



E-Invoice (IRN) System

*Ease in doing Business...
Ease in GST Compliance!*



01. **At a Glance**
Why, What, Whom, Which, When
and How of E-Invoicing

03. **Notifications**
Relevant notifications issued by the
Government for E-Invoicing

05. **Detailed Process Flow**
Step by step illustration of the E-
Invoicing process

07. **Schema/ Format**
Common standard schema/ format
for adopting E-Invoicing standards

09. **Outreach and Feedback**
Initiatives to create trade awareness
on E-Invoicing

02. **The Need**
Understanding the need of adopting
E-Invoicing by businesses

04. **Salient Features**
Understanding the most important
features of the E-Invoicing process

06. **Implications for Taxpayers**
How will the taxpayers be impacted
by the implementation of E-Invoicing

08. **API Testing**
Available API specifications and
testing progress

10. **Questions**
Post discussion session open for
questions/ queries by attendees



01. E-Invoice: At a Glance



<h2>WHY</h2>	<ul style="list-style-type: none">• To improve business-to-business communication by reducing transcription errors and cost involved;• To simplify exchange of documents between suppliers and buyers, just like sending/receiving e-mail;• GST reporting will be a lot more easier and indeed a by-product
<h2>WHAT IT MEANS</h2>	<ul style="list-style-type: none">• ‘e-invoicing’ means reporting details of specified GST documents to a Government-notified portal and obtaining a reference number.• It doesn’t mean generation of invoice by a Government portal.
<h2>TO WHOM APPLICABLE</h2>	<ul style="list-style-type: none">• Taxpayers whose aggregate turnover (based on PAN) in a financial year > Rs 500 Crores• Few sectors exempted: SEZ Units, Insurance, Banking [including NBFCs], Goods Transport Agency [transporting goods by road in goods carriage], Passenger Transport Services, Multiplex Cinema Admissions

<p>WHICH SUPPLIES COVERED</p>	<ul style="list-style-type: none">• GST invoices, Credit Notes and Debit Notes in respect of B2B Supplies & Exports
<p>WHEN COMING TO FORCE</p>	<ul style="list-style-type: none">• 1st October 2020
<p>HOW ABOUT THE PROCESS</p>	<ul style="list-style-type: none">• Taxpayers will continue to create their GST invoices on their own Accounting/Billing/ERP Systems• These invoices will now be reported to 'Invoice Registration Portal (IRP)'• On reporting, IRP returns signed e-invoice with unique 'Invoice Reference Number (IRN)' along with a QR Code.• Then, the invoice can be issued to receiver (with QR Code).• A GST invoice will be valid only with a valid IRN.



02. E-Invoice: The Need





- Ensures **Digitization, Standardization, Interoperability and Paperless mode** in invoice communication
- Eliminates data re-entry and reconciliation errors
- Improves payment cycles
- Reduces processing costs
- Reduces disputes among transacting parties



- Generation of invoice and its reporting will become part of business process.
- No further reporting to GST portal or e-way bill portal.
- **Reporting to GST is an incidental by-product.**





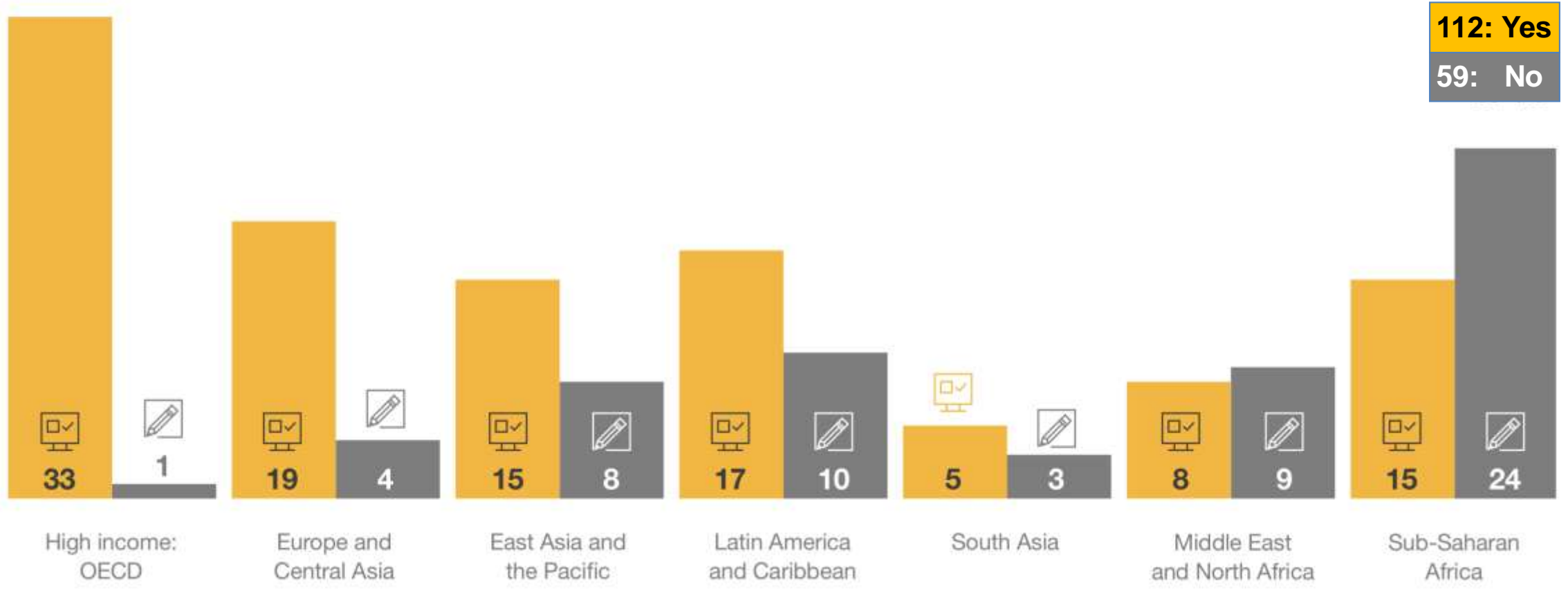
- Auto-reporting of invoices into GST Return
- Auto-generation of e-way bill, where required
- GST reporting compliance will be part of natural business system
- Improves overall business efficiency
- Facilitates business-friendly e-initiatives such as invoice financing
- Mitigates invoice fraud
- Global imperative



2018: Overall Rank: 77 On Paying Taxes: 121	2019: Overall Rank: 63 On Paying Taxes: 115
--	--



Number of economies offering e-invoicing



Source: Doing Business database





7 euros for the shipment of an issued paper invoice (versus **0,30 euros** for an electronic format). **15 euros** for a received paper invoice.



52% view the cost reduction as the principal advantage of the digital transformation.



6,000 paper invoices processed each year by a full-time equivalent. This same person may check **90,000** electronic invoices.



Time saving
15 days if paper invoice
3 days with a rate of 80% dematerialization

► Source: EY survey - France - 2016

Source: EY Study, 2016



Items	Paper invoice (pre e-invoice period)	After introduction of e-invoice	Change
Cost of handling of one invoice	7 Euros	0.3 Euros	96% saving
Number of invoices handled by an employee in a year	6,000 paper invoices	90,000 e-invoices	15 times efficiency improvement
Time saving	15 days for paper invoice	3 days for e-invoice	80% saving of time
52% businesses view cost reduction as the principal advantage of digital transformation			

Source: EY Study, 2016



03. E-Invoice: Notifications



Notification No. (Central Tax)	Key Contents
68/2019 Dt. 13-12-2019	<ul style="list-style-type: none">• Central Goods and Services Tax (Eighth Amendment) Rules• Inserted below new sub-rules in Rule 48 of CGST Rules, 2017: (4) 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).

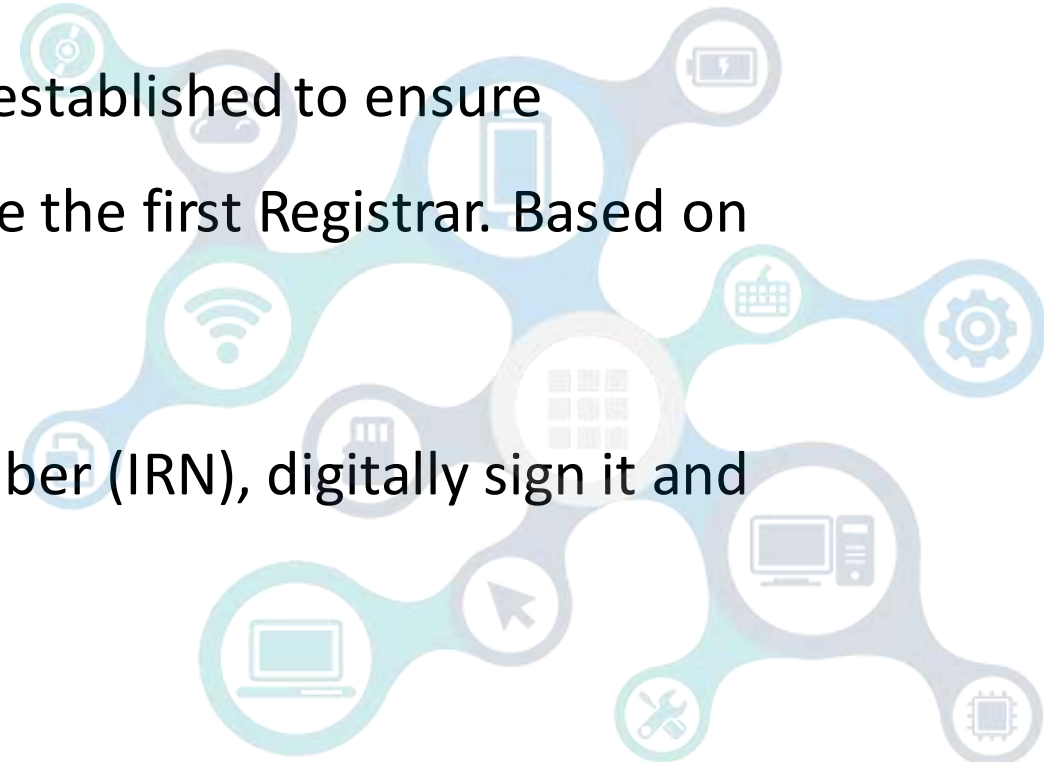
Notification No. (Central Tax)	Key Contents
69/2019 Dt. 13-12-2019	Notified 10 Common Goods and Services Tax Electronic Portals for the purpose of preparation of invoice in terms of rule 48 (4)
70/2019 Dt. 13-12-2019	<p>Notified registered person, whose aggregate turnover in a financial year exceeds one hundred crore rupees, as a class of registered person who shall prepare invoice in terms of sub-rule (4) of rule 48 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</p> <p>(This notification superseded by 13 of 2020 Dt. 21-3-2020)</p>
2 of 2020 Dt. 1-1-2020	<p>Substituted Form GST INV-1 as e-invoice schema</p> <p>(Schema further amended vide Notification 60/2020 Dt. 30-7-2020)</p>

Notification No. (Central Tax)	Key Contents
<p>13 of 2020 Dt. 21-3-2020 (in supersession of 70/2019 Dt. 13-12-2019)</p>	<ul style="list-style-type: none"> e-invoicing to start from the 1st October, 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 CGCT Rules, 2017, in respect of supply of goods or services or both to a registered person. <p>(Further amended by 61/2020 Dt. 30-7-2020)</p>
<p>60/2020 Dt. 30-7-2020</p>	<ul style="list-style-type: none"> Central Goods and Services Tax (Ninth Amendment) Rules, 2020 New form substituted for GST INV-01 (i.e. notified revised Schema/format for e-invoice)
<p>61/2020 Dt. 30-7-2020</p>	<ul style="list-style-type: none"> 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.



04. E-Invoice: Salient Features

- Taxpayers will continue to create their GST invoice on their own accounting/billing/ERP System
- e-invoice, as prepared, will be reported to Invoice Registration Portals (IRP)
- Multiple Invoice Registration Portals (IRP) will be established to ensure uninterrupted availability. To start with, NIC will be the first Registrar. Based on experience, more registrars will be added.
- IRP will generate a unique Invoice Reference Number (IRN), digitally sign it and return the e-invoice.



- IRP will also generate a QR code containing the unique IRN along with below key particulars:
 - i. GSTIN of supplier
 - ii. GSTIN of Recipient
 - iii. Invoice number as given by Supplier
 - iv. Date of generation of invoice
 - v. Invoice value (taxable value and gross tax)
 - vi. Number of line items.
 - vii. HSN Code of main item (the line item having highest taxable value)
 - viii. Unique Invoice Reference Number (hash)



****QR code will enable Offline verification of invoices using Mobile App**



- **INV-01 Schema** is based on e-invoice standard (Based on Universal Business Language (UBL) / PEPPOL with certain customisations to cater to Indian business practices and requirements like e-way bill etc.)
- **Documents covered** - invoice, credit note, debit note
- **Types of supplies covered:** B2B, Exports
- IRN will be generated in sub 200 milliseconds duration – specified key fields to be validated on IRP
- Facility for bulk-upload of invoices
- The uploaded invoice data will be digitally signed by IRP
- No amendment of already-reported invoice on IRP - cancellation and re-generation will be the only option

- Invoice no. (e.g. ABC/1/2019-20) is different from IRN (e.g ***35054cc24d97033afc24f49ec4444dbab81f542c555f9d30359dc75794e06bbe***)
- A GST invoice will be valid only with a valid IRN
- Free offline utility will also be provided in due course through which invoices can be reported and get IRN;
- IRN generation option through Mobile app will also be made available
- **Modes for reporting e-invoice:** Multiple modes to be made available so that taxpayer can use one based on his/her need:
 - *API based,*
 - *mobile app based,*
 - *Offline tool based and*
 - *GSP based*



06/12/2019 11:10PM



e-Invoice System

Schema version: 1.0
Tax scheme: GST

Original For Recipient

e-Invoice

1. GSTIN: 05AAACG2207L1ZY
2. Name: GSTN LTD
3. Address: GODREJ, VIKHROLI, Mumbai, Maharashtra, 400075
4. Serial No. of Invoice: GSTN001
5. Date of Invoice: 06/12/2019
6. IRN No.: 05AAACG2207L1ZY/GSTN001/2019-20

Dispatch from: 05AAACG2207L1ZY, GSTN LTD
Address: GODREJ, VIKHROLI, Mumbai
State: Maharashtra
Pincode: 400075

Details Of Receiver(billed to)		Details Of Consignee(Shipped to)	
Name	ABC INDIA LTD	Name	ABCINDIA LTD
Address	Mumbai	Address	Mumbai
Pin Code	400011	Pin Code	400011
State	Maharashtra	State	Maharashtra
State Code (Place of supply)	MH	State Code (Place of supply)	MH
GSTIN/Unique ID	05AAACG2207L1ZY	GSTIN/Unique ID	05AAACG2140A1ZL

Sample e-Invoice

Supply type: Outward
Transaction mode: Tax Invoice

S.No	Description of supply / Item description	HSN Code	Quantity	Rate per unit of quantity	GST rate (aggregate of CGST+SGST/IGST)	Taxable Value	CGST		SGST		IGST		CESS	
							%	Amount	%	Amount	%	Amount	%	Amount
1	LAPTOP	8703	2.00	50000.00	18.00	100000.00	9.00	9000.00	9.00	9000.00	0.00	0.00	0.00	0.00
Total						100000.00	9000.00	9000.00	0.00	0.00				
Total Invoice Value(In figure):						118000.00	Total Taxable Amount				100000.00			
Amount of Tax subject to Reverse Charges: No							Total Tax Amount				18000.00			
Payee Information:														
Payee name: KPMG						Final Amount						118000.00		
Account number:						Amount paid in advance:						10000.00		
Payment mode: Cash						Amount outstanding:						98000.00		
IFSC code:														

Remarks 1
Remarks 2





05. E-Invoice: Flow

Seller

Invoice Registration Portal (IRP)

GST System

Buyer



Uploads e-invoice
(Containing GSTIN,
Invoice Number,
Date, Value etc.)

Receives the
digitally signed
JSON of e-invoice
that contains the QR
Code

Seller's GSTR-1 gets updated with liability entered in the invoice

B2B APIs



IRP-

- Signs the invoice
- Sends the invoice to the GST System
- Adds a QR to the JSON
- Sends back signed JSON to buyer

APIs



GST System:

- Updates the outward and inward supplies for buyer and seller
- Now has a unique invoice with a unique number



Buyer can view the ITC related to the invoice in his GSTR-2A

A. Seller-IRP Flow of Activities



Note:
Seller to have JSON prep utility from excel, word, ERP Accounting software, mobile app etc.

1

Prepares e-invoice as per schema having mandatory (GSTIN, Invoice No. Date, value etc.) and optional fields



2

Uploads the JSON of e-invoice to the IRP



B2B APIs/ Direct Interaction on IRP



Receives the digitally signed JSON of e-invoice that contains the QR Code

3

JSON pushed to IRP



IRP to have facility to-

- Accept JSON through APIs
- Accept JSON-direct upload



4

- Generates IRN
- Does de-duplication check with GST System
- Signs JSON with digital signature of IRP
- Adds QR code to JSON

5

Returns digitally signed JSON to seller with the QR code included in it



6a

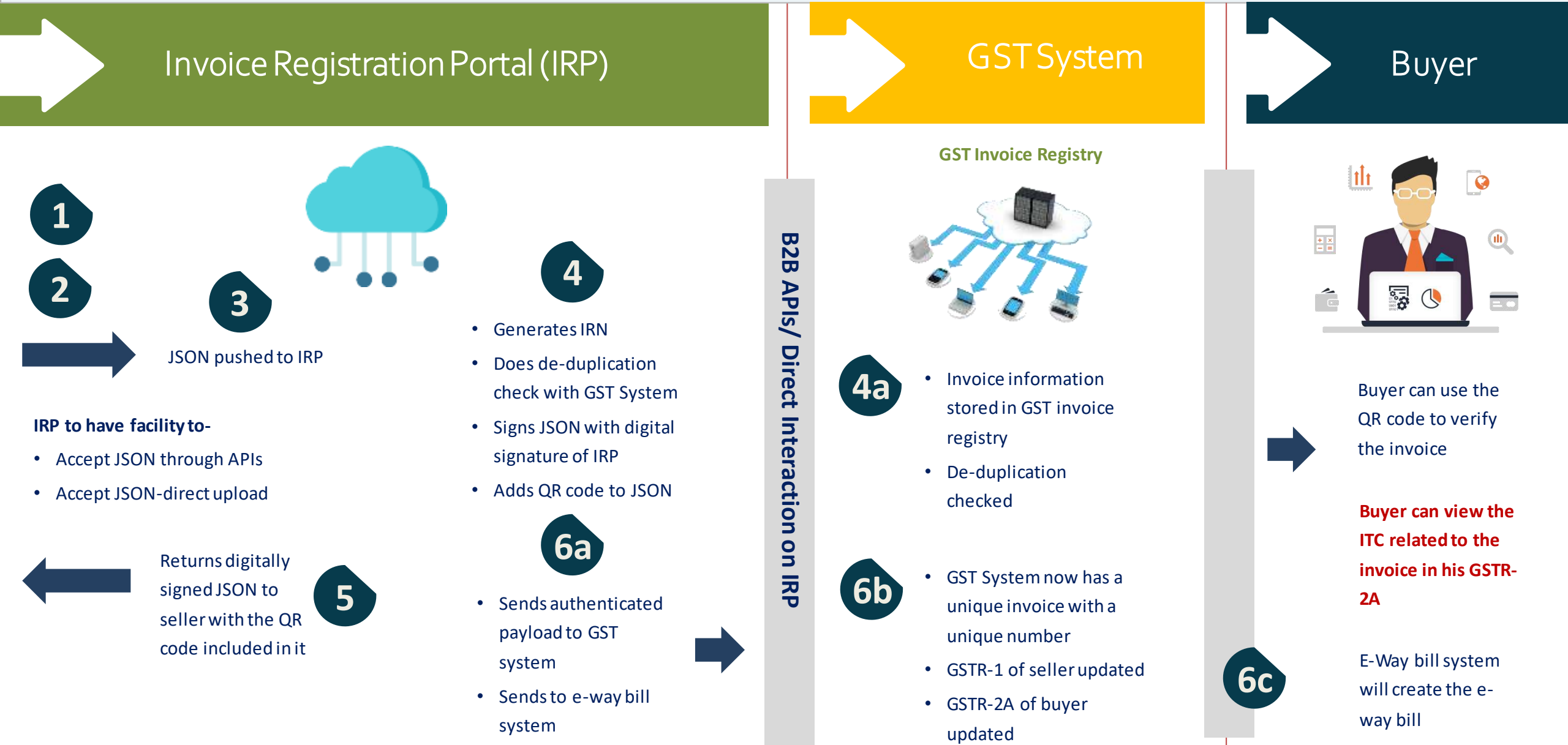
- Sends authenticated payload to GST system
- Sends to e-way bill system



Seller's GSTR-1 gets updated with liability entered in the invoice



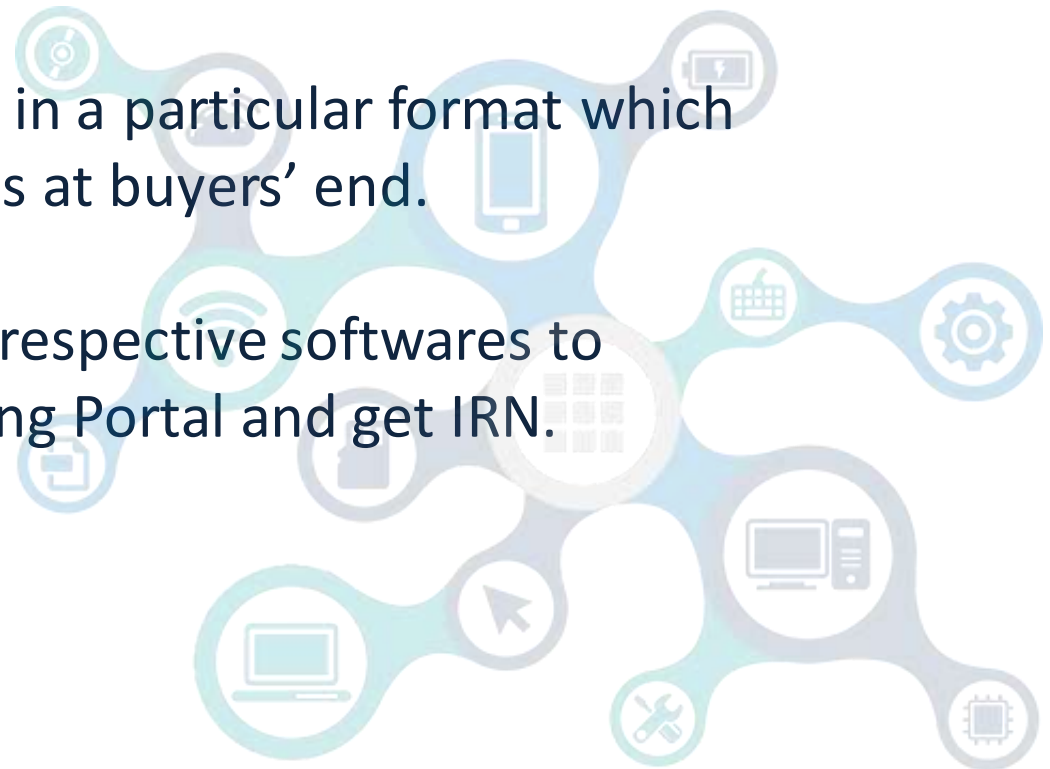
B. IRP-GST System Flow of Activities

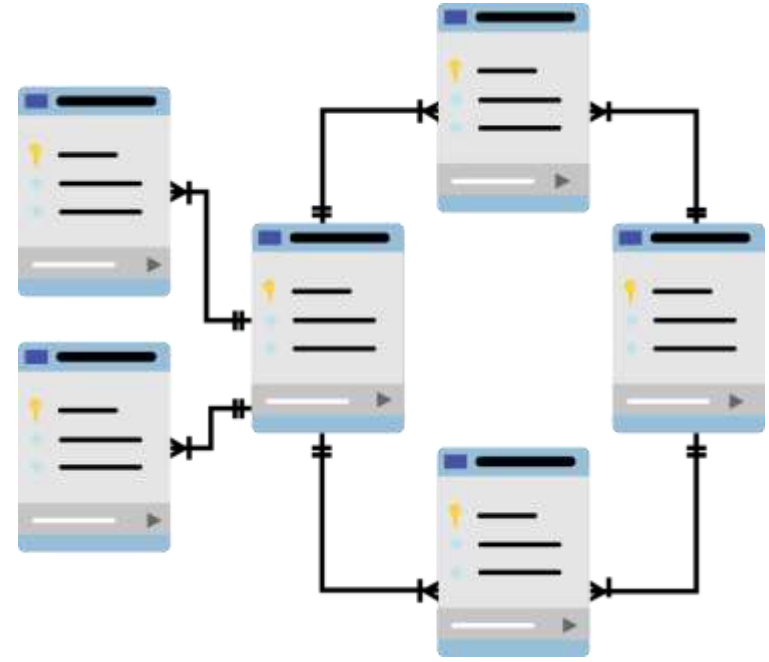




06. E-Invoice: Implications for Taxpayers

- e-invoice does not mean generation of electronic invoice by GST Portal but **reporting of Invoice electronically and getting an IRN**
- No Change in the way taxpayer interfaces with ERP/Accounting Software and generate invoice
- **Only Change:** Reporting of invoice data generated in a particular format which can be understood by government portal as well as at buyers' end.
- All changes will be made by software providers in respective softwares to enable reporting invoice details to Invoice Reporting Portal and get IRN.





07. E-Invoice: Schema/ Format





- E-invoice schema is notified as **'INV-1'**
- **'Schema'** simply means a structured template or format
- **'e-invoice' schema** is the standard format for electronic invoice
- Invoice details in prescribed schema to be reported to IRP in **JSON** format (*JavaScript Object Notation*)
- **'JSON'** can be thought of as a common language for systems/machines to communicate between each other and exchange data



- Businesses are already preparing/generating invoices in their ERPs/Accounting/Billing Software; the same to continue without any change
- ‘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.
- No need of further data entry by buyers & hence transcription errors eliminated;



- In e-invoice scenario, we are talking of '**machine-to-machine**' exchange of invoice data (*between seller & IRP and between seller and buyer*).
- Though the option of obtaining IRN by entering invoice data via **web-based screen** will be made available, that mode will be used rarely, e.g. by businesses who don't use any ERPs/Accounting/Billing Software and have very few invoices to report. This will be introduced later
- Going forward, for small entities not having their own ERP/Software solutions, **a free offline utility** will also be provided, through which invoices can be easily prepared, reported to IRP and obtain IRN/signed e-invoice.

- For each field, 'Cardinality' is marked as 0..1 / 1..1 / 1..n / 0..n
- To denote whether a field is 'mandatory' and is 'repeatable'

Notation	Meaning
Starts with 0	Optional field
Starts with 1	Mandatory field
Ends with 1	Field can be entered only once
Ends with n	Field can be repeated multiple times



S. No.	Description	Nature of Section	Total	<i>Mandatory</i>	<i>Optional</i>
1	Basic Details	Mandatory	8	6	2
2	Invoice Period	Optional	2	2	0
3	Order and Sales Order Reference	Optional			
3.1	Preceding Document Reference	Optional	3	2	1
3.2	Receipt / Contract References	Optional	8	0	8
4	Supplier Information	Mandatory	10	6	4
5	Buyer Information	Mandatory	12	6	6
6	Payee Information	Optional	9	0	9



S. No.	Description	Nature of Section	Total	Mandatory	Optional
7	Delivery Information	Optional			
7.1	Despatch From (Annexure 1.1)	Optional	6	5	1
7.2	Ship To (Annexure 1.0)	Optional	8	5	3
8	Item Details Including Batch Details (Annexure 1.2 & Annexure 1.4)	Mandatory	33	9	24
	Attribute Details (Annexure A 1.5)		2	0	2



S. No.	Description	Nature of Section	Total	Mandatory	Optional
9	Document Total (Annexure 1.3)	Mandatory	13	2	11
10	Extra Information	Optional	8	1	7
11	Additional Supporting Documents	Optional	3	0	3
12	E-way Bill Details	Optional	8	1	7
Total			133	45	88



S. No.	Description	Nature of Section	Total	Mandatory	Optional
A 1.0	Ship to Details	Optional	8	5	3
A 1.1	Dispatch from Details	Optional	6	5	1
A 1.2	Item Details	Mandatory	30	8	22
A 1.3	Document Total Details	Mandatory	13	2	11
A 1.4	Batch Details	Optional	3	1	2





08. E-Invoice: API Testing





- **API Specifications** made available by NIC at <https://einv-apisandbox.nic.in>
- **Registration and Testing** going on since 7-1-2020.

- Sandbox API portal for taxpayers and GSPs:
<https://einv-apisandbox.nic.in>



The screenshot shows the 'e - Invoice API Developer's Portal' website. The header includes the Government of India logo, 'GOODS AND SERVICES TAX e - Invoice System', and 'NATION TAX MARKET NIC'. A navigation menu contains: Home, Introduction, API Overview, Benefits, On-Boarding, API Credentials, Best Practices, and FAQs. A red message states: 'Now available. Please click on "Login" for Registration'. The main content area is titled 'API Specifications' and is divided into three columns: 'Authentication', 'Generate IRN', and 'Cancel IRN'. Each column lists links for 'Current Version (v1.00)', including Overview, Payloads, Sample JSONs, JSON Schema, Validations, and FAQs. A 'Resources' section is partially visible at the bottom left.

e-Invoice API Sandbox Dashboard

From Date	<input type="text" value="06/01/2020"/>	To Date	<input type="text" value="02/08/2020"/>	<input type="button" value="Submit"/>
-----------	---	---------	---	---------------------------------------

No. of Taxpayers Registered
3198

No. of GSPs Registered
42

No. of IRNs generated
3215829

No. of IRNs cancelled
14602

No. of Distinct Users Generating Tokens
1742

No. of distinct Taxpayers generated IRNs
1177





GOODS AND SERVICES TAX
e - Invoice System

सत्यमेव जयते



Home

Laws

Help

Search

Contact Us

Registration

Login

Welcome



LATEST UPDATES

- 01** JAN • Launch of e-Invoice Portal in Sandbox
- 07** JAN • Launch of e-Invoice APIs in Sandbox
- 10** FEB • Launch of Bulk e-Invoice Facility in Sandbox





09. E-Invoice: Outreach and Feedback

- **Overview & FAQs** published and being updated from time to time
- **2 Awareness Videos** released - in wide circulation on social media; More on the way
- **Awareness/Interaction sessions** held in 7 major cities: *New Delhi, Chennai, Hyderabad, Jaipur, Bengaluru, Pune and Mumbai (Dec. 2019 & Jan. 2020)*
- **900+ Software professionals** from about 150 software and product development companies attended.
- **125+ accounting & billing software providing entities** enrolled with GSTN to get regular updates on e-invoice
- You can send suggestions on e-invoice at e-invoice@gstn.org.in





10. E-Invoice: Questions