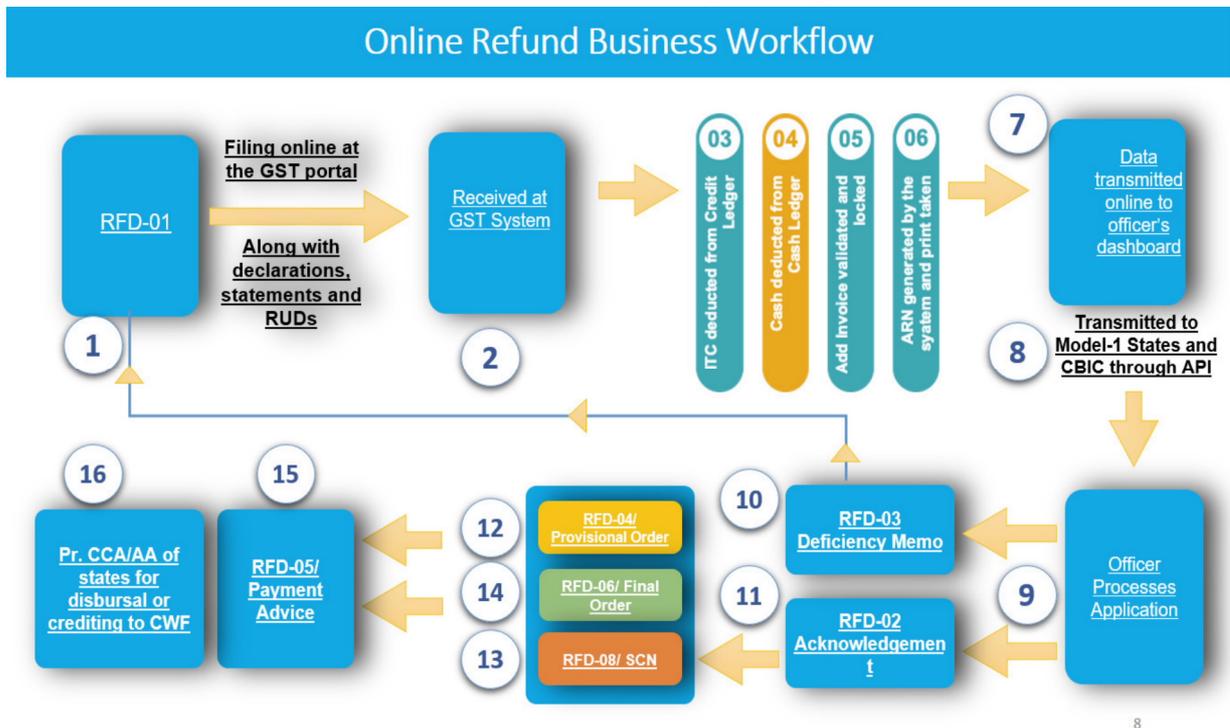
Chart No.3.1: Manual processing of Refund

Chart No. 3.2: Online processing of Refund

Thus, GST refund module was fully rolled out only in September 2019, more than two years after the rollout of GST. The constraints which led to the delayed rollout as stated by GSTN were as follows:

(a) Frequent changes and delay in finalization of the GST rules during the months prior to the rollout of GST Portal in July 2017.

(b) The dispensation of initial GST return mechanism and keeping in abeyance of GSTR-2 and 3 due to which the entire GST refund module had to be reworked.

(c) Dependency of the rollout on readiness of Model-1 states - In March 2019, GSTN was ready with the business flow of processing of refund application electronically. However, Model-1 states and CBIC have their own backend systems and Refund module couldn't have been deployed without the readiness of all the Model-1 States and CBIC together.

(d) Single Disbursement process - The initial RFD-01A flow had an offline disbursement process, wherein the refund amount was to be disbursed by both Central and State authorities (CGST and SGST components respectively). Eventually it was decided to implement single authority disbursement through PFMS. Due to this, the integration process with Model-1 states had to be modified taking into account the readiness of not only CBIC and Model-1 States but also PFMS.

Refund module is a crucial module with high relevance for taxpayers and should have been prioritized and expedited by GSTN. The rollout of refund module could have been expedited by proper planning and coordination among stakeholders.

The IT audit revealed deficiencies in the Refund module of GST IT system, including areas where the GST IT system was not aligned with the provisions of the GST Acts and the Rules. Detailed audit findings are as follows:

3.7.3.1 *Overview of findings on IT audit of Refund module*

During audit of Refund module, we noticed absence of adequate controls, risk of claiming refund on unverified ITC and deficiencies in integration of GST Portal with ICES application for IGST Refund on Export of Goods. Eighteen audit observations related to Refund module were noticed as part of this audit, out of which 15 were issued to GSTN and three were issued to DGS. Out of the 15 audit observations issued to GSTN, eight were accepted and four were not accepted by GSTN. For the remaining 3, GSTN replied that the issue being a policy matter would be referred to DoR /Law committee for further action. Reply to two audit observations that were issued to DGS, is awaited as of November 2020.

3.7.3.2   *Unmitigated risk in the GST Refund mechanism*

There are refunds of the unused ITC which get accumulated during production of goods and services. In these refund categories, a taxpayer is paid in cash equivalent to the ITC accumulated. Such a system's effectiveness depends on inbuilt mechanism to verify / cross check the ITC claimed by the taxpayer and ensure its authenticity. However, in the current GST system, such mechanism is not there posing the risk of claiming refund on unverified ITC as explained in succeeding paragraphs.

In the original GST system, the GST Portal would have verified the ITC, and seamless flow of ITC was envisaged to be achieved through the returns GSTR-1, 2 and 3. It was envisaged that suppliers would file invoice-wise details of outward supplies made by them during the month through GSTR-1. These details were to be made available electronically to the registered recipients through form GSTR-2A who was in turn supposed to furnish form GSTR-2 after including details of other inward supplies. Form GSTR-1 furnished earlier by the supplier would have stood amended to the extent of modifications accepted by him.

The GSTR-2 so filed by a registered dealer could be used to check with the sellers' GSTR-1 for buyer-seller reconciliation. This reconciliation is vital because ITC on purchases will only be available if the details of purchases filed in GSTR-2 return of buyer matches with the details of sales filed in GSTR-1 of the seller. GSTR-3, monthly return with the details of sales and purchases during the month along with the amount of GST liability, was supposed to be auto-generated from GSTR-1 and GSTR-2.

However, GSTR-2 and 3 were kept in abeyance. In lieu of GSTR-3, a new form GSTR-3B was inserted by the Government as a summary return. GSTR-3B was introduced as a temporary arrangement to collect tax from taxpayer till a new return format replacing initial GSTR-1, 2 and 3 is deployed. However, the new returns have not been rolled out as of November 2020, and GSTR-3B continues to be used. There is no auto-population either from or to GSTR-3B from other returns. All the details in GSTR-3B are purely based on taxpayer input.

Thus, the invoice matching mechanism of returns via GSTR-1, 2 and 3, as originally envisaged, is not functional. Being a self-assessed summary return and having no validation of ITC claimed for paying tax liability in GSTR-3B, there is a risk that tax paying entities pass on ITC down below in the ITC chain without actually paying tax.

In reply, GSTN stated (July 2020) that they have developed the refund business process as per existing legal provisions and all the changes introduced by Government have been implemented.

GSTN's reply should be seen in the light of facts that these passed down ITCs can be used to claim refund after multiple levels of ITC transmission. The only control preventing such fraudulent refund claims is verification by the Refund Processing Officer (RPO) while processing Refund claims. However, it is practically not feasible for a RPO to get the source of every ITC claim especially where the ITC chain may have huge number of layers involving genuine taxpayers in between. Thus, the risk of fraudulent refund claims on fake ITC is an inherent risk in the GST eco-system due to incomplete rollout of the envisaged returns and lack of reconciliation / auto-population in the alternate mechanism adopted (GSTR-3B).

3.7.3.3 Deficient re-crediting facility of ITC where Deficiency Memo (DM) was issued on second and subsequent occasion

CGST Rule 90(3) provides "Where any deficiencies are noticed, the proper officer shall communicate the deficiencies to the applicant in FORM GST RFD-03" requiring him to file a fresh refund application. As per Rule 93(1) "Where any deficiencies have been communicated under aforesaid, the amount debited under sub-rule (3) of rule 89 is re-credited to the electronic credit ledger".

We observed that when a taxpayer files an application under various categories of refund at GST Portal, the ITC ledger of the taxpayer is debited with an equivalent amount of refund claimed. If RPO issues a DM on the application, the ITC ledger of taxpayer gets re-credited with the amount of refund claimed on this first occasion of issuance of DM by the RPO. If the taxpayer again applies refund for the same period, the ITC ledger of taxpayer gets debited but ITC ledger does not get re-credited if RPO issues further DM on the second occasion and in subsequent DMs. This could result in blockage of ITC of taxpayers.

GSTN accepted (June 2020) the audit observation and stated that due to a code error, in few cases, the system was not re-crediting the ITC if the tax officer issued further DMs. GSTN stated (13 July 2020) that the defect had been fixed on 21 January 2020 and all the impacted cases had been resolved through data fix by re-crediting the ITC.

3.7.3.4 Excess refund allowed by system in case of export without payment of tax (LUT)

Section 16 (3) (a) of IGST Act, 2017 provides that the person may supply goods or services or both under bond or Letter of Undertaking (LUT), without payment of integrated tax and claim refund of unutilised ITC. For calculating eligible refund amount of ITC, Rule 89 (4) of CGST Rules, 2017 provides the following formula –

Refund Amount = (Turnover of zero-rated supply of goods + Turnover of zero rated supply of services) x Net ITC ÷Adjusted Total Turnover {Statement-3A}

The intention of this refund category is to provide refund to an exporter on the ITC he/she has accumulated while purchasing domestic inputs required for making export goods / services. We noticed that the system is implemented in such a way that it is possible for the taxpayer to claim refund on ITC much more than the ITC accumulated from the purchase of domestic inputs as detailed in the following case study.

Case Study

A taxpayer filed an application for refund of ` 59,24,756 for the month of October 2019 under the category 'Refund of ITC on export of goods without payment of tax'. We noticed that the total taxable value of export of goods for the period was only ` 70,689. However, in this case, ` 59.25 lakh was sanctioned as refund against the exports of ` 70,689 made in the month with refund sanctioned to export ratio of 8381.4 per cent. Thus, this is a case of sanctioning excess refunds. There is also a possibility that the ITC for which refunds have been sanctioned may not be related to exports at all.

The above case clearly shows that refund of ITC sanctioned was disproportionately more than the actual value of export. GSTN provided sample data[33] of 9136 cases of refunds under LUT category. We noticed that in 143 of these cases, the refund sanctioned was disproportionate to the export value. In 27 of these 143 cases, the refund sanctioned was more than the export value with refund sanctioned to turnover ratio ranging from 103.24 *per cent* to 8381.4 *per cent*[34].

It appears that the system is designed in a way that it does not restrict the claim of refund on the basis of export value, and thus enables taxpayers to get higher ITC encashment through this functionality. The sample data query results substantiate that such cases are actually happening and refunds are also sanctioned far in excess of the maximum ITC possible in comparison to export value.

In response to audit observation, GSTN stated (June 2020) that the functionality has been developed strictly as per the legal requirements / provisions, and since the observation relates to policy and not to IT, GSTN cannot comment on the policy issue being pointed out by Audit. Further, GSTN

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[33]   All Refund cases on account of export of goods / services without payment of tax for the period 01 July 2019 to till 31 December, 2019 containing details like Refund claim, Sanctioned amount and Taxable value.

[34]   These are cases where refund sanctioned was morethan 28 *per cent* (maximum GST rate) of export value.

stated (June 2020) that the audit observation is based on the notion that refund on account of export of goods and services without payment is automated i.e. once the refund application is filed, the amount is sanctioned automatically. However, that is not the case. The jurisdictional officer processing the refund application verifies the antecedents of the taxpayer and scrutinises the case before sanctioning refund application, and thus audit assertion of fraudulent refund claims by fly-by-night operators lacks merit.

We understand that the system has been designed as per the rule provisions. However, the intention of refund of ITC on exports *is to provide for tax paid domestically for goods exported and the tax should be in proportion to the goods exported*. As the above examples show, the system allows refund far more in excess of the tax paid in goods exported and is not in sync with the intention of the law. There is currently no mechanism to separate ITC remaining unutilised on account of goods sold in India (for which refund is not admissible) with goods exported out of India (for which refunds are possible). We are also not in agreement with the GSTN contention that RPO alone is an effective check against fraudulent claims of this manner. The IT system should as far as possible strive to aid the jurisdictional officer in highlighting the risk and make effective controls. In this case, the possibility of IT system to identify and prevent such cases is under-utilised leaving the entire risk mitigation responsibility on the RPO.

In a complex system like GST, it is possible that the rule provisions may not cover all possible scenarios. GSTN may consult the matter with DoR / Law Committee to flag this issue and make adequate validations in the system. GSTN replied (July 2020) that the matter has been considered by Law Committee, and GSTN was yet to receive any instruction in this regard.

> *Recommendation 1:* GSTN may implement validations to restrict the refund claimed under LUT in proportion to turnover of goods exported.

3.7.3.5 *Mandatory validation not put into the system (Endorsement detail of invoices of supplies to SEZ was not made mandatory)*

Rule 89 sub-rule (2) of CGST Rules, 2017 provides that the application under sub-rule (1) shall be accompanied by any of the following documentary evidences in Annexure 1 in form GST RFD-01, as applicable, to establish that a refund is due to the applicant, namely:- (d) a statement containing the number and date of invoices as provided in Rule 46 along with the evidence regarding the endorsement specified in the second proviso to sub-rule (1) in the case of the supply of goods made to a SEZ unit or a SEZ developer, (e) a statement containing the number and date of invoices, the evidence regarding the endorsement specified in the second proviso to sub-rule (1) and the details of

payment, along with the proof thereof, made by the recipient to the supplier for authorised operations as defined under the SEZ Act, 2005, in a case where the refund is on account of supply of services made to a SEZ unit or a SEZ developer. As per Paras 5.4.6 & 5.4.7 of Refund SRS, the applicant is required to enter Shipping Bill / Bill of Export / Endorsed Invoice by SEZ' details mandatorily, in case of refund on account of supplies made to SEZ unit/ SEZ developer. In case of refunds on supplies to SEZ category, Endorsed Invoices by SEZ is a proof that the supplies are actually made to SEZ.

We observed that the system allowed the taxpayer to submit the refund application without providing the details of Endorsed Invoices by SEZ (in Statement-4 of refund application) while filing refund application against the supplies made to SEZ unit / developer with payment of tax. Similarly, the refund application against the supplies made to SEZ unit / Developer without payment of tax can also be filed without providing details of Endorsed Invoices by SEZ in Statement-5 of refund application. The validation of Endorsed Invoices by SEZ was mandatory as per provisions of SRS and has not been implemented in the system. Without validation of the Endorsed Invoice details, it is not possible to ensure that exports (against which refund is sanctioned) have actually happened from the SEZ.

In response, GSTN mentioned (June 2020) that in the development of IT functionality requiring seamless integration with other IT systems, the relative maturity and preparedness of constituent IT systems plays a pivotal role. Now, after rigorous testing and checks, the integration with Indian Customs Electronic Gateway (ICEGATE) has become stable and therefore, the process of SEZ Endorsed Invoice data validation through ICEGATE has been taken up for implementation. GSTN informed (July 2020) that they were currently having interactions with ICEGATE / SEZ Online to finalise the integration process. GSTN also intimated that the tax officers have access to SEZ Online Portal wherein Endorsed Invoices can be verified while processing the refund application.

Tax officers having access to SEZ Online and manually verifying them is not an effective substitute for automatic validation by IT system. Integration with SEZ should have been a priority for GSTN due to the risk involved. The fact remains that even after three years from the rollout of GST and despite having provisions in the SRS for such validation, integration with SEZ system has not been achieved to minimize this risk in the system.

Recommendation 2: GSTN may take necessary steps for integration of GST Portal with SEZ Online system.

3.7.3.6   *Non implementation of "With-hold" request functionality*

As per CGST Rule 96(4)(a) and (5), the claim for refund of integrated tax paid on goods (or services) exported out of India shall be withheld where request has been received from the jurisdictional Commissioner of GST to withhold the payment of refund for violation of provisions of GST / Customs Act. Where refund is withheld in accordance with these provisions, the proper officer of integrated tax at the Customs station shall intimate the applicant and the jurisdictional Commissioner of GST, and a copy of such intimation shall be transmitted to the common portal.

We observed that the functionality for issue of "With-hold" request of shipping bills by the GST Commissioner, in case of refund of export with payment of tax, was not developed / implemented in the system. On enquiring with DGS it was also confirmed that there is no electronic transmission of GST withheld cases.

GSTN accepted (April 2020) that "With-hold" functionality has not been implemented in full. GSTN intimated that the business flow with respect to withhold and release functionality is under discussion in the Law Committee and the forms have to be notified. Further, GSTN stated (June 2020) that since the observation relates to policy and not to IT, GSTN cannot comment on the policy issue being pointed out by audit.

In the absence of the "With-hold" functionality, the possibility of further refund to the non-compliant exporters cannot be ruled out. We are also unaware of any alternate mechanism to mitigate the risk other than GST Commissionerate writing directly to Customs Ports to suspend the IGST refund which is inefficient and not in line with the vision of fully electronic processing of refunds. The provision of "With-hold" was there in the law from the beginning, and the need for rolling out should have been anticipated much earlier. The responsibility of not rolling out of this functionality rests with all the stakeholders including GSTN.

GSTN replied (July 2020) that they have flagged the issue with the Law Committee, and are yet to get an instruction in this regard.

> *Recommendation 3:*   GSTN may pursue the matter with the DoR to finalise the business flow and forms required to implement the "With-hold" functionality at the earliest.

3.7.3.7   *Functionality for interest on delayed payment of Refund was not implemented in the system*

Section 56 of CGST Act 2017 provides that if any tax ordered to be refunded under sub-section (*5*) of section 54 to any applicant is not refunded within sixty days from the date of receipt of application, interest at such rate not exceeding

six *per cent*, as may be specified in the notification issued by the Government on the recommendations of the Council, shall be payable in respect of such refund from the date immediately after the expiry of sixty days from the date of receipt of application till the date of refund of such tax. Claims of refund that arise from an order passed by an Adjudicating Authority or Appellate Authority or Appellate Tribunal or court which has attained finality are also governed by these provisions.

We observed that

∗ the provisions to calculate (automatic / manual) interest payable on delayed sanctioning of refund were not considered for incorporation in the SRS and consequently not implemented in the system.

∗ the interest field in RFD-05 form (Payment Advice) is not mandatory to fill even in cases where 60 days have passed since refund application.

∗ there are no fields available where the RPO has to mention the reason for not sanctioning the interest in cases where refunds are sanctioned beyond 60 days.

We also noticed that there is no provision in the GST Portal to apply for interest in case the taxpayer is not provided interest along with the refund payment. A specific example of the same is given below:

> *We noticed that one tax-payer was not paid interest along with the refunds. He approached Hon'ble High Court for redressal of his grievance. The petitioner also stated that there was no option available on the common portal to enable the registered person to make application for claiming compensation / interest on delayed refund. High Court agreed with the contention and directed to pay the interest at the rate of 9 per cent per annum for delayed payment of refund to taxpayer where interest was not paid at the time of payment of refund claim.*

In response, GSTN replied (April 2020) that the tax officer can manually calculate the interest amount and include the same. GSTN stated (June 2020) that the calculation of interest on delayed sanction of refund involves many scenarios which were difficult to be captured efficiently by the system due to myriad number of factors. GSTN stated (June 2020) that the system cannot calculate interest on refund in various scenarios like non-compliance by the taxpayer in quasi-judicial proceedings, multiple payment orders against a single Application Reference Number (ARN), withholding of refund by the proper officer and its subsequent release, delays on account of non updation of bank account by the taxpayer, process of assessee master validation by PFMS etc. Similarly, there are certain externalities that are beyond control viz. pandemics, natural disasters, network breakdown, differences in the holiday

calendars of different states etc. that might delay the sanction of refund amount. Hence, to envisage all these scenarios and deliver the functionality of auto-calculation of interest will not be feasible.

GSTN's reply is not acceptable as calculation of interest is relatively straightforward in most cases. Citing exception scenarios to not implement the interest calculation feature is, in our view, under-utilisation of the potential of IT in achieving effectiveness and automation of process.

During exit conference, GSTN intimated (July 2020) that delays may also occur between the sanction of refund and payment being made. Interest for such delay will be not be possible to calculate automati cally since it happens outside GST Portal. We are not in agreement with GSTN's contention since delay at payment stage is likely to be of less duration since it's primarily an automated process involving integration with PFMS / banks. More importantly, since this delay will be after the calculation of interest, it would not impact the amount of interest whether interest calculation is done manually or automatically. Hence non-implementation of automatic calculation of interest citing this reason doesn't hold merit.

The purpose of an IT application is not to exactly replicate the manual processes. Instead, the IT system should strive to achieve efficiencies and automation of processes wherever feasible. This has not been achieved in the instant case.

GSTN did not reply to audit observation regarding lack of provision in the GST Portal to apply for interest in case the taxpayer is not provided interest along with delayed refund payment.

> *Recommendation 4:* GSTN may implement the functionality of auto calculation of interest on delayed payment of refund, and provide for a functionality in the GST Portal for the taxpayer to apply for interest if the same is not paid with delayed sanction of refunds by the department.

3.7.3.8 Non allocation of RFD 10 of Other Notified Persons (ONP) to State Jurisdictional Authority

Para 6.3 of SRS for GST Refund module provides the Main Flow (MF) of refund application for UN bodies / Embassies / ONPs. SRS p rovides that "RFD-10 " filed by ONPs shall be sent to State / Centre based on th e Authority selected by the applicant in the registration form and RFD-10 filed by UN Bodies / Embassies shall be sent to CBIC via APIs[35]".

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[35]   Application Programming Interface

During audit, we filed a dummy refund application under the category "Other Notified Person having State administration" as its jurisdictional authority. We noticed that the application was not assigned to any officer of assigned state jurisdiction for further processing of refund. This indicates lacunae in the assignment process of refund application under "Other Notified Person of Unique Identification Number (UIN)" category with possibility of refund applications not being assigned at all.

GSTN accepted (June 2020) the audit observation and stated that there are very few entities registered under the "Other Notified Person of UIN" category and the proposed logic of assigning the ARNs would entail the development of complete backend systems of all the States and CBIC which would also require multiple APIs for integration. Keeping in view the pressing priorities with regard to development of other critical use cases and subsequent changes, the proposed functionality was given lower priority in view of disproportionate effort vis-a-vis the outcome. GSTN stated (July 2020) that the audit observation has been noted and a Change Request (CR) has been raised to this effect.

3.7.3.9 *Absence of auto–exclusion functionality to deduct the ITC of Capital goods*

In GST regime, taxpayers are eligible for tax credit on tax paid on inputs used in the finished good. As per Section 2(59) of CGST Act, 2017 "input" means any goods *other than capital goods* used or intended to be used by a supplier in the course or furtherance of business.

In the original return format (GSTR-3), there was provision to capture ITC availed in respect of input goods, input services and capital goods separately. This would have enabled the system to identify ITC excluding the capital goods while processing of refund applications. However, this GSTR-3 was held in abeyance and instead Government introduced a new summary return i.e. GSTR-3B. The format of GSTR-3B does not contain separate fields for ITC of input goods, input services and capital goods distinctly and hence in the present return format there is no mechanism to segregate ITC from input goods/services with ITC from capital goods.

While testing refund applications under the category 'Inverted Tax Structure'' in training environment, we noticed that the value of Net ITC is auto-populated from ITC availed by the tax-payer in his return (GSTR-3B). This value of Net ITC may also include the ITC of capital goods (which is non-refundable) availed during the return period. There is no functionality available in the system to identify and exclude ITC of capital goods from the total ITC available with the taxpayer nor is the taxpayer being instructed to exclude the ITC due to capital

goods while filing of refund application. This may lead to sanction of excess refunds.

On being pointed out, GSTN replied (May 2020) that a CR has been raised for incorporating the instruction for excluding the ITC of capital goods, in the system, in case of refund on account of Inverted Duty Structure (IDS). GSTN further stated (May 2020) that the taxpayer can downward edit to exclude the ITC availed on capital good and the RPOs have access to the inward invoices auto-populated in the GSTR-2A of the refund applicant to address the issue.

Instead of instruction to exclude the ITC on capital goods, additional fields may be created in the refund application form (or in the proposed new return form) wherein the taxpayer explicitly declares the ITC on capital goods while applying refunds so that it can be excluded from the total ITC. In response, GSTN stated that even if the flag of capital / non-capital ITC is inserted, as suggested by audit, the system won't be able to validate the veracity of the flag being chosen by the taxpayers and again it will be a self-declaration which is currently being followed.

Legal position is that Refund of ITC on capital goods is not available and therefore, ITC related to capital goods should be distinctly identifiable to guard against sanction of excess refund. Such a field will be a deterrent for the taxpayer to wilfully or by mistake include the ITC on capital goods in refunds. Moreover, it will assist the RPOs in readily identifying risks if unusual values are there in that field (say, too low ITC on capital goods value relative to the profile of the business). We also noted that similar risks exist in the refund category of export of goods or services without payment of tax under bond or LUT.

GSTN intimated (July 2020) that suggestions made by audit will be submitted to Government for appropriate action / direction.

> *Recommendation 5:* GSTN may review the feasibility of creating additional fields in refund application of IDS and export of goods or service or both without payment of tax for taxpayer to declare ITC related to capital goods for excluding the same from ITC used for calculation of refund claim amount.

3.7.3.10 *Excess claim of refund in the absence of adequate controls / validations*

Rule 89(2)(h) of CGST Rules 2017 provides that the Refund application shall be accompanied by Statement 1A in cases where the claims pertain to refund of any unutilised input tax credit under sub-section (3) of section 54, where the credit has accumulated on account of the rate of tax on the inputs being higher than the rate of tax on output supplies, other than nil-rated or fully exempt

supplies (i.e., Inverted tax structure). In Statement 1A along with Refund Application form GST RFD-01A/01, the taxpayer has to furnish the *invoice wise details* of inward and outward supplies electronically. Similarly, taxpayer has to provide the total turnover of inverted rated supply of goods and services in Statement-1. The total turnover in Statement-1 should be less than or equal to the total turnover of invoices in Statement-1A to ensure that invoice details for all supplies are available for which refund is claimed.

We noticed that 69 GSTINs had declared higher value of turnover of inverted rate of supply of goods and services in Statement-1 in comparison to the total value of invoices of outward supplies as provided in Statement-1A on all India basis for the period from 1 April 2019 to 30 November 2019. The difference of turnover between these two tables was ` 652.21 crore**.**

In reply, GSTN stated (July 2020) that a CR has been initiated on 15 June 2020 for adding validation for turnover in Statement-1 of refund application in the case of Inverted Duty Structure (IDS) Refund. It will be taken up for development once other lined up priority CRs have been developed.

> *Recommendation 6:* GSTN may implement the validation in the system to verify the turnover of inverted rate of supply in Statement-1 with the corresponding entries as provided in Statement-1A.

3.7.3.11 *Functionality for unregistered person / consumer to apply for refund not implemented*

Section 76 (10) (CGST Act, 2017) provides that where any surplus is left after the adjustment under sub-section (*9*), the amount of such surplus shall either be credited to the Consumer Welfare Fund (referred to in section 57) or refunded to the person who has borne the incidence of such amount. As per SRS for GST Refund module, in case of unregistered person / consumer, the refund application would be taken after creating a temporary login (Front Office module). Assumption (AS_11) provides "Refund application can be filed by unregistered person on creating a temporary login".

We observed that an unregistered person / consumer can get a "temporary login ID and password" through the functionality provided in Services module of the GST Portal. However, functionality for applying a refund with this temporary login ID and password (i.e. for unregistered person / consumer) has not been provided in Refund module. In the absence of such functionality, an unregistered person / consumer would not be able to file application for his refund claim. Further on verification of data, it was observed that in one case only, temporary GSTIN was issued to unregistered person by the tax officer till 25 March 2020.

In response to audit observation, GSTN stated (June 2020) that the functionality of refund application to unregistered person / consumer was not accorded high priority. However, the refund business process has stabilized now and development of the functionality allowing unregistered person / consumer to claim refund has been initiated.

> *Recommendation 7:* GSTN may implement the functionality of refund application to unregistered person / consumer in a time bound manner.

3.7.3.12   IGST Refund on Export of Goods – integration with ICES application

Exports are zero-rated in GST regime. It implies that exporters can claim refund of tax (IGST) paid on exports or ITC available with them. There are two means with which this is achieved both of which involve data exchange between the GST Portal and Customs ICES application.

Export of Goods with payment of IGST

IGST Refund process for exports is operational in ICES since 10 October 2017. As per Rule 96 of the CGST Rules 2017, the shipping bill filed by an exporter is deemed to be an application for refund of integrated tax paid on the goods exported out of India, once both the Export General Manifest (EGM) and valid return in form GSTR-3 or form GSTR-3B, as the case may be, have been filed. Further, the information on GSTR-1 (Table-6A) is then transmitted electronically to the ICES application.

The necessary matching between the two data sources (GSTN and ICES) is done at invoice level and any mis-match of the laid down parameters returns with error / response codes. If matching is successful, ICES processes the claim for refund and the relevant amount of IGST paid with respect to each Shipping Bill or Bill of Export is electronically credited to the exporter's bank account by the Customs Commissionerate.

Export of Goods under LUT

Here the exporter doesn't pay IGST while exporting. Instead he gives LUT and claim refund for the ITC. The necessary matching between the two data sources (GSTN and ICES) is done at invoice level including other values from various data fields and any mis-match of the laid down parameters returns with error / response codes. In case of refund of unutilized ITC on inputs or input services for export under LUT, the taxpayer has to file online refund application (RFD-01/01A) which is sanctioned by the GST Commissionerates.

Existing System for Transmitting IGST Paid Export Invoices to ICEGATE

GST System uses a ledger based mechanism to ensure that cumulative liabilities from export (table 6A), supplies to SEZ (table 6B), any change of liability due to amendment of export invoice (table 9A) and credit / debit notes (tables 9B & 9C) is sufficiently paid under table 3.1(b) – Zero rated outward taxable supplies. The invoices, pertaining to export of goods, from table 6A are transmitted to ICEGATE if the IGST cumulatively paid under table 3.1(b) of all GSTR-3B returns filed till date, is equal to, or greater than, the cumulative liability arising out of tables 6A/6B/9A/9B/9C of all GSTR-1 filed till date. Under this process of validation, it is possible that either of GSTR-1, or GSTR-3B, of same months is not filed, but the invoices are transmitted for previous periods because the difference between IGST paid and liability is greater than, or equal to zero.

We analysed the integration between the GST Portal and ICES and noticed the following deficiencies:

3.7.3.12.1 *Reconciliation between GST Portal and ICES*

The processing of refund of IGST on exports involve to and fro transmission of data between the GST Portal and ICES through API mechanism. A robust reconciliation mechanism is expected between the two portals to ensure that there is no data loss during transmission and to ensure completeness and accuracy of data received at each end. In an API based data exchange, it is preferable that the reconciliation mechanism is also API based for seamless integration of the reconciliation process between the two systems.

We could not find any formal Standard Operating Procedures (SOPs) document between the two agencies which clearly specifies the roles and responsibilities of each party and the validations to be ensured by each side. Similarly, there is no formal documentation on the reconciliation process being employed between the two portals to ensure that there is no data gap/loss or transmission errors in the data exchange between the two portals.

GSTN was also requested to provide copies of reconciliation reports so that we could verify the current reconciliation mechanism. In reply, GSTN stated (July 2020) that the reconciliation is based on the count of transactions sent by the GST System to ICEGATE and it also includes the transactions that ICEGATE validates and transmits back to the GST System. Presently, a daily report is generated by the GST System and sent to all relevant stakeholders, including the ICEGATE team. Similarly, an excel based data comparison is done between the two teams on meta data. None of these reports or details of data comparison methodology were shared with us despite being asked for. Hence,

we are not in a position to comment whether the reconciliation mechanism is effective or it is free from errors.

To independently verify the reconciliation mechanism by comparing data sets of same month from GSTN and DGS, we requested same month data from both the agencies. Though GSTN provided (July 2020) the data, we have not received desired data set for doing such analysis from DGS and in its absence, we could not verify the reconciliation mechanism.

GSTN further stated (July 2020) that a CR is being worked upon for an API based reconciliation between GST System and ICEGATE. Once the CR is live, daily transaction level reconciliation will be done over API, and relevant stakeholders will be alerted of gaps, if any noticed.

We note that the API based data exchange between GST and ICES portals has been functioning since October 2017. However, an API based reconciliation mechanism for the data exchange is yet to be operationalised.

> *Recommendation 8:* **GSTN and DGS may implement** API based reconciliation between GST Portal and ICES system at the earliest.

3.7.3.12.2 *Non-deployment of validation to restrict the shipping bills having higher rate of duty drawback*

Section 54 (3) (ii) of CGST Act, 2017 provides that no refund of ITC shall be allowed, if the supplier of goods or services avails drawback in respect of central tax or claims refund of the integrated tax paid on such supplies.

Analysis of the data shared by DGS revealed that IGST refund amounting to ` 1.50 crore against 115 shipping bills at four Customs ports was disbursed where the higher rate of drawback was already allowed during the period July 2017 to February 2020. This implies that the system had not deployed the validation to restrict the shipping bills having granted higher rate of duty drawback from claiming refund.

The issue was raised with DGS, vide audit observation dated 18 June 2020 followed by an Inspection Report dated 7 July 2020. Reply is still awaited.

> *Recommendation 9:* DGS may deploy the validation in ICES Portal to restrict the shipping bills having granted higher rate of duty drawback from claiming refund.

3.7.3.12.3 *Absence of system validation led to excess IGST Refund amount*

As per para 9.1 of circular No 37/11/2018-GST dated 15 March 2018, during the processing of the refund claim, the value of the goods declared in the GST invoice and the value in the corresponding shipping bill / bill of export should be examined and the lower of the two values should be sanctioned as refund.

Further, Business Rule 6(1) of Para 9.2.6 of SRS of Refund module also provides that the refund amount to be reimbursed shall be lower of the two values, out of:

(i)   IGST value reported in shipping bill filed at Customs and

(ii)   IGST value reported in GSTR-1 filed at GST Portal.

Analysis of all India data for the period July 2017 to February 2020 provided by DGS revealed that the system allowed disbursement of higher value of IGST from the IGST reported in shipping bill at Customs and IGST reported from GSTR-1 in 67 shipping bills. Thus, the absence of validation in the system allowed disbursement of ` 2.28 crore instead of ` 1.55 crore resulting in excess refund of IGST of ` 72.49 lakh which was in contravention to the aforesaid criteria. Hence, it may be concluded that the functionality to restrict the disbursement of higher value between IGST reported in shipping bill at Customs and GSTR-1 has been not developed/deployed.

The issue was raised with DGS vide audit observation dated 18 June 2020 followed by an Inspection Report dated 7 July 2020. Reply is still awaited.

Recommendation 10: DGS may deploy in ICES Portal the functionality to restrict the disbursement to lower value between IGST reported in shipping bill at Customs and in GSTR-1.

3.8   Return Module

3.8.1   *About Returns module*

In GST, taxpayers have to file common return for all taxes viz., CGST, SGST, IGST and GST Compensation Cess. The basic features of the return mechanism envisaged electronic filing of returns, uploading of invoice level information, auto-population of information relating to ITC from returns of supplier to that of recipient, invoice level information matching and auto-reversal of ITC in case of mismatch. As per GST Rules, ITC cannot be claimed by a taxpayer unless it has been paid by the supplier. This is to be ensured through the provisions for matching of invoices of 'suppliers and recipients' through filing of returns GSTR-1 (details of outward supplies) and GSTR-2 (details of inward supplies) as also generation of monthly return GSTR-3 (payment of tax, interest and late fee, if any, on the basis of computation of net tax liability) based on GSTR-1 and 2 filed by taxpayers, with the taxpayer adding details of tax paid in GSTR-3.

However, from the initial stages of introduction of GST, filing of GSTR-2 and GSTR-3 returns have been kept in abeyance and taxpayers are allowed to claim ITC in GSTR-3B return without any such cross-verification. Under GSTR-3B, ITC is claimed by the taxpayer on self-assessment basis. Hence, in the absence of

validation that ITC is being claimed by a taxpayer after payment of tax by the supplier, it is not possible to verify the veracity of ITC claims. This has serious implications, as the taxpayer could claim excessive ITC. However, of late, attempts were made to address this issue by limiting the claim to ITC available according to GSTR-2A, which is created from the suppliers' outward supply details filed in GSTR-1.

Moreover, in the 31st GST Council meeting (December 2018), it was decided that a new return system, for taxpayers under GST would be introduced for the taxpayers in place of GSTR-1 and GSTR-3B. After several changes in the proposed date of implementation, new return forms were proposed to be brought from October 2020. New return forms were to address the need for a single, simple and concise return form which would take the place of multiple return forms of complex nature that are currently being filed by taxpayers. GST Council have in its 42nd meeting (October 2020), decided not to roll out the proposed new return system in one go. It has decided to incrementally incorporate the features of the new return system in the present familiar GSTR-1 / 3B scheme. The new approach would allow the taxpayer to view ITC available in his electronic credit ledger from all sources i.e. domestic supplies, imports and payments on reverse charge etc. Prior to the due date for payment of tax, and enable the system to auto-populate return (GSTR-3B) through the data filed by the taxpayer and all his suppliers. The new provisions will be provided with effect from 1 January 2021 for monthly filers and 1 April 2021 for quarterly filers. The present GSTR-1 / 3B filing system has been extended till 31 March 2021 and the GST laws would be amended to make the GSTR-1 / 3B return system as the default return filing system.

3.8.2   *Audit Objective*

IT audit of Return module was conducted to assess whether it was rolled out in line with relevant provisions of the GST Act / Rules / notifications as amended, and to identify the risks in the GST eco-system due to incomplete rollout of Return module.

3.8.3   *Audit Observations*

3.8.3.1 *Overview of findings on Returns Module*

We noticed lack of validations resulting in gaps / non-filing of GSTR-1, 3B and 4, lack of auto calculation of interest liability of taxpayers in GSTR-3B, and incorrect mapping of rules to SRS. Ten audit observations pertaining to Return Module were issued to GSTN apart from one para on non-furnishing of documents. Out of these, 6 were accepted by GSTN and two were not accepted. In the remaining two observations, GSTN intimated that the issue

pertains to policy and hence, would be taken up with government for further clarification.

3.8.3.2 *Non-Production of information to Audit*

For assurance on the first audit objective, i.e., whether Returns module was implemented as per extant laws, rules and procedures, we had provided a total of 93 information seeking data queries (in December 2019) for execution to GSTN. As of now (December 2020), output of only 68 data queries have been provided, and output in respect of 25 queries is still pending despite GSTN having adequate time of seven months for running the queries.

With regard to the second audit objective of identifying risks in the GST eco-system, we had issued 73 data queries to GSTN. GSTN replied that these queries were not related to check of controls / validations in the IT System and hence did not fall within the scope of IT audit. GSTN further stated that it was holding the data of individual taxpayers in fiduciary capacity, on behalf of the respective Central / State Tax Administrations, and hence was not in a position to provide the data. Since GSTN did not provide the requisite information, we are not in a position to provide assurance on risks and vulnerabilities prevailing in the system owing to incomplete roll out of Returns module.

GSTN replied (July 2020) that it would provide replies to the pending data queries related to first objective shortly. GSTN's reasons for non-furnishing of data for assessing risks in Returns module are not tenable, as CAG is empowered to satisfy himself that an effective check on the assessment, collection and proper allocation of revenue has been incorporated into the design of the system (Section 16 of the CAG's Duties Powers and Conditions of Service (DPC) Act). To this end, it was necessary, in audit, to carry out checks, not merely to check validation failures, but also to place such vulnerabilities in perspective. Analysis of summary data was, therefore, of utmost importance, to assess the possible impact of designing a GST ecosystem without originally envisaged provisions such as invoice-matching.

3.8.3.3 *Incorrect creation of GSTR-2A led to irregular availability of ITC*

As per the provisions[36] of the CGST Act 2017 (as amended), and Notifications[37] issued from time to time, ITC could be utilised only by the recipient taxpayer and only for the amount of tax paid, which was shown to the said taxpayer in GSTR-2A (details of inward supplies) plus 10 *per cent* thereof, at most. Further,

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[36]   Section 16 (2) read with Section 39 and Section 43A of CGST Act.

[37]   Notification No. 49/2019-CT dated 09-10-2019 as amended by Notification No. 75/2019 dated 26 December 2019.

there was provision[38] of amendment of invoice, subsequent to uploading of information in GSTR-1.

During test-check of forms, we noticed that, when the invoice was amended by changing the GSTIN of the recipient, the amount of invoice was seen in GSTR-2A of both the recipients-i.e. the originally mentioned recipient, as well as the amended one. Further, no flag was raised to the original recipient for the amendment of invoice. Therefore, ITC was shown as available to both the recipients, for utilisation for payment of tax. Similarly, when only the amount of invoice was amended but the recipient was same, it was noticed that GSTR-2A of the recipient contained both the original and revised invoices, along with the corresponding amounts. Thus, when a taxpayer amended his invoice details in his GSTR-1 in the subsequent tax period, after filling in the original return, the corresponding details in GSTR-2A of respective recipients was not reflected correctly.

On this being pointed out (January 2020), GSTN emphasised (June, July 2020) that the absence of GSTRs-1/2/3 had led to the problems in creation of GSTR-2A. It further averred that GSTR-2A had been designed as a bucket of information, relating to inward supplies to the taxpayers, for viewing purposes only, since GSTRs-2 and 3 had been kept in abeyance, and GSTR-2A not only depicted details from the filed GSTR-1, but also from the one submitted but not filed. It further stated that ITC had to be claimed on self-assessment basis only and that the amount of ITC available is already shown to the taxpayers (in GSTR-2A), along with the amount they are claiming (in GSTR-3B), for ensuring compliance.

GSTN's reply is not acceptable as, in the absence of GSTR-2, GSTR-2A is an important source of information on inward supply. Taxpayers, as well as tax officers, rely primarily on GSTR-2A as the reference record for their claims and issuance of refunds. Thus, the correctness of GSTR-2A is of immense importance for safeguarding of government revenue. Further, the Act restricts ITC from being taken by two persons on the same invoice, and also twice on the same invoice. In absence of validations in this regard, possibility of fraudulent practices cannot be ruled out. GSTN was in fact aware of the consequences of faulty GSTR-2A and had created (October 2018) a CR to plug the loophole. However, the CR has not been implemented so far.

Thus, from the reply furnished by GSTN and that the CR was not implemented, it was clear that it had not enacted requisite changes in the system, to prevent the system from showing incorrect ITC availability on the amended invoice. In

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[38]   In terms of Rule 36 of CGST Rules, 2017 read with Notification 49/2019 and CBIC Circular No.123/42/2019-GST Dated: 11 November 2019

the exit meeting (July 2020) with Audit, GSTN stated that additional facilities including filing status, amendment status etc. will be made available in GSTR-2A, with the approval of Government.

> *Recommendation 11:* Since tax officers and taxpayers rely on GSTR-2A, GSTN may make necessary changes in the implementation of GSTR-2A to keep the system updated with underlying invoice data so that it reflects the correct picture.

3.8.3.4   *Absence of validation on turnover, leading to no restriction being imposed on composition taxpayers, with regard to filing of GSTR-4, even after crossing the threshold limit*

Rule 6 of the CGST Rules, 2017, provides for the validity of composition levy. It stipulates that, when the person liable to pay tax under section 10 of the CGST Act 2017, ceases to satisfy any of the conditions mentioned in section 10, he should issue tax invoices for every taxable supply made thereafter, and should also file an intimation for withdrawal from the scheme in form GST CMP-04 within seven days of the occurrence of such event. Further, as per the SRS[39] of GSTR-4, after filing of return, the system should check aggregate turnover on PAN level basis. If the turnover exceeds the prescribed limit[40], an alert may be sent to the taxpayer in the notification section of the dashboard.

During the course of test-checks relating to filing of GSTR-4 for the year 2017-18, we noticed (in the test environment) that no alert was sent to the taxpayer even when the total value of supply exceeded the threshold limit of ` 1.5 crore in any single return. The system allowed the same taxpayers to file returns for the next quarters of 2017-18, despite their turnover exceeding the prescribed cut-off limit in the previous quarter itself. This was in contravention of the GST provisions and the SRS mentioned above.

On this being highlighted (January 2020), GSTN stated (June 2020) that the functionality could not be implemented due to frequent changes in the threshold limit of Composition Scheme, as also due to the frequency of filing returns being changed to 'Annual', adding that it was difficult for the software development cycle to keep pace with such changes. It further stated that the development of an IT functionality required bucketing of functionalities into *'must have'* and *'good to have'* features and *'must have'* functionalities had been given priority.

GSTN's reply is not acceptable, since the annual turnover constitutes an important criterion for deciding upon the category of the taxpayer. As such,

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[39]   SRS- BR_SRS_RET_004_16

[40]   Initial limit was 40 lakh later the threshold turnover has changed to ` 1.5 crore vide notification No. 14/2019 dated. 03 July 2019.

the turnover for the taxpayer under the Composition Scheme should have fallen under *'must have'* criteria, instead of the *'good to have'.* Moreover, GSTN did not furnish records relating to the decision taken in regard to not categorising annual turnover in the *"must have"* bucket. Subsequently, GSTN stated (July 2020) that the functionality to check turnover threshold and sending alert to such taxpayers on crossing the threshold limit would be implemented with CMP-08 [quarterly return] (erstwhile GSTR-4) by the end of August, 2020.

> *Recommendation 12:* GSTN may make appropriate changes in the system, to check the PAN level turnover, at the time of filing GSTR-4, to ensure that eligible taxpayers are permitted to file GSTR-4.

3.8.3.5 Absence of provisions in the system, leading to non-payment of tax on Reverse Charge Mechanism (RCM) basis by Non Resident Taxable Person (NRTPs)

As per Section 2(98), "reverse charge" means the liability to pay tax, by the recipient of goods or services or both, instead of the supplier of such goods or services or both, under Section 9 and section 5 of the IGST Act. Further, Notification No. 13/2017 Central Tax (Rate) dated 28 June 2017 specifies various categories of services, with the whole tax being leviable under Section 9 of the CGST Act and needing to be paid on reverse charge basis by the recipient of such service/(s), according to which the Goods Transport Agency (GTA) or legal services providers fall under such category.

During the course of test-checks, it was noticed that, in GSTR-5, as provided vide Rule 63, there is no provision for tax payment, on reverse charge basis, in case an NRTP has availed services which have attracted tax payable on reverse charge basis only. Clarification was sought for from GSTN as to whether the payment of tax on reverse charge mechanism, as applicable to NRTP for receiving such services, is available in the system or not; and whether GTA or legal services providers etc., while filing GSTR-1, are allowed to declare outward supplies (Table-4B), payable on reverse charge basis, to the NRTP or not. In reply, GSTN stated that there are no such provisions in the notified form GSTR-5, adding that, in Table-4B (supplies attracting tax on reverse charge basis) of GSTR-1, the system does not accept the GSTIN of NRTP. This implies that there is no provision in the system, for an NRTP to pay GST for services received on reverse charge basis, nor is there any provision for the service providers to pay the GST, on behalf of the NRTP, as a forward charge. This lacuna in the form GSTR-5 carries the risk of loss of revenue, as, under the present system, the liability of GST rests neither with the NRTP, nor with the service provider.

On this being highlighted, GSTN stated (June 2020) that there is no table in GSTR-5 to capture supplies attracting reverse charge. It added that the system having been designed according to the notified form, there is no gap between the IT process and the law and suggested that comments may also be obtained from the concerned department of government.

The reply of GSTN that there is no gap between the IT process and the law is not acceptable, since an important provision of the Act has not been mapped in the form GSTR-5 and in the system, which carries the risk of non-payment of tax, along with revenue loss to Government for this category of transactions. Subsequently, GSTN stated (July 2020) that it would forward the audit observation to the Government for appropriate action.

> *Recommendation 13:* DoR may make necessary changes in the GSTR-5 and consequently in the IT system to enable NRTPs to discharge their tax liability on RCM basis, in respect of supplies which necessitate payment of tax on RCM basis only.

3.8.3.6 *Incorrect mapping of Rule to SRS diluted the criteria of declaring HSN[41] details in GSTR-1 by relevant taxpayers*

Details of outward supply are required to be furnished by relevant taxpayers in form GSTR-1 as per Rule 59 (1) of CGST Rules, 2017, read with Section 37 of CGST Act. Further, as per the instructions (Sl. No.17 of GSTR-1) for filing the said return, it is mandatory to report the HSN code: (i) at 2-digit level, for taxpayers having an annual turnover, above ` 1.50 Cr but up to ` 5.00 Cr, in the preceding year and (ii) at 4-digit level, for taxpayers having an annual turnover above ` 5.00 crore, in the preceding year. A similar provision for providing HSN details in the tax-invoice was also notified vide Notification No. 12/2017 – Central Tax dated 28 June, 2017.

During the course of test-checks, we noticed that the system did not make it mandatory for taxpayers having a specified turnover to fill in the relevant HSN details. In response to audit query as to whether the system checks the annual turnover in the preceding financial year, for complying with the abovementioned rule, GSTN stated that the checking of turnover is not required at this time. The reply is not admissible, as the compulsion of filling in HSN details in Table-12 of GSTR-1 is dependent on the turnover of the previous year. Thus, adequate validations have not been built into the system resulting in the risk of non-filling up of appropriate HSN details, which are

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[41] HSN code stands for "Harmonized System of Nomenclature". This system has been introduced for the systematic classification of goods all over the world. HSN code is a 8-digit uniform code that classifies 5000+ products and is accepted worldwide.

mandatory for taxpayers whose annual turnover in the preceding year was above ` 1.50 crore.

On this being highlighted (June 2020), GSTN stated that the implementation of turnover-based HSN check is difficult and may not be feasible because the turnover is dynamic and may change even after the end of preceding year till September return of the next financial year through various amendments. Further, restrictions over HSN declaration have not been imposed strictly, because a majority of the taxpayers have migrated from State VAT, and are not familiar with HSN. GSTN later stated (July 2020) that HSN code validation will be developed and implemented with the approval of Government.

The earlier reply of GSTN is not tenable, in light of the provisions of the Act / Rule / Notification, mandating that HSN details are compulsory. Further, even though the system has the provision to capture HSN, it has not been made mandatory for relevant taxpayers. Again, as the taxpayer is expected to determine his turnover when filing the return, it is assumed that the system would also be able to do it. Further, neither the dynamic nature of the turnover, nor ignorance of the provision by taxpayers, constitutes a valid basis for not implementing a provision of law.

> *Recommendation 14:* GSTN may make necessary changes in the system and incorporate validations in line with the provisions of the Act, which mandate that HSN information is compulsory, for specified taxpayers, based upon their previous year's turnover.

3.8.3.7 *Non-computation of actual interest liability and non-enforcement of payment thereof through the system*

As per Section 50(1) of CGST Act, 2017, every person who is liable to pay tax in accordance with the provisions of this Act or the rules made thereunder, but fails to pay the tax or any part thereof to the Government within the period prescribed, shall, for the period for which the tax or any part thereof remains unpaid, pay, on his own, interest at such rate, not exceeding eighteen *per cent*, as may be notified by the Government on the recommendations of the Council.

During the course of IT audit of Returns module, a clarification was sought from GSTN as to whether 'Interest' is auto-calculated in GSTR-3B; and whether GSTR-3B can be submitted by paying tax only, without payment of 'Interest', even if there is interest liability.   In reply, GSTN stated that interest liability is not auto-calculated in GSTR-3B and payment of interest is on the basis of self-declaration. Thus, the system does not enforce the taxpayer to pay the interest liability, leaving open the risk of erroneous calculation of interest liability, as well as short / non-payment of interest.

On this being highlighted (June 2020), GSTN stated that, owing to the differences in the frequency of filing of GSTR-1 and GSTR-3B returns etc., as well as the various conditions and implications involved, it is difficult to implement the auto-computation of interest in GSTR-3B. Contention of GSTN is not acceptable as auto-computation of interest was originally envisaged as per SRS of GSTR-1, but it could not be implemented because GSTR-1 filing was not made sequential and remained unlinked with GSTR-3B. GSTN also stated that the Law Committee, in its meeting dated 20 April 2018, had held that the current design of GSTR-3B did not permit auto-computation of interest. Subsequently, GSTN intimated (July 2020) that, once GSTR-1 and GSTR-3B are linked, an attempt would be made to auto-compute interest.

> *Recommendation 15:* GSTN may make necessary changes in the system for auto-calculation of interest and, to enforce payment of the actual interest liability by taxpayers.

Shortcomings noticed in the system on the basis of TRAN-1 and TRAN-2 data

In the course of audit, exception data queries were issued to check validations relating to various provisions of carry forward of legacy ITC to GST regime. On the request of GSTN, however, we sought complete transitional credit data for a sample of 10 GSTINs, out of a list of 100 GSTINs shared by GSTN. Apart from this, data pertaining to another 10 GSTINs was sought, for detailed verification. The following are the results of the analysis:

3.8.3.8 *Ineligible taxpayer allowed to avail benefit under TRAN-2*

In terms of CGST Rule 117(4)(a)(i), sub-section(3) of section 140 of the CGST Act, form TRAN-2 can be filed by a dealer/trader (but not a manufacturer or a service provider) who is registered in the GST regime, but was unregistered under the pre-GST regime. Such a dealer, who does not have a VAT or excise invoice for stocks held by him on 30 June, 2017, can use form TRAN-2 to claim tax credit of the stock held by him. TRAN-2 has to be filed by a dealer or trader at the end of every month, when stock is sold, reporting the details to claim ITC.

Analysis of data shared with Audit showed that all the twenty taxpayers were migrated taxpayers, who had been registered in the pre-GST regime, either in Central Excise, Service Tax or State VAT and thus were ineligible to avail benefit under TRAN-2. Further, 10 out of these 20 taxpayers had multiple registrations. It was observed that 17 taxpayers had declared items in part 7B of Table 7(a)[42]

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[42] Table 7(a) deals with amount of duties and taxeson inputs claimed as credit excluding the credit claimed under Table 5(a) (under sections 140(3), 140(4)(b), 140(6) and 140(7)) and **Part 7B** deals with cases where duty paid invoices are not available (Applicable only for person other than manufacturer or service provider).

and Table 7(d)[43] of form TRAN-1, with total tax value of ` 51.77 crore and subsequently availed the benefit in form TRAN– 2, to carry forward ITC on stock held, where proof of payment of duty was not available. These taxpayers had availed ITC on such items to the tune of ` 1.51 crore under 1,571 transactions and the same was credited in their electronic credit ledger, ITC_LDG.

This contravenes the provision of the CGST Act and Rules, 2017, mentioned above. Reply of GSTN is awaited (December 2020).

3.8.3.9   *ITC availed in respect of ineligible items in TRAN-2*

As per CGST Rule 117 (4), a taxpayer can avail ITC on goods held in stock on the appointed day and declared in form TRAN-1. He cannot avail any ITC on such goods which had not been declared therein. In other words, only such HSN line items can be added in TRAN-2 for availing ITC, which have been declared in Part 7B of Table 7(a) and Table 7(d) of TRAN-1, furnished earlier.

Analysis of data, shared with Audit, revealed that, out of total 468 distinct HSNs, for which ITC had been availed by 17 GSTINs in form TRAN-2, in two cases, the HSNs had not been declared in form TRAN-1. The system, however, allowed the taxpayer to take credit on items undeclared in TRAN-1. Further, in one case, the declaration of details in form TRAN-1, was seen to be inconsistent with the opening stock declared in form TRAN-2 for the same item. Thus, the system did not restrict the taxpayer from availing ITC on items in form TRAN-2, according to eligibility, based on the declarations in form TRAN-1. Apart from this, in 1,108 cases, units of measurements in form TRAN-1 and form TRAN-2 were inconsistent. Reply of GSTN is awaited (December 2020).

3.8.3.10   *Credits allowed in TRAN-2 without validating the tax rate as per law*

As per CGST Rule 117(4)(a)(ii), the ITC on items carried forward in form TRAN-2 "shall be allowed at the rate of sixty percent on such goods which attract central tax at the rate of nine percent or more and forty *per cent* for other goods of the central tax applicable on supply of such goods after the appointed date and shall be credited after the central tax payable on such supply has been paid". In case of tax paid as IGST, the rate of credit would be 30 and 20 *per cent*, respectively.

Analysis of the data provided by GSTN, revealed that the credit carried forward from form TRAN– 2, to the electronic credit ledger, was not as per the

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[43]   Table 7(d) deals with stock of goods not supported by invoices/documents evidencing payment of tax

provisions of the Rule stated above. The discrepancy was found in case of 5 GSTINs, out of a total of 17 GSTINs, regarding which data had been provided. Out of 1,571 transactional records, it was noticed that in 110 cases, more than 40 *per cent* of the tax paid was applied for ITC, despite the tax paid amount being less than 9 *per cent*, as per the central tax rate. Reply of GSTN is awaited (December 2020).

3.9   E-Way Bill System

3.9.1   About EWB

Electronic Way Bill (or EWB) is a unique document or bill generated electronically for each consignment or movement of goods from one place to another under GST regime. When EWB is generated, a unique EWB number is made available to the supplier, recipient and the transporter. The EWB replaces the way bill, which was a physical document and existed during VAT regime for the movement of goods separately in each states. The EWB system was introduced nation-wide for inter-state movement of goods with effect from 1 April 2018 while the states were given the option to choose any date till 3 June 2018 to implement EWB system for intra-state supplies. Consequently, all the states have notified the EWB system for intra-state supplies, the last being the NCT of Delhi where the EWB system was introduced with effect from 16 June 2018. Though part of GST eco-system and under the control of GSTN, the IT Portal for EWB has been developed by NIC.

3.9.2   Statutory Provisions of EWB

Section 68 of the CGST Act, 2017 empowers the Government to prescribe the documents or devices to be carried by a person in charge of a conveyance and the method of validating such documents. The section also empowers the specified tax officers to inspect such conveyances or movement of goods. Based on this section, detailed provisions are prescribed under Rule 138 of the CGST Rules, 2017.

This Rule initially prescribed that till such time an EWB system was developed and approved by the GST Council, the Government might, by notification, specify the documents that the person in charge of a conveyance carrying any goods in transit should carry. Detailed provisions for EWB were issued (August 2017) by amending the Rule 138 and incorporating new rules from 138A to 138D in the CGST Rules, 2017. Thereafter, EWB was introduced for inter-state movement of goods with effect from 1 April 2018 vide notification dated 7 March 2018. Rule 138E was incorporated in the CGST Rules, 2017 in December 2018, after implementation of the EWB system. The EWB consists of two parts – Part A and Part B. Part A contains details of the supplier,

recipient, product and invoice. Part B contains details of the transporter and vehicle numbers.

3.9.3 Objectives of the EWB

The following are the envisaged objectives of the EWB:

i. Single and unified EWB for inter-state and intra-state movement of goods for the whole country in self-service mode

ii. Enabling paperless and fully online system to facilitate seamless movement of goods across all states

iii. Improve service delivery with quick turnaround time for the entire supply chain and provide anytime anywhere access to data/services

iv. To facilitate hassle free movement of goods by abolishing inter-state check posts across the country.

3.9.4 Audit Objectives

IT audit of EWB system was conducted to verify

(a) whether the functionalities of EWB system are designed and implemented as envisaged,

(b) whether the technology solution is robust in terms of infrastructure, documentation and security, and

(c) whether the EWB Portal is user friendly.

3.9.5 Audit Findings

The EWB system developed by NIC, Bengaluru has leveraged important features of the e-Sugam application[44] in vogue in the State of Karnataka. Currently, the EWB system is effectively supporting the growing volume of EWBs generated on a daily basis. NIC has developed an application, deployed various upgradations and feature enhancements to the EWB system.

In order to realise the full potential and achieving defined objectives of EWB system, implementation of the envisaged RFID system to track the physical movement of goods on real time is essential. Implementation of the RFID system, however, has not taken place. The continued delay in implementation of the RFID system for tracking the movement of goods is impairing the utility of the EWB system.

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[44] e-Sugam was a procedure set by the Commercial Taxes Department of Karnataka State for movement of goods, having value above a prescribed limit, within Karnataka and in & out of Karnataka in the pre-GST VAT regime. The system functioned on the basis of a transit document, carrying a unique number generated online by a seller or dealer who was transporting the goods. The unique number thusobtained was to be produced to the check post officer on reaching a check post

We issued audit observations on 18 issues pertaining to EWB system as a part of IT audit of GSTN. Out of these, 10 observations were accepted and eight observations were not accepted. The observations noticed during the IT audit of EWB are provided in succeeding paragraphs:

3.9.5.1 Rejection of EWBs

Rule 138(12) of GST Rules envisages that if the recipient of the EWB does not communicate acceptance or rejection within 72 hours of the details being made available on the common portal or at the time of delivery of goods, whichever is earlier, it shall be deemed that the person has accepted the said details.

On verification of EWBs for the quarter July 2019 to September 2019 for the states of Bihar and Karnataka, however, it was observed that:

a) Rejection of EWBs was allowed after the expiration of 72 hours in 281 cases in violation of the rules, out of total 1988 rejected cases (for both the states).

b) Rejection of EWBs with a short validity period of less than 72 hours was not restricted to the validity of the EWB. There were 155 such cases in the data set (only for Karnataka) where rejection of EWBs was allowed after the EWB validity date. Providing a uniform validation rule of 72 hours for all EWBs (having validity less than 72 hours and those having validity beyond 72 hours) exposes the system to the potential risk of clandestine movement of goods.

NIC, in response (July 2020), stated that the rejection of EWBs beyond the stipulated 72 hours was due to some users manipulating screens in some versions of browser and that this issue has since been resolved on 5 June 2020. NIC further stated that the change in rule "rejection within 72 hours or at the time of delivery of goods, whichever is earlier" was effected at a later stage and hence the validation was not incorporated. The fact, however, remained that Rule 138(12) was amended prior to the implementation of the EWB system in April 2018. GSTN subsequently stated (July 2020) that the issue at (b) above has been resolved.

3.9.5.2 Supply to or by SEZ

Section 7 of IGST Act defines the nature of inter-state supply. Clause (b) of Sub-section (5) of Section 7 states that any supply "to or by a SEZ developer or SEZ unit" shall be treated to be a supply of goods or services or both in the course of inter-state trade or commerce. In continuation, proviso (i) of sub-section (1) of Section 8 states that supply of goods to or by a SEZ developer or SEZ unit shall not be treated as intra-state supply. SRS of EWB module also specifies

the business rule (Para 4.8.5) stating that "In case one of the party is SEZ unit, then IGST tax and values have to be passed".

Verification of the front-end of the EWB system disclosed that the SEZ users (both SEZ units and SEZ developers) have to use the option of export / import for recording transactions, to or from SEZ developers and units, to indicate the transactions as Inter State supplies. The system, however, does not bar users from selecting supplies of goods by or to SEZ developers and units as intra-state supplies. Analysis of EWB data for the quarter July to September 2019 for the State of Karnataka revealed that, in 318 cases, users have recorded supplies of goods by or to SEZ developers as intra-state supplies with tax recorded under CGST and SGST in place of IGST.

GSTN, in its response (July 2020), stated that the validation for SEZ units existed in the system for supply, export and import transactions. The validation for SEZ developers could not be included due to non-availability of their status, which has now been implemented from 5 April 2020.

The reply only confirms the audit contention. SEZ users are identified for IGST values when they use either the export / import option or supply option only with the export code (999999). There is no validation in the system to restrict the SEZ users from recording intra-state supplies with CGST/SGST values by using the pin code of SEZ units and SEZ developers. A sample check of 10 SEZ units for the quarter of July to September 2019 (for the state of Karnataka) revealed that 22 records exist for three SEZ units where supply has been treated as intra-state supply by recording CGST/SGST instead of IGST, which is not in consonance with rules.

> *Recommendation 16:* GSTN may implement a functionality to restrict SEZ users from recording intra-state supplies with CGST/SGST values.

3.9.5.3 Extension of EWBs

The second proviso to Rule 138(10) of GST Rules states that 'where, under circumstances of an exceptional nature, including trans-shipment, the goods cannot be transported within the validity period of the EWB, the transporter may extend the validity period after updating the details in Part B of form GST EWB-01, if required'. Third proviso of the same rule states that 'provided also that the validity of the EWB may be extended within eight hours from the time of its expiry'. Explanation (1) under Rule 138(10) further states that the period of validity shall be counted from the time at which the EWB has been generated and each day shall be counted as the period expiring at midnight of the day immediately following the date of generation of EWB.

Verification of EWBs data for the quarter of July 2019 to September 2019 for the states of Bihar and Karnataka involving extension of EWBs (9,21,880 records) revealed that in:

a) 14064 cases (only in Bihar), EWBs have been extended 24 hours after expiry of their validity.

b) 11647 cases (both for Bihar and Karnataka), EWBs have been extended earlier than eight hours prior to the expiry of EWBs, indicating that the validation was not incorporated in the EWB system.

GSTN, in response (July 2020), stated that a) the validity time of EWB has to be read as 23:59:59 hours of the validity date, and that all cases are within the prescribed eight-hour limit from that time; and b) extension earlier than eight hours prior to the expiry of EWBs occurred due to users manipulating the request through the browser. GSTN also stated that this issue would be resolved before 31 July 2020 and test report provided to audit.

> *Recommendation 17:* GSTN may ensure that the system recorded validity time depicts the actual validity time.

3.9.5.4 *Automatic calculation of distance based on PIN Code*

In the enhancements to the EWB system implemented in April 2019, GSTN introduced auto calculation of distance based on PIN codes for generation of EWB. As per the implementation details, "The EWB system will calculate and display the estimated motorable distance between the supplier and recipient addresses. User is allowed to enter the actual distance as per the movement of goods. However, it will be limited to 10 *per cent* more than the auto calculated distance displayed".

On verification of EWB data for Bihar and Karnataka for the quarter July-September 2019, however, it was observed that:

a) the system did not impose any restriction on entry of distance. For example, in 32 cases, it is observed that the distance recorded was unrealistically more than 3500 km even when both the place of supply and place of receipt were in the State of Karnataka.

b) in 524 cases (407 cases pertaining to Karnataka and 117 cases pertaining to Bihar), even though the place of supply and place of receipt are in different states and not sharing a common border, the distance recorded was less than 10 km. Further, a check of front-end of the EWB system also confirmed that the system does not restrict entry of unrealistic distances on the lower side.

GSTN, in its response (July 2020), stated that the i) PIN master obtained regularly from Postal Department is consolidated once in a few months by the department, due to which the PIN to PIN distance for the new PIN codes will not be available. In such cases, users are allowed, without hampering their business, to enter the distance less than 4000 km. GSTN further stated that a MIS report is being designed for officers of the department to examine such EWBs; and ii) distance of less than 10 km entered for two different states does not have any risk impact as lesser distance implies shorter validity date of EWB and the goods have to be moved in shorter time.

The reply indicates the inherent weakness in periodic updation of PIN Master, which is hampering the functionality of auto calculation of distances based on PIN codes. Users entering exceptionally high distances (as noticed during audit) is fraught with the risk of generating EWBs with longer validity and using the same EWB for multiple trips. Further, GSTN's reply stating that EWBs for a distance of less than 10 kilometres do not have a risk exposure, is not tenable as EWBs with such unrealistic distances could imply that users are potentially creating a record /document to attest movement of goods without actually transporting them.

> *Recommendation 18:* GSTN may strengthen the process of PIN Master updation with a defined periodicity for updation. GSTN may consider implementing a functionality to restrict users from recording exceptionally large distances for intra-state transport. GSTN may consider implementing a functionality to limit recording distances on the lower side as compared to the system calculated distance similar to the validation for recording distances on the higher side.

3.9.5.5 *Multivehicle Mode of Transport*

Rule 138(5) read with Rule 55(5) of CGST Rules allows transportation of goods in batches or lots and the particulars in Part B of FORM GST EWB-01 should accordingly be updated while the goods are transferred from one conveyance to another. Para 4.12 of SRS, further envisages that the EWB system provides the users viz. the suppliers and transporters an option of multivehicle mode of transport. As per the procedure, if user wishes to ship the goods in more than one mode of transport to reach the destination they can use the multivehicle mode of transport. Using this option, user can select the multi-mode of transport, split the quantity based on requirement and update the vehicle details. When using this option, the quantity of goods to be moved cannot exceed the original quantity as per the EWB.

Verification of the front end of the system and EWB data for Bihar and Karnataka, for the quarter July-September 2019, indicated the following issues in multi-mode transport option:

a) The quantity once entered while generating the EWB is amenable to changes when vehicle details are updated in the EWB with multimode option. In 2212 cases, the total quantity as per the multi vehicle mode exceeded the total quantity mentioned in the EWB when it was originally generated.

b) The unit of measurement specified in the original EWB viz. bags, boxes etc. can also be freely altered during the vehicle updation process. In 39750 cases, the unit of measurement mentioned while updating the EWB into the multi vehicle mode is not the same as mentioned in the EWB when it was originally generated.

Thus, the system was not ensuring internal consistency of values entered for total quantity and unit of measurement, which exposed the system to the risk of potential fraudulent behaviour. GSTN replied (July 2020) that this issue would be addressed based on a discussion with the policy wing.

> *Recommendation 19:* Adequate controls need to be put in place expeditiously to ensure consistency of values entered for total quantity and unit of measurement while updating the EWB with multi-mode option.

3.9.5.6 *Transportation by Rail*

Rule 138(2A) of CGST Rules, 2017 stipulates that EWB shall be generated after furnishing information in Part B of FORM GST EWB-01 by the registered person in case of transportation of goods by rail. Para 4.8 of SRS (Generate EWB) further envisages that when mode of transport is Railways, it is mandatory for the user to enter the Railway Receipt (RR) number and date to generate the EWB, and on clicking the "submit" button, system should check for RR number. A valid RR number is a nine digit numerical provided by Railways when a transporter books a rail cargo.

On verification of EWB data of State of Karnataka for the month of September 2019, it was observed that in 18 cases the RR number was not recorded in the generated EWB. It was further observed that RR number was not entered in the 9-digit format in 19,104 (83 *per cent*) out of 23,024 records. Further, a test of the front-end indicated that the EWB system allows any value as RR number. GSTN agreed (July 2020) to incorporate a suitable validation after examining the format of the RR number with the Railways.

> *Recommendation 20:* GSTN may incorporate a functionality to restrict users from entering irregular Railway Receipt numbers where transportation involves movement by rail.

3.9.5.7 MIS Reports for departmental officers

The Officer module of the EWB system encompasses functionalities to facilitate verification of the EWB, search on taxpayers, transporters, products and services. It comprises various reports that assist departmental officers with data driven analysis on aspects such as strategic places for inspection based on the commodities, GSTIN, vehicle number etc. There are multifarious reports on critical data points and outlier situations, which can potentially enhance the functional capacity of officers with a targeted approach to detection of irregular movement of goods and tax evasion.

As of December 2019, 19,809 users have registered in the officer's module. However, analysis of the information revealed that the application was not being used extensively. During December 2019, only 5 *per cent* of the total users were using the application daily (that is, officers using MIS Reports for more than 20 days of the month). The percentages ranged from zero *per cent* in some states (eg: NCT of Delhi, where 140 users were registered) to a maximum usage of 25 *per cent* in Karnataka.

GSTN replied (July 2020) that the EWB system has MIS reports designed as per requirements of all officers of the state and central departments and that these authorities will be informed to make extensive use of these reports.

> *Recommendation 21:* GSTN may regularly bring to the notice of tax departments the status / extent of usage of the Officer module. Tax departments / GSTN may also train tax officials in the use of Officer module.

3.9.5.8 Analytic Reports on EWBs

Audit analysis of EWB data pertaining to the state of Karnataka for the quarter July to September 2019 revealed certain high risk patterns and variances in generation of EWBs, especially with respect to rejection, cancellation and extension of EWBs which need to be examined by the department.

Rejection of EWB:

   i.   For 13 Users (as recipient), more than 50 *per cent* of the EWB supplied to them are shown as rejected.

   ii. Two users have more than 90 *per cent* of the EWB supplied to them as rejected.

   iii. In case of 8 users (as supplier), more than 50 *per cent* of the EWB generated have been rejected.

Cancellation of EWB:

i.   For 128 users (as supplier), more than 50 *per cent* of the EWB generated are shown as cancelled.

ii.   Nine users have more than 90 *per cent* of their EWB as cancelled.

iii.   In case of 226 users (as recipient), more than 50 *per cent* of the EWB generated against them, as recipient, are shown as cancelled.

iv.   For 20 users, more than 90 *per cent* of the EWB generated against them, as recipient, are shown as cancelled.

Extension of EWB:

For 192 users (as EWB generator), more than 50 *per cent* of EWB generated were shown as extended in transit, out of which in respect of 14 users, more than 90 *per cent* of their EWB generated were extended.

Such high risk patterns need to be further analysed by the Department for further action as appropriate. GSTN, in its response (July 2020), stated that new analytical reports will be designed on these patterns and will be made available to officers for further action as required.

> *Recommendation 22:* GSTN may implement analytical reports in the nature of discerning patterns to facilitate effective monitoring and oversight of EWB system.

3.9.5.9   *Disaster Recovery (DR) Management*

A review of the DR Management Plan disclosed that NIC has not operationalized a functional DR environment. In the event of a disaster affecting the primary site, the system would face an outage and with a non-functional DR setup, the time required to bring the EWB system back online cannot be estimated.

Further, a scrutiny of the document revealed that it does not describe steps to be undertaken during the DR procedure. The document neither listed out the actions nor their inter-se order to activate the DR site of the EWB system if the need arises. The issue-wise escalation matrix and contact details indicated multiple organizations spread across different cities that may need to work together in the event of a disaster. Without detailing out action items and mode of coordination, it is not clear as to how the DR Plan in its present form would serve the intended use.

GSTN, in its response (July 2020), stated that the DR site of the EWB system was established at NIC-Hyderabad in August 2019, and it is ready for operationalization with complete infrastructure, application and data. GSTN

further communicated (July 2020) a revised BCP and DR Plan of the EWB system.

The fact, however, remains that even though EWB System has been in operation for two years; the system is yet to have a functional DR set up. Apart from the inherent risk exposure from a functionality dimension, the technology infrastructure earmarked since August 2019 for the DR set up has a continuing opportunity cost for the period the dedicated infrastructure is not put to use in a functional DR set up. Based on the hardware specifications shared by NIC for the DR set up, the estimated cost using the cost calculator at the NICSI Cloud Service website (https://cloud.nicsi.nic.in), works out to ₹14.30 lakh per month.

> *Recommendation 23:* GSTN may ensure that the requisite procedural formalities are completed expeditiously so that the DR set up can be made functional.

3.10   Other Issues

3.10.1   *Monitoring of Incident Management Process (IMP)*

An incident is any event which is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a degradation in the quality of services. One of the ways in which GSTN classifies incidents is on the basis of incident severity which is the extent to which the defect can affect the software. Accordingly, there are three levels viz., Severity 1 (critical business impact), Severity 2 (significant business impact) and Severity 3 (minimal business impact).

3.10.1.1 *Delay in providing resolution*

On the basis of classification of severity, the incident is supposed to be initiated within stipulated response time and service should be resumed within prescribed resolution time as mentioned in process document. We noticed that in 14 out of 17 high priority (P1) incidents, the resolution time (60 minutes) was more than the prescribed, as given below:

Table No.3.2: Incident resolution time

Severity	Nature	Resolution Time	Total Number of incidents	Number of incidents which took more than the resolution time prescribed
I	Critical Business Impact	60 Minutes	17	14

GSTN stated (August 2020) that in GST system, though end result / impact of an incident may be same or similar yet the root cause of the incidents is typically different. Hence, considering the complexity of the system, it takes more time than stipulated within the Service Level Agreement (SLA) to restore a service. To prove the SLA adherence, GSTN and MSP have identified areas of improvement in ensuring sustainability and resilience of the system to reduce repetition of the incident with same root cause and improve lead time for restoration of the service. GSTN enumerated following actions taken in this regard:

− Digitization and updation of knowledge repository of incident/root cause/resolution to make it easy for reference and reduce restoration time. First set has been made operational effective May 2020 and it is being done on an ongoing basis.

− Improvement at design / code level to eliminate recurring issues and enhance performance optimization to improve system resilience. This has been made operational effective June 2020 and it is being done on an ongoing basis.

− Complete capacity augmentation at infrastructure layer and network layer to eliminate issues related to concurrency and load. This has been completed on 18 June 2020 and 7 July 2020.

GSTN also stated that incidents, where dependency on Original Equipment Manufacturer (OEM) or third party service provider is involved or which require device / appliance replacement / upgrade, may take longer than stipulated time within SLA since it is beyond reasonable control of GSTN and MSP.

> *Recommendation 24:* GSTN should ensure that the resolution of incidents is achieved in accordance with the timelines prescribed in Incident Management Process.

3.10.2 License Management

As per License Management Process (LMP) document of GSTN, license management is the management and traceability of every aspect of a procured license from beginning to end, and it includes the key process areas i.e. name of the license, name of the OEM, quantity of license procured / deployed / spare and its validity, metric of license, periodic review etc. Further, it stipulates that license deployment shall be taken up as per the business requirement. The Asset Manager, Software Quality Assurance (SQA) and Application & Infrastructure Support (AIS) teams shall be the users and responsible for the LMP. They periodically track and capture all the software license details (quantity delivered, validity, utilization, spare) as per the

prescribed template. LMP team shall review the software license every month and observations / comments of the review be closed within a week.

Scrutiny of root cause analysis (RCA) document revealed that an incident was created after the helpdesk and Infosys internal teams reported on 26/09/2019 (at 08:30 a.m.) that the GST Portal was not working or users were not able to login to portal. The services were affected till 10:00 am as the incident management team resolved the issue temporarily. However, in the meanwhile, the team analysed the issue and found that all four (DC1 & DC2)[45] bundled McAfee AV licenses had expired for CAS[46] devices. All four licenses were renewed and synced up by GSTN. The issue got fixed at 08:07 p.m. and took almost 12 hours for resolution. From the above, it may be concluded that the proper monitoring was not being done for renewal of licenses, which resulted in avoidable major incident affecting the entire GST Portal.

In response to audit observation, GSTN stated (June 2020) that at the time of commissioning the infrastructure, all software licenses were recorded in the asset register as per agreed Bill of Material (BoM). However, since the McAfee antivirus licenses were bundled in the appliances, these were not recorded as separate license in the BoM and the asset register. As a result, validity of these bundled licenses was not known to the license management team. There was a gap in capturing license details in the asset register because the OEM partner had failed to explicitly mention the bundled license details as part of the BoM.

GSTN further stated (August 2020) that the license management process has been streamlined and is being monthly reviewed with MSP. Status of license expiry is being tracked during operations review meetings. Corrective action was taken in October 2019 and there has been no further recurrence.

3.10.3 GST Portal Performance on peak filing days

As per GSTN's Standard Operating Process – Peak Readiness, activities like scaling up of resources, health check- up of various components, pro-active availability of teams and Circuit Breaker (Portal User Concurrency) are required to be conducted before peak period. Below 2 dates are primary peaks from system perspective:

∗ GSTR3B - From 18th to 20th of the Month.

∗ GSTR1 – From 9th till 11th of the Month

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45 Data Centre: DC1 (NCT of Delhi) and DC2 (Bengaluru)
46 Content-addressed storage (CAS) is a method of providing fast access to fixed content (data that is not expected to be updated) by assigning it a permanent place on disk. CAS makes data retrieval straightforward by storing it in such a way that an object cannot be duplicated or modified once it has been stored; thus, its location is unambiguous.

During verification of RCA documents pertaining to various incidents, we noticed that there has been frequent disruption/non-functioning of the GST portal on peak filing days and the taxpayers were facing difficulty in filing various types of returns. We noticed that five incidents have been raised on the same issue from October, 2018 to February, 2020. The duration of services affected due to these incidents ranged 2 hours to 55 hours (approx.) from October, 2018 to February, 2020. The causes for the incidents as per the RCA documents include issues such as high load on peak filing days, high utilization of CPU, load on Return APIs, configurations not increased in accordance with expected load etc.

The recurring disruption of the GST portal on peak filing dates indicates that the GST portal is not designed to handle the expected load/concurrent users even two and half years after the rollout of GST.

In response to audit observation, GSTN stated that the Maximum Peak Capacity observed on Portal since launch is approximately 1.56 lakh concurrent users. In addition to this, the GST system handles around 1500 back office user sessions, around 50,000 API sessions from Government entities and 1.5 lakh GST Suvidha Provider (GSP) API sessions.

GSTN informed that the peak concurrency of the GST portal at the time, when GST came into effect was estimated at 25,000 based upon the original estimated number of registrations which was about 64 lakh as per the RFP. In anticipation of expected growth over the next five years, the RFP mandated that security & network devices be sized at double the anticipated load i.e-50,000 concurrent users. Based on the pattern of increase in the numbers of registrants, the concurrency design load of the GSTN System has since been revised and raised up to 1.5 lakh i.e. six times of the original design estimate. However, in certain scenarios like two last dates coinciding due to the amnesty scheme/ last date extensions / last date of filing of GSTR-1 return coinciding with the last date of filing of GSTR-3B etc., the number of concurrent users exceeded GST portal capacity, and hence the system performance was affected. GSTN intimated that GST Portal is now in the process of being upgraded to handle up to 3 lakh concurrent user sessions.

We also sought details of periodic load/stress testing on the application to get assurance on the ability of the system to handle peak load. GSTN replied that as per the terms of the contract between GSTN and MSP, the MSP is obliged to demonstrate performance of GST system at 50,000 concurrent user load before Go-Live in production environment. MSP successfully completed the performance/stress test as per the agreed criteria prior to launch of each functionality such as registration, Return form GSTR-1 and GSTR-3B. The main GST return form (GSTR-3B) had also passed such performance test in

August 2017 before being made available to public. As concurrency on the portal increased beyond 50,000 concurrent user sessions, the application started to show signs of stress. In response, the MSP redesigned the application architecture and repeated the performance testing at an increased load of 90,000 concurrent users in the month of November 2018.

We have not been provided with load testing reports since the November 2018 test despite asking for it. In November 2018 load test, the maximum concurrent load tested was only 90,000 concurrent users against around 1.6 lakh peak concurrency now. Even at 90,000 load, the portal had encountered issues and showed strain. In such a scenario, periodic load/stress/endurance testing should have been the ideal course of action so that GSTN could have been ready for peak loads.

We agree with GSTN argument regarding earlier estimates in RFP on peak concurrency being widely off the mark. Such a scenario is possible when designing a system with few parallels like GST portal. However, we have concerns on the agility of GSTN in ramping up capacity thereafter. It is not acceptable that the system is still not able to handle peak load after three years of rollout. Moreover, on issues like load testing, more proactive approach is expected rather than just doing load testing during rollout time and little action thereafter.

During exit conference, GSTN intimated that it has recently upgraded the system to handle peak capacity of 3 lakh concurrent users. It was informed that GSTN was in the process of upgrading the system capacity to handle upto 5 lakh concurrent users. GSTN also replied that they have set up a dedicated test environment to test any new change for its impact on portal performance at peak concurrent users before releasing the change into production environment.

> *Recommendation 25:* GSTN may conduct a comprehensive analysis of the issue of poor portal performance on peak filing days, and upgrade the portal infrastructure accordingly if required.

3.10.4   Business Continuity Management Plan

Any kind of disruption in functioning of GST IT System, even of temporary nature, will severely impact the indirect tax administration of the country. Hence, a comprehensive policy of Business Continuity Management Process (BCMS) and its proper implementation are crucial for all stakeholders of the project.

GSTN has released BCMS (Version 1.4) on 28 March 2019. The purpose of this plan is to identify critical business services, foreseeable category of disaster

events, emergency response plan, recovery plan and restoration plan to the pre-defined levels of business operation following a disaster.

3.10.4.1 Disaster Recovery Drill Plan

GSTN has released its DR Plan for the GST IT System to ensure continuity of service in the event of a disaster.

As per the SLA document of GSTN with MSP, it is mentioned that two DR drills should be conducted every year. As per Section 3.5.4 of DR Plan, DR drill will be conducted to test the failing over of services within the planned downtime / Recovery Time Objective[47] (RTO) of 30 minutes for critical functions, and 4 hours for non-critical functions. The objective of testing the DR Plan is to ensure a reliable failover of services to alternate DC[48].

We noticed that GSTN did not conduct two successful DR drills in 2019-20 as required.

Further scrutiny of documents related to a disaster event on 5 March, 2020 disclosed that the database of DC1 was not coming up during implementation of a change (DC1 DB Failover) within the planned duration of 5 hours. Hence, an incident was raised and it was decided at 7.21 am to switch over to DC2 environment. Switch over of critical services to DC2 started at 8.40 am.

However, we noticed that critical services could be restored in DC2 only by 10 am. Thus, in an unplanned switchover to DC2 from DC1 it took 2.39 hours for critical services (after decision on switchover to DC2) as against the downtime window of 30 minutes for critical services. Restoration of backup in DC2 could be completed by 13.20, thus taking 6 hours for restoring the entire services against the targeted downtime of 4 hours.

In response to audit observation, GSTN stated (June 2020) that DR drill conducted in April 2019 was successful in terms of RTO for both critical and non-critical services. GSTN informed that the next DR drill was attempted on 1 September 2019. During the drill, critical services were successfully switched over but the activity encountered storage related issues for the non-critical services, and operations was switched back to primary DC. Subsequently, DR drill was planned several times after September 2019 but had to be cancelled due to rollout of urgently required critical functionalities and peak filing of returns due to which an appropriate window could not be arrived to conduct the DR drill. GSTN stated that the audit observations have been noted, and it

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[47] RTO is the targeted duration of time and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity.

[48] Data Centre: DC1 (NCT of Delhi) and DC2 (Bengaluru)

is being worked out such that DR drill is done more frequently to keep the system ready for any real time disaster.

These issues point out that the DR mechanism has not stabilised and the target RTOs are not achieved. The DR drills are not happening at the desired frequency to prepare the system for any failure / disaster in future.

GSTN stated (August 2020) that to ensure readiness at all time for a disaster, GSTN and MSP have agreed on quarterly DC-DR switchover, and creating a switchover calendar with designated dates and a fall back date in case the proposed date is not workable due to business reasons.

> *Recommendation 26:* GSTN may ensure that RTO targets are achieved and accordingly strengthen the DR process so that in the event of disaster, critical services can be restored in reasonable time.

3.11 Conclusion

Absence of adequate controls in Refund module indicate the possibility of refund on unverified ITC being claimed. Similarly, lack of controls in case of transitional credits being claimed through forms TRAN-1 and TRAN-2 indicate the vulnerability of system to detect ineligible ITC being claimed.

Incomplete roll out of Returns module coupled with the fact that GSTN did not provide the requisite information, providing assurance on risks and vulnerabilities prevailing in the Returns module is difficult.

Regarding EWB module, in view of the discrepancies pointed out in the data analysis there is a need for a detailed examination of such patterns. So far as the performance of GST portal is concerned, in addition to upgrading the system to handle peak capacity, the causes for the incidents pointed out in this report need to be examined in detail.

In view of above, we have made 26 recommendations for consideration of the Ministry / GSTN. The recommendations pertain to implementation of adequate validations in the modules audited by us; incorporation of functionalities in the system to effectively implement GST laws and rules; and appropriate changes in the rules / forms for strengthening the GST administration.