E-invoice in India
(Updated as on 1.1.2021)

Introduction

The GST Council, in its 35th meeting held on 21st June 2019, has recommended the introduction of electronic invoices (‘e-invoice’) in GST in a phased manner on a voluntary basis for online generation of B2B e-invoices from January 2020. As a result, a technical sub-group was constituted to look into the technical aspects of e-invoicing (Annexure-1 contains the extract of minutes of 35th GSTC meeting on introduction of electronic invoicing system). After that, GST Council in its 37th meeting held on 20th September 2019 took note and approved the recommendations of the technical sub-group on e-invoicing (Annexure-2 contains the extract of minutes of 37th GSTC on status and progress in generation of e-invoicing). The Government on 13th December 2019 issued Notifications 68/2019- Central Tax to 70/2019-Central Tax, setting out the legitimate guide for e-invoicing.

Initially, it was decided to introduce e-invoicing mandatorily for all taxpayers with annual aggregate turnover above ₹100 crores from April 1, 2020. However, the sudden onset of COVID-19 pandemic delayed the implementation, and the dates were extended to 1st October 2020 and the aggregate turnover of registered persons required preparing invoice in terms of Rule 48(4) enhanced to Rs. 500 crores. The aggregate turnover includes the turnover of all GSTINs under a single PAN, across India. For the taxpayers with annual aggregate turnover above ₹100 crores, e-invoicing provisions got applicable from January 01, 2021.

Under e-invoicing system, taxpayers continue to create their GST invoices on their own Accounting/Billing/ERP Systems. These invoices are now reported to ‘Invoice Registration Portal (IRP)’ in a standard format (called ‘schema’ & notified as Form GST INV-1). On reporting, IRP generates a unique ‘Invoice Reference Number (IRN)’ and digitally sign the invoice. IRP also generates a QR code containing the unique IRN along with certain other key particulars. While the 64-character IRN need not be printed on the invoice, the QR code generated by IRP shall be printed on the invoice issued to the buyer. The QR code enables offline verification of the fact whether the e-invoice has been reported on the IRP or not and whether the digital signature is intact or tampered with (using Mobile App etc.).

Applicability

At present, e-invoicing is required for invoices, credit notes and debit notes issued by a registered person, other than

- SEZ units
- insurer or a banking company or a financial institution, including a non-banking financial company
- goods transport agency supplying services in relation to transportation of goods by road in a goods carriage
➢ suppliers of passenger transportation service
➢ suppliers of services by way of admission to exhibition of cinematograph films in multiplex screens

whose aggregate turnover in any preceding financial year from 2017-18 onwards exceeds Rs. 100 crores in respect of the supply of goods or services or both to registered persons (B2B), SEZs (with/ without payment), or for the purpose of exports (with/ without payment) and deemed Exports.

**Advantages of E-invoicing System**

As discussed in 35th GSTC meeting, e-invoicing has several benefits for both taxpayers as well as the Government.

From taxpayer perspective, backward integration and automation of tax relevant processes replace manual and periodic reporting of forms, separate GST declarations, separate tax accounting etc. Thus, tax collection and refund can be processed seamlessly. Further businesses are relieved from carrying hard copies of invoice during transit of goods and it also results in early settlement of payable and receivables. The electronic invoice system also reduces the need for post audit systems of invoice matching drastically, as it ensures in real-time that fiscal documents are tax compliant. Electronic invoicing also helps to digitalize the supply chain which in future may result in emergence of more innovative trade finance schemes.

From Government perspective, e-invoice leads to significant reduction of the tax evasion, which paves the way to better management of taxes and freeing human resources for other important works. Various types of fraud like carousel fraud, fraud of invoicing between phantom partners who disappear before tax audit, no invoicing or invoicing with no goods supplied, fraudulent export ITC refunds, suppression of turnover etc., can be addressed through increasing use of e-invoices.

**Important Terms used under E-Invoicing System**

1. **E-invoice Schema (INV-1)**

E-invoice schema is notified as FORM GST INV-1. Schema simply means a structured template or format. ‘Schema’ acts as uniform standard for ERP/ Billing/ Accounting software providers to build utility in their solution/package to prepare e-invoice, for reporting to IRP. Schema ensures e-invoice is ‘machine-readable’ and ‘inter-operable’, i.e. the invoice/format can be readily ‘picked up’, ‘read’, ‘understood’ and further processed by different systems like Tally, SAP etc.

Latest e-invoice schema is notified on 30th July 2020 vide Notification No. 60/2020 – Central Tax. The e-invoice schema contains both mandatory and optional fields. The mandatory fields are those that must be compulsorily there for an invoice to be valid under the e-invoice standard. The optional fields are those that may be incorporated as per the business needs.
2. **Invoice Registration Portal (IRP)**

Invoice Registration Portal (IRP) is the website for uploading/reporting of invoices by the notified persons.

Vide notification no. 69/2019-Central Tax dated 13.12.2019, ten portals were notified for the purpose of preparation of the invoice in terms of Rule 48(4).

The first IRP i.e. [https://einvoice1.gst.gov.in/](https://einvoice1.gst.gov.in/) is built by NIC. The trial portal of the same can be accessed at [https://einvoice1-trial.nic.in/](https://einvoice1-trial.nic.in/).

Other portal will be made available in due course depending upon the volume of transactions.

3. **Invoice Reference Number (IRN) and Quick Response Code (QR Code)**

IRN is a unique reference number (hash) generated and returned by IRP, on successful registration of e-invoice. IRN is a unique 64-character hash. IRN is generated using the computer algorithm and is hash of Supplier GSTIN + Fin. Year + Doc Type + Doc Number. Document types are INV for Invoice, CRN for Credit Note, DBN for Debit Note.

A hash generation algorithm is a function that converts a message or a string consisting of characters (alphabets + numbers + certain special characters) into a series of numbers such that the resulting numbers cannot indicate the original message.

For example, a taxpayer with GSTIN 06AAAAA9999A19N has issued the Invoice with Number ABC01234 on 05.01.2021, the string used for hashing is 06AAAAA9999A19N2020-21INVABC01234 and hash will something look like

5558A0B05925B5CA5D1012F658CC4E732B525FDDDD6F09C6CE69FFEB48683004

This IRN shall be unique for every e-invoice raised in a financial year by a GSTIN in the entire GST system.

IRP will also generate the QR code containing the unique IRN (hash) along with some important parameters of invoice and digital signature so that it can be verified by an Offline App.

The QR code will consist of the following e-invoice parameters:

- GSTIN of Supplier
- GSTIN of Recipient
- Invoice number as given by Supplier
- Date of generation of invoice
- Invoice value
- Number of line items
- HSN Code of main item
- Unique Invoice Reference Number (hash)
- Date of generation of IRN

The Signed QR code when it is printed will look like as follows:
4. IRP-generated QR Code Vs. Self-generated Dynamic QR Code

IRP-generated QR Code is required on B2B & Export Invoices, Credit & Debit Notes. As per Rule 48(4) of CGST Rules (inserted vide Notification No. 68/2019 – Central Tax Dated 13-12-2019 and read with other notifications), notified registered persons, in case of B2B & Export supplies, have to prepare invoice by uploading specified particulars in FORM GST INV-01 on Invoice Registration Portal (IRP) and upon obtaining Invoice Reference Number (IRN). The Portal will also return a QR Code which contains key particulars of the invoice including IRN.

While the 64-character IRN need not be printed on the invoice, the QR code generated by IRP shall be printed on the invoice issued to the buyer. (It was also clarified that printing of QR code on separate paper is not allowed. While the printed QR code shall be clear enough to be readable by a QR Code reader, the size and its placing on invoice is up to the preference of the businesses.)

On the other hand, self-generated dynamic QR Code is required on B2C invoices. There is a separate Notification No. 14/2020-Central Tax dated 21st March, 2020 read with other notifications which mandates entities with aggregate turnover > Rs. 500 crores in a FY to include QR code on their B2C invoices. It was also specified that a Dynamic Quick Response (QR) code made available to buyer through digital display (with payment cross-reference) shall be deemed to be having QR code. In this case, the QR Code is generated by supplier himself.

The purpose of this Notification is to enable and encourage digital payments where buyer can scan the dynamic QR code and make payment from mobile wallet directly. Today, many shops have static QR code at the payment counter which is scanned by the buyer but the buyer has to enter the amount to be paid to the shop (in the mobile payment App). The dynamic QR code, on the other hand, will have the payment details and thus ‘scan and pay’ in one go will be possible.

This requirement has no relevance or connection with e-invoicing mandated for B2B Supplies and Exports by notified class of taxpayers.


E-Invoice – Detailed Workflow

The overall workflow of ‘e-invoice’ system is as follows:
The above flow of e-invoice generation, its reporting/registration and receipt of confirmation can be logically divided into two major parts:

A. Interaction between the business (supplier) and the Invoice Registration Portal (IRP).

B. Interaction between the IRP and the GST/E-Way Bill Systems and the Buyer.

**Part A: Flow from Supplier to IRP:**

**Step 1** is the generation of the invoice by the seller in his own accounting or billing system (it can be any software utility that generates invoice including those using excel or GSTN provided Offline Utility). The invoice must conform to the e-invoice schema (standard format...
notified) and have the mandatory parameters. The optional parameters can be according to the business need of the supplier. The supplier’s (seller’s) software should be capable to generate a JSON of the final invoice that is ready to be uploaded to the IRP. The IRP will only take JSON of the e-invoice.

Note:

1. Seller should have a utility that will output invoice data in JSON format, either from his accounting or billing software or his ERP or excel/word document or even a mobile app. [All accounting and billing software companies are being separately asked to adopt the e-invoice standard so that their users can generate the invoice in notified standard from the software and upload the same on the IRP.]

Those who do not use any accounting software or IT tool to generate the invoice, will be provided a free offline tool to key-in data of invoices and then report the same to IRP and obtain IRN.

2. The small and medium size taxpayers who do not have accounting/billing software can avail free accounting and billing systems offered by GSTN- empanelled providers.

Steps 2 and 3: To upload and push the e-invoice JSON to the IRP by the seller. The JSON may be uploaded directly on the IRP or also through GSPs or through third party if software is available for the same.

Step 4: The IRP will generate Invoice Reference Number (IRN), based on Supplier’s GSTIN, Document Type, Document Number and Financial Year and check the same from the Central Registry of GST System to ensure that the same document (invoice etc.) from the same supplier pertaining to same Financial Year is not being uploaded again.

On receipt of confirmation from Central Registry, IRP will add its signature on the Invoice Data as well as a QR code to the JSON. The hash computed by IRP will become the IRN (Invoice Reference Number) of the e-invoice. This shall be unique to each invoice and hence be the unique identity for each invoice for the entire financial year in the entire GST System for a taxpayer. [GST System will create a central registry where hashes sent by all IRPs will be kept ensuring uniqueness of the same].

In case the same document has been uploaded earlier, the IRP will reject it with an error code, back to the supplier.

Step 5 will involve returning the digitally signed JSON with IRN back to the seller along with a QR code.

Step 6 will involve sharing the uploaded data of document (invoice etc.) with GST and e-way bill system.
Part B: Flow from IRP to GST System/E-Way Bill System & Buyer:

The following diagram shows how e-Invoice data would be consumed by GST System for generation of e-way bill or populating relevant parts of GST Returns, stated in Step-6 above.

**Step 6(a)** will be to send the signed and authenticated e-invoice data along with IRN (same as that has been returned by the IRP to the seller) to the GST System as well as to E-Way Bill System.

**Step 6(b)** The GST System will update GSTR-1.

**Step 6(c)** The e-invoice schema includes parameters e.g., ‘Transporter ID’ and ‘Vehicle Number’, etc. that are required for creating and generating e-way bills. These can be entered if available with seller, at the time of generation of e-invoice so that e-way bill can be created using this data without any further requirement of data entry by the user.

*Source: [https://www.gstn.org.in/assets/mainDashboard/Pdf/GST%20e-invoice%20System%20-%20FAQs.pdf](https://www.gstn.org.in/assets/mainDashboard/Pdf/GST%20e-invoice%20System%20-%20FAQs.pdf)*

**Legal Provisions Governing E-invoice**

Below notifications are issued on e-invoice:

<table>
<thead>
<tr>
<th>Notification No. (Central Tax)</th>
<th>Key Contents</th>
</tr>
</thead>
</table>
| 68/2019 dt. 13-12-2019         | - Central Goods and Services Tax (Eighth Amendment) Rules  
                             | - Inserted sub-rules 4,5 and 6 in Rule 48 of CGST Rules, 2017 |
The invoice shall be prepared by such class of registered persons as may be notified by the Government, on the recommendations of the Council, by including such particulars contained in FORM GST INV-01 after obtaining an Invoice Reference Number by uploading information contained therein on the Common Goods and Services Tax Electronic Portal in such manner and subject to such conditions and restrictions as may be specified in the notification.

(5) Every invoice issued by a person to whom sub-rule (4) applies in any manner other than the manner specified in the said sub-rule shall not be treated as an invoice.

(6) The provisions of sub-rules (1) and (2) shall not apply to an invoice prepared in the manner specified in sub-rule (4).

**69/2019 dt. 13-12-2019** Notified 10 Common Goods and Services Tax Electronic Portals for the purpose of preparation of invoice in terms of Rule 48 (4) namely:

(i) www.einvoice1.gst.gov.in;
(ii) www.einvoice2.gst.gov.in;
(iii) www.einvoice3.gst.gov.in;
(iv) www.einvoice4.gst.gov.in;
(v) www.einvoice5.gst.gov.in;
(vi) www.einvoice6.gst.gov.in;
(vii) www.einvoice7.gst.gov.in;
(viii) www.einvoice8.gst.gov.in;
(ix) www.einvoice9.gst.gov.in;
(x) www.einvoice10.gst.gov.in.

**70/2019 dt. 13-12-2019** Notified registered person, whose aggregate turnover in a financial year exceeds 100 crore rupees, as a class of registered person who shall prepare invoice in terms of Rule 48 (4) of the said rules in respect of supply of goods or services or both to a registered person.

Notification to come into force from the 1st day of April 2020.

(This notification superseded by N/N 13/2020 dt. 21-3-2020)

**2/2020 dt. 1-1-2020** Substituted Form GST INV-1 as e-invoice schema

(Schema further amended vide Notification 60/2020 dt. 30-7-2020)


Notifies registered persons, other than those referred to in sub-rules (2), (3), (4) and (4A) of rule 54 of the said rules, whose aggregate turnover in a financial year exceeds Rs. 100 Cr., as a class of registered person who shall prepare invoice and other prescribed documents, in terms of sub-rule (4) of Rule 48 of CGST Rules, 2017,
in respect of supply of goods or services or both to a registered person.

**(Further amended by 61/2020 Dt. 30-7-2020)**

| 60/2020 dt. 30-7-2020 | Central Goods and Services Tax (Ninth Amendment) Rules, 2020  
New form substituted for GST INV-01 (i.e. notified revised Schema/format fore-invoice) |
|-----------------------|-------------------------------------------------------------------------------------------------|
| 61/2020 dt. 30-7-2020 | Amended notification 13/2020 dt. 21-3-2020  
Special Economic Zone units also excluded from e-invoicing mandate  
Aggregate Turnover of registered persons required to prepare invoice in terms of Rule 48(4) enhanced to Rs. 500 Cr. |
| 70/2020 dt. 30-9-2020 | The words “a financial year” in notification 13/2020 dt. 21-3-2020 substituted with “any preceding financial year from 2017-18 onwards”  
Invoices for exports were also included |
| 72/2020 dt. 30-9-2020 | In rule 46, after clause (q), below clause is inserted:  
“(r) Quick Reference code, having embedded Invoice Reference Number (IRN) in it, in case invoice has been issued in the manner prescribed under sub-rule (4) of rule 48.”  

In rule 48, in sub-rule (4), below proviso was inserted:  
“Provided that the Commissioner may, on the recommendations of the Council, by notification, exempt a person or a class of registered persons from issuance of invoice under this sub-rule for a specified period, subject to such conditions and restrictions as may be specified in the said notification.”  

In rule 138A, for sub-rule (2), below sub-rule was substituted:  
“(2) In case, invoice is issued in the manner prescribed under sub-rule (4) of rule 48, the Quick Reference (QR) code having an embedded Invoice Reference Number (IRN) in it, may be produced electronically, for verification by the proper officer in lieu of the physical copy of such tax invoice.” |
| Press Release dt. 30.9.2020 | Provides that “invoices issued by taxpayers having aggregate turnover of Rs. 500 crores and above during October 2020 without
following the manner prescribed under Rule 48(4), shall be deemed to be valid and the penalty leviable under Section 122 of the CGST Act, 2017, for such non-adherence to provisions, shall stand waived if the Invoice Reference Number (IRN) for such invoices is obtained from the Invoice Reference Portal (IRP) within 30 days of the date of invoice”

| 73/2020 dt. 01-10-2020 | Notifies the registered persons required to prepare the tax invoice in the manner specified under Rule 48(4) of the CGST Rules, 2017, who have prepared tax invoice in a manner other than the said manner, as the class of persons who shall, during the period from the 1st day of October, 2020 to the 31st day of October, 2020, follow the special procedure such that the said persons shall obtain an Invoice Reference Number (IRN) for such invoice by uploading specified particulars in FORM GST INV-01 on the Common Goods and Services Tax Electronic Portal, within 30 days from the date of such invoice, failing which the same shall not be treated as an invoice.

(Issued to notify the above Press Release)

| 88/2020 dt. 10-11-2020 | Provides that e-invoicing provisions will be applicable for the registered persons whose aggregate turnover in any preceding financial year from 2017-18 onwards exceeds Rs. 100 crores with effect from January 01, 2021.

Source: [https://www.gstn.org.in/assets/mainDashboard/Pdf/GST%20e-invoice%20System%20FAQs.pdf](https://www.gstn.org.in/assets/mainDashboard/Pdf/GST%20e-invoice%20System%20FAQs.pdf)

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Annexure-1

Extract of Minutes of 35th GSTC Meeting on Introduction of E-Invoicing System

The Secretary introduced the agenda item regarding generation of e-invoice and stated that the agenda was before the Council for considering the benefits of e-invoices and that, at least preparation should start for generation of e-invoice and its reporting on GST portal, because this would help the entire GST eco-system, in the long run. The advantages and salient features of the proposal, as stated in the agenda are summarised as below:

a. The e-invoicing can accelerate the business process automation, reduce compliance burden and improve ease of doing business. Moreover, the immediate capture of the details of transaction helps in easing compliance burden, by facilitating auto drafting of returns. Further, under the current system, there was a gap between time of generation of invoices and time of filing of Returns (GSTR-1, GSTR-3B, GSTR-4 etc.), which left scope for misdeclaration or errors in submitting returns.

b. For taxpayers, backward integration and automation of tax relevant processes replaces manual and periodic reporting of forms, separate GST declarations, separate tax accounting etc., Thus, tax collection and refund can be done seamlessly, and it also results in early settlement of payable and receivables. It also reduces the need for post audit systems of invoice matching drastically, as it ensures in real-time that fiscal documents are tax compliant. On the other hand, it leads to significant reduction of the tax evasion, which paves the way for better management of taxes and human resources.

c. In order to crystalize the ideas towards generation of e-invoice, a Committee of Officers (CoO) on generation of electronic invoice on GST portal was constituted under the Convenorship of Dr. Rajeev Ranjan, Special Secretary, GST Council Secretariat with officers from CBIC, States, GST Policy Wing, TRU-I & TRU- II, Department of Revenue and GSTN as members. During deliberations in all these meetings, it was observed that the idea of e-invoice on voluntary basis for large taxpayers in B2B segment was worth considering and it needed to be explored positively.

d. NIC had demonstrated a prototype for reporting of e-invoice that would have backward integration with e-way bill and was further working on it.

e. The Committee of Officers has recommended the proposal of introducing e-invoices on a voluntary and optional basis for business to business (B2B) supplies with some caveat and accordingly sub-committees of officers have been constituted to work out the technical parameters and legal and policy framework for e-invoicing.

The Secretary stated that in view of the overall aim to continue to simplify the GST regime, the idea of implementation of e-invoice on voluntary basis for large taxpayers in B2B segment was worth considering. The taxpayers would not be required to submit invoice data multiple times for return and e-way bill and that too in separate formats, as is the case today. He also mentioned that this issue was discussed in the meeting of the Officers held on 20th June 2019. The Centre had shared details relating to the generation of fake invoices with the States along with a detailed presentation regarding the technical development on
e-invoices by GSTN. Hence, he submitted that the proposal in the agenda may be approved by the Council.

The Hon’ble Deputy Chief Minister of Delhi stated that due to paucity of time, the revenue position could not be discussed, and the bogus billing presentation was also not made. Since Delhi’s revenue was decreasing for the last few months and one of the major reasons was bogus billing and sealing of premises, the Government of Delhi was concerned.

The Secretary stated that the issues of bogus billing and fake invoices were discussed in the meeting of the Officers held on 20th June 2019 along with the steps to be taken to curb bogus billing and most of the States had agreed to it. Hence, the officers should go ahead with the suggested measures since no law amendment was required, it being only an issue of enforcement. He further stated that in the next Council meeting, a detailed presentation would be made on it. Further, to consider what changes would be required in the law for curbing bogus billing, a proper proposal would be brought before the Council at appropriate time. He suggested that Council could give in principle approval to launch a pilot project on voluntary basis for online generation of B2B e-invoices from January 2020.

The proposal of generation of e-invoicing as above was placed before the Council for consideration and approval.

The Council approved, in principle, to launch a pilot project on voluntary basis for online generation of B2B e-invoices from January 2020.

Introducing the Agenda item, the Secretary mentioned that, the Council in its 35th Meeting held on 21st June 2019, decided to introduce electronic invoicing system (e-invoice) in a phased manner for B2B transactions. Phase 1 was proposed to be voluntary and it was to be rolled out from Jan 2020. In view of the same a Technical Sub-Group was constituted to look into tech aspects of e-invoice, which mentioned that the e-invoice will be generated through GST portal.

He stated that the sub-group had submitted its recommendations which were of technical nature and required approval so that development could take place. The recommendation of the Technical subgroup, as per the agenda were as follows:

a. The standard of template of e-invoice based on industry consultation.
b. Format of Unique Invoice Reference Number (IRN) that will be based on the computation of hash of GSTIN of generator of document (invoice or credit note etc.), Year and Document number.
c. Creation of multiple registrars to which e-invoice could be reported by taxpayers to obtain Unique Invoice Reference Number to ensure 24X7 operations without any break. NIC will be the first registrar.
d. Digital Signing of e-invoice by registration portal.
e. Generation of QR Code by the e-Invoice Registration Portal (IRP) containing the IRN (hash) along with some important parameters of invoice like GSTIN of seller and buyer, invoice number and date, taxable amount, total tax and HSN Code of major item, to help validation of registered e-invoice in offline mode.
f. Multiple modes for getting invoice registered on IRP like Web, API, SMS, mobile app, offline tool, GSP.
g. Direct printing from JSON to enable small taxpayers to directly print from a mobile app to a compatible printer.

He also stated that the presentation in this regard was made by CEO, GSTN in the Officer’s Meeting held on 19.09.2019. However, due to paucity of time the presentation could not be made before the Council. The same would be circulated to the members of the Council and the issue would be discussed in detail in the next Council meeting. The Presentation is attached as Annexure 5. Since implementation of e-invoice would require development, the Secretary placed the Agenda item before the Council for approval.

The Council took note and approved the recommendations of the technical sub-group on e-invoice.