FOUNDATIONS · E-INVOICING NETWORKS

The corner model, explained

Two, three, four, five corners: the language of e-invoicing describes who stands between a supplier and a buyer when an invoice travels. This article explains each model with a flow chart and real examples, shows where countries sit, follows one group's invoices through four of them, and draws the consequences for SAP.

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For
Finance, tax and IT teams

Level
Foundations, no prior knowledge

Status at
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Prepared by
30 Advisory

Educational document, not tax or legal advice. Country examples are summarised from our country briefings as at October 2026 and change frequently. Companion to "E-invoicing, explained from the ground up".

01 Why we count corners

A simple question with large consequences

Every e-invoice starts with a supplier and ends with a buyer — those are always two corners. The question the corner model answers is: **who else is in the middle, and what do they do?** The answer decides how many connections you build, who you depend on, and who sees your invoices.

2	3	4	5
Direct: supplier and buyer connect to each other	One shared hub in the middle	Each side has its own provider; providers interconnect	The four corners — plus the tax authority receiving data

An analogy: telephones

In the early days, a telephone line connected two specific places — a **two-corner** world. Then exchanges appeared, but you could only call people on the same exchange — **three corners**. Today you choose your own mobile operator and can call anyone, because operators interconnect — **four corners**. In some countries the regulator also receives a record of every call — that is the **fifth corner**.

The vocabulary

TERM	MEANING
Corner	A party or system an invoice passes through on its way from supplier to buyer
Access point / provider	A service that sends and receives invoices on a company's behalf, often certified
Network	A set of providers that agree to interconnect under common rules — Peppol is the best known
Directory	The network's address book: who can receive, through which provider, in which formats
Participant identifier	A company's address on the network — a scheme code plus a number, such as a VAT or company number
Clearance	A model in which the state platform must validate an invoice before it is valid — a central hub rather than a corner

CORNERS DESCRIBE THE ROUTE, NOT THE FORMAT

The corner model says who carries the invoice. The **format** — UBL, CII, a national XML — is a separate question, and so is the **legal effect**. A four-corner network can carry any agreed format; a country can make the network compulsory or leave it optional.

Three questions that place any regime

- **Can supplier and buyer use different providers and still reach each other?** If yes, it is at least four corners.
- **Does the authority receive data from the exchange?** If yes, there is a fifth corner.
- **Must the authority accept the invoice before it is valid?** If yes, it is clearance — the state is the hub.

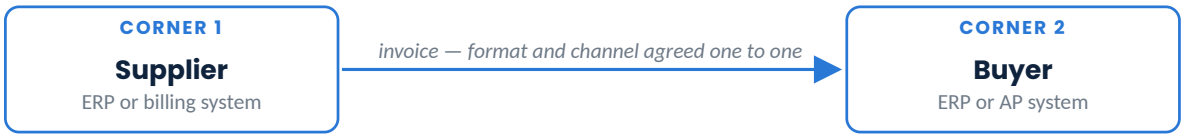
WHAT THE CORNER MODEL DOES NOT TELL YOU

It does not say **which format** is required, **when** an invoice becomes legally valid, or **what happens on rejection**. Two four-corner countries can have very different rules on all three — always read the corner model together with the country's legal rules.

02 Two corners: direct exchange

One connection per trading partner

In the two-corner model, the supplier's system talks directly to the buyer's system. Format, channel and security are agreed one to one — often in an EDI agreement.



Every new trading partner = a new connection, a new mapping, a new test

Examples

EXAMPLE	HOW IT WORKS
EDI with a large retailer	EDIFACT or similar messages over a direct secure connection, set up for that customer
ERP-to-ERP connection	Two companies — often within a group — connect their systems by API
Structured file by email	A supplier emails an XML invoice the buyer's system can read — direct, but rarely secure or tracked

Strengths and limits

STRENGTHS

- No intermediary, no per-invoice fees
- Full control over format and timing
- Efficient for a few very large partners

LIMITS

- Every partner is a new project
- Does not scale to hundreds of customers or suppliers
- On its own, does not meet mandates that require a certified provider or a copy to the state

WHERE TWO CORNERS STILL MATTER

Many companies keep EDI with their largest customers. Under a mandate, those flows usually have to **be re-routed or copied** through the network or platform the law requires — a frequent and underestimated piece of work.

Example: EDI with a retailer, step by step

1. **Agree**
   Message standard, identifiers, transport and test plan, in an interchange agreement.
2. **Build**
   Map the SAP billing document to the retailer's message; set up the connection.
3. **Run**
   Invoices sent per delivery; acknowledgements returned; errors handled partner by partner.

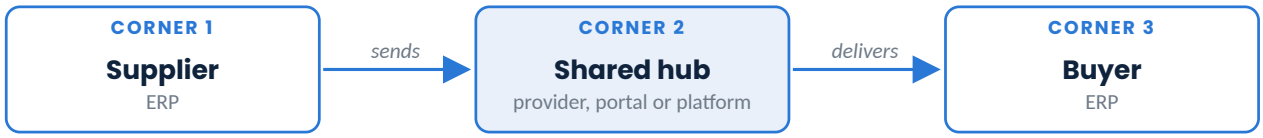
The cost profile

COST	TWO CORNERS
Per invoice	Close to zero
Per new partner	High — a project each time

03 Three corners: a shared hub

Simple inside the hub, closed outside it

In the three-corner model, supplier and buyer both connect to **the same hub** — a service provider, a buyer's supplier portal, or a marketplace. Each side has one connection, but only to partners on that hub.



Simple — as long as both parties use the same hub

Examples

EXAMPLE	HOW IT WORKS
Buyer's supplier portal	A large buyer asks every supplier to submit invoices through its procurement network
One provider for both	Supplier and buyer happen to use the same e-invoicing provider
Marketplace billing	Platforms that invoice on behalf of sellers to buyers inside the platform

When the hub is the state

Clearance countries put a **state platform in the middle**. It is a hub in the three-corner sense — but with legal power: the invoice is valid only once the platform accepts it.



The invoice exists only once the platform accepts it — e.g. Italy (SdI), Poland (KSeF)

COUNTRY	STATE HUB	SINCE
Italy	Sistema di Interscambio (SdI) — every domestic B2B invoice	2019
Poland	KSeF — the invoice exists once it has a KSeF number	2026
Serbia	SEF — state platform for B2B and B2G	2023
Latin America	Clearance through the authority or authorised providers — Mexico, Chile, Brazil	2000s

COMMERCIAL HUB

- Chosen by the parties
- Lock-in: partners on other hubs are hard to reach

STATE HUB

- Imposed by law; everyone connects
- The platform's availability becomes your billing availability

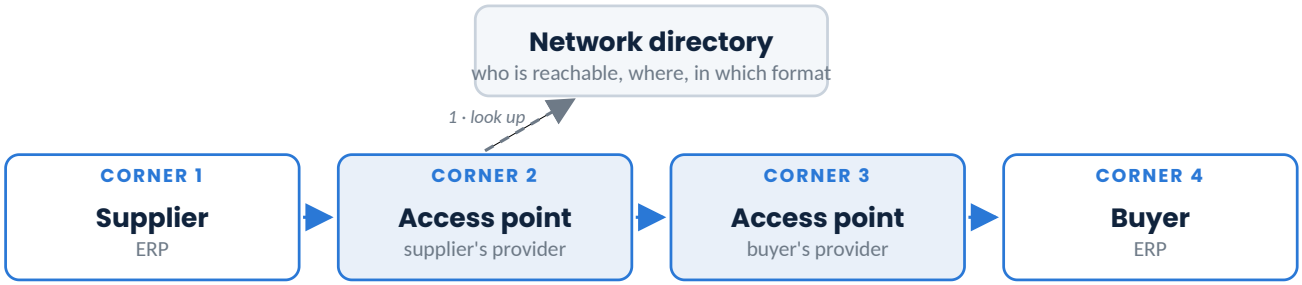
A PROVIDER IN FRONT OF THE HUB

Many companies reach a state hub through a service provider. On paper that adds a corner; in practice the **state platform still decides validity**, and the provider is a channel. Count the corners by who has authority over the invoice, not by the number of systems it passes.

04 Four corners: the Peppol network

Choose your provider, reach everyone

In the four-corner model, supplier and buyer each choose their own **access point**, and access points interconnect under common rules. Before sending, the supplier's access point looks the buyer up in the **network directory** to find its access point and the formats it accepts.



One invoice, step by step

1	**Create**	Supplier ERP creates the invoice and hands it to its access point
2	**Look up**	Access point finds the buyer in the directory: endpoint and formats
3	**Validate**	Access point checks the invoice against the network specification
4	**Transmit**	Secure exchange to the buyer's access point (AS4)
5	**Deliver**	Buyer access point delivers to the buyer's ERP and confirms

A PARTICIPANT IDENTIFIER, DECODED

0088:5412345000013 — the first part is the identifier scheme (here 0088, a GS1 Global Location Number); the second is the company's number in that scheme. Other schemes use VAT or company registration numbers. The identifier is what the directory looks up. **Example number fictitious.**

The building blocks of Peppol

COMPONENT	ROLE
OpenPeppol	The association that governs the network; national Peppol Authorities run it locally
Access points	Certified providers that send and receive — corners 2 and 3
Directory (SML and SMP)	The central locator and each provider's capability register
AS4	The secure transport protocol between access points
BIS and PINT	Document specifications: Peppol BIS Billing in Europe; international variants such as JP PINT, PINT A-NZ, PINT SG and PINT AE

04 Four corners in practice

Where the network is used, and why

COUNTRY	HOW FOUR CORNERS ARE USED	STATUS
Belgium	Domestic B2B invoices over Peppol, by law	**MANDATORY** since Jan 2026
Germany	Peppol one of several allowed channels; must be able to receive e-invoices	Receiving since 2025
Nordic countries	Public-sector invoicing over Peppol, widely used in B2B	Long established
Australia, New Zealand	PINT A-NZ; government adoption, voluntary for business	Voluntary B2B
Japan	JP PINT for qualified invoices; no mandate	Voluntary
EU public sector	Many contracting authorities receive over Peppol	Directive 2014/55/EU

Why the four-corner model spreads

- **Connect once, reach everyone** on the network
- **Free choice of provider**, and freedom to change it
- **Common specifications**, so data arrives the same way from every supplier
- **Governance**: certified providers, agreed security and service levels
- **Ready for reporting**: adding a fifth corner is a natural extension
- **Global**: the same network across Europe, Asia-Pacific and the Gulf

What a company must manage

ITEM	WHY IT MATTERS
Its own participant identifier	Registered in the directory, so customers' providers can find it
Customers' identifiers	Stored in master data, or looked up, to address each invoice
Document types it can receive	Published per participant — invoices, credit notes, orders
The provider contract	Service levels, archive, status messages and the exit route

FOUR CORNERS DO NOT MEAN FOUR COMPANIES

Corners are roles. A large company can run its own access point and be corners 1 and 2 at once; a provider can serve both supplier and buyer. **What makes it four-corner is that the two sides could use different providers — and still reach each other.**

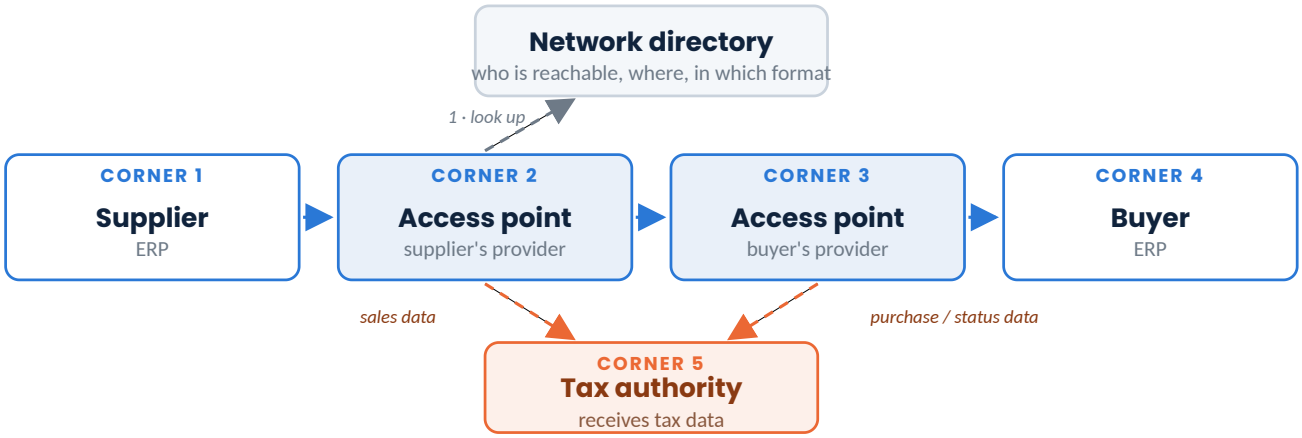
Choosing an access point

- Is it certified in every country where you need it — including any fifth-corner role?
- Does it integrate with SAP DRC as standard, returning statuses to the SAP document?
- How does it handle inbound invoices, archiving and the exit to another provider?

05 Five corners: the authority joins

Invoices between companies, data to the state

The five-corner model keeps the four-corner exchange and adds the **tax authority as a fifth corner**. The access points — or approved platforms — send tax data from each invoice to the authority. The invoice travels between companies; the authority sees the data without sitting in the middle.



Examples

COUNTRY	HOW THE FIFTH CORNER WORKS	STATUS
France	Approved platforms exchange invoices and transmit data to the tax administration; e-reporting for B2C and cross-border	Live since Sep 2026; SMEs Sep 2027
Singapore	InvoiceNow (Peppol) with GST invoice data sent to the tax authority	New registrants 2025–26; all by Apr 2031
United Arab Emirates	Accredited service providers on Peppol (PINT AE), tax data to the Federal Tax Authority	Largest taxpayers from Jan 2027
Belgium	Near-real-time e-reporting planned on top of Peppol	Planned 2028

Variations on the theme

COUNTRY	MODEL
Spain	Private platforms or a public solution, with a "true copy" of every invoice sent to the public solution — from October 2027
Croatia	Exchange through intermediaries, with invoice data fiscalised by both sides, and payments reported

FIVE CORNERS VERSUS CLEARANCE

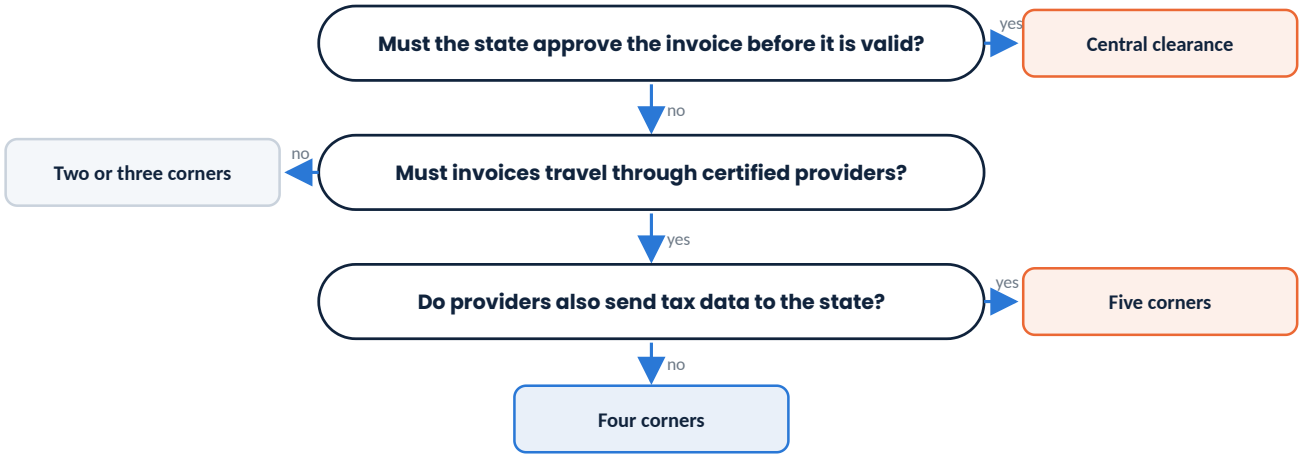
In clearance, the state sits **between** supplier and buyer and must accept the invoice first. In five corners, it sits **beside** the exchange and receives data. The difference shows when the state platform is down: in clearance, invoicing stops; in five corners, invoices still flow.

06 The models side by side

And how to tell which one applies

	2 CORNERS	3 CORNERS	CLEARANCE HUB	4 CORNERS	5 CORNERS
In the middle	Nobody	One shared hub	State platform	Two providers	Two providers + state
Reach	One partner	Hub members	Everyone, by law	The whole network	The whole network
Authority sees	At audit	At audit	Every invoice, first	At audit	Every invoice's data
Valid when	Sent	Sent	Accepted by the state	Delivered	Delivered and reported
Main risk	Scale	Lock-in	Platform outage	Directory and data	Consistency of data
Examples	EDI	Supplier portals	Italy, Poland	Belgium	France, UAE

Which model applies? A decision flow



Countries by model

MODEL	EXAMPLES (OCTOBER 2026)
Clearance hub	Italy, Poland, Serbia, Romania, Türkiye, Saudi Arabia, Mexico, Chile, Brazil, India (registration)
Four corners	Belgium (mandatory), Germany (allowed), Nordic countries, Australia, New Zealand, Japan
Five corners	France, Singapore (GST InvoiceNow), United Arab Emirates (2027), Belgium e-reporting (2028)
Mixed or own model	Spain (platforms plus public solution), Croatia (intermediaries plus fiscalisation), Greece (licensed providers plus myDATA)

Where the trend is going

- **Networks are converging.** More countries adopt Peppol-style interoperability, even with their own formats.
- **Reporting is added on top.** Four-corner countries add a fifth corner rather than replace the network.
- **Europe aligns by 2030.** Under ViDA, intra-EU invoices move to digital reporting from 1 July 2030 — closer to five corners than to clearance.

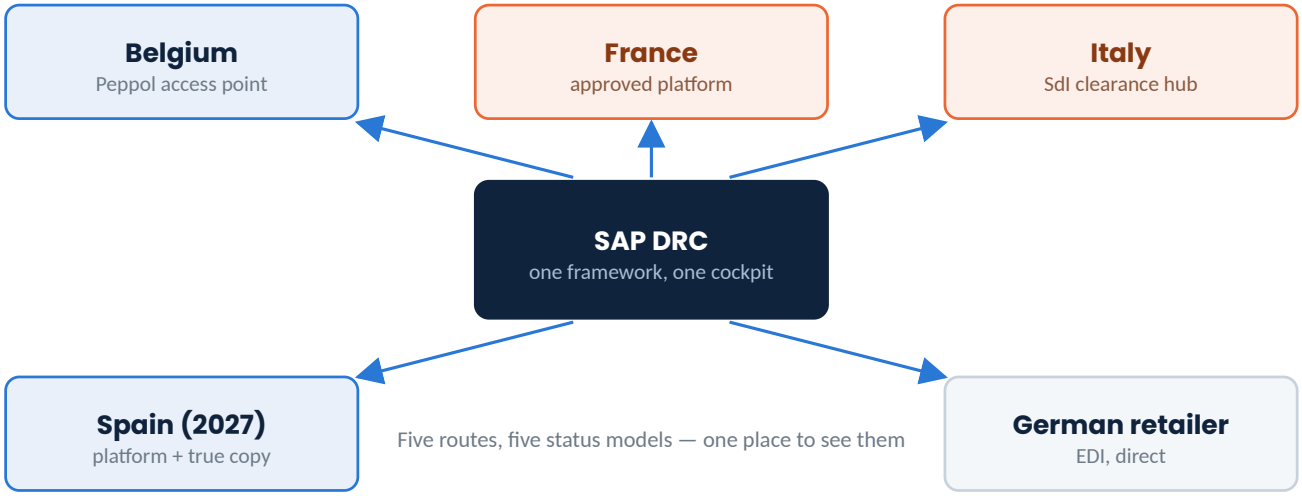
07 One group, five journeys

The same €1,000 invoice, five routes

An illustrative manufacturing group sells the same €1,000 spare part from five subsidiaries, each to a local business customer. The commercial content is identical. The routes are not.

ENTITY	MODEL	JOURNEY OF THE INVOICE	VALID WHEN
Belgium	4 corners	SAP → group access point → customer's access point → customer's ERP	Delivered over Peppol
France	5 corners	SAP → approved platform → customer's platform → customer; data to the tax administration	Exchanged through approved platforms
Italy	Clearance hub	SAP → SdI, which validates and delivers → customer	Accepted by the SdI
Spain	Mixed, from 2027	SAP → platform → customer, with a true copy to the public solution; or SAP → public solution → customer	Issued through approved channels
Germany, to a retailer	2 corners	SAP → retailer by EDI, as agreed — a structured format the law accepts	Issued in a valid format

Simplified. Dates and conditions in our country briefings; Spain's B2B obligations start 6 October 2027 for companies above €8 million.



What the group's finance team sees

- Five statuses with different meanings: delivered, accepted, cleared, copied, sent
- Five places where an invoice can fail — and five kinds of error
- Different deadlines to fix a rejection
- Different identifiers to keep on each document: network IDs, clearance numbers
- Different archives: the provider's, the state's, or only its own
- One customer master, five addressing rules

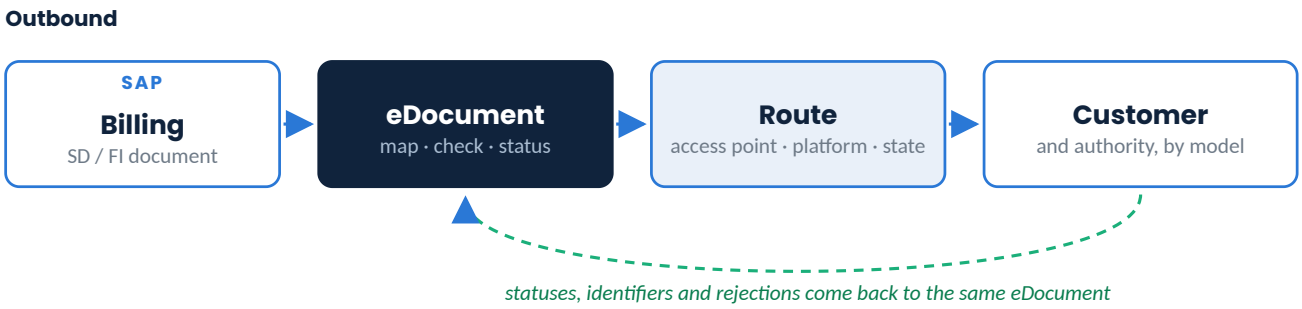
THE LESSON

A group never lives in one corner model. **The design goal is one framework and one cockpit for all routes** — so that the meaning of "sent", "delivered" and "accepted" is clear for every country, and nobody has to log into five portals to know whether last month's invoices arrived.

08 What it means for SAP

One framework, many routes

SAP Document and Reporting Compliance turns billing and purchasing documents into electronic documents and routes each one according to its country's model: to a network access point, to an approved platform, or to a state platform. SAP also offers **Peppol connectivity** through its own exchange service, and integrates with third-party access points and providers.



MODEL	WHAT SAP NEEDS	TYPICAL DECISION
2 corners	An outbound channel per partner; EDI mapping	Keep, or move to the network
Clearance hub	The national format; the state's identifier and status returned	Direct connection or provider
4 corners	Participant identifiers; a Peppol access point; inbound import	SAP's Peppol service or a third party
5 corners	As four corners, plus reporting statuses and data consistency	Provider certified in the country

Master data the networks depend on

- **Participant identifiers** for customers and for your own companies
- **Tax and company numbers**, validated
- **Accepted document types**, from the directory or the customer
- **Routing rules** by company code, country and customer

Four design questions

- **One access point for the group, or one per country?** Fewer providers, fewer contracts and portals.
- **Who owns the directory entries?** Your own registration, and customers' identifiers in SAP.
- **How do statuses come back?** Every route must return its status to the SAP document.
- **What happens to inbound?** Received invoices arrive through the same corners — plan the AP side too.

THE RECEIVING SIDE IS A CORNER TOO

Every model works in both directions. A company that connects SAP for sending but leaves supplier invoices arriving in a provider's portal has **half a solution** — and, in five-corner countries, a reporting obligation on purchases it cannot see.

Implementation checklist

- Route map: entity × country × model × provider
- Own participant IDs registered in each network
- Customer and supplier IDs in the business partner
- Status model per route, mapped to the eDocument
- Inbound import and approval in accounts payable
- Provider exit route and archive agreed

09 Glossary and how we help

The words you will hear most

TERM	MEANING
Access point	A certified provider connecting a company to a network
Approved platform	A provider authorised by a tax authority to exchange invoices and transmit data
AS4	Secure messaging protocol used between Peppol access points
Clearance	Validation by a state platform before an invoice is valid
Directory	The network's address book of participants and capabilities
E-reporting	Sending transaction data to the authority, without the invoice itself
Participant ID	A company's address on the network — scheme plus number
Peppol	An international network and specifications for e-document exchange
PINT	Peppol International Invoice model, with country variants
True copy	A copy of the invoice sent to the authority's platform by the provider

Five things to remember

- **Corners describe who carries the invoice** — not its format or legal effect.
- **Two and three corners** are efficient but do not scale or interconnect.
- **Four corners** let every company choose its provider and still reach everyone.
- **Five corners** add the state beside the exchange; clearance puts it in the middle.
- **A group lives in several models at once** — design one framework for all.

Route map

Every entity and country placed in its model, with the provider and data each needs.

Implementation

SAP DRC configured for each route — sending, receiving and statuses in one cockpit.

Run

Directory entries, providers and legal change kept current.

WHERE DO YOUR ENTITIES SIT?

Bring your list of companies and the countries they invoice in to our free 60-minute diagnostic — you leave with a route map of corners, providers and dates. **30advisory.com**

Sources consulted 13 October 2026 — OpenPeppol and national Peppol authorities; Digital Agency (Japan); IRAS and Avalara on GST InvoiceNow (Singapore); European Commission on ViDA; 30 Advisory country briefings (Belgium, France, Germany, Italy, Poland, Spain, Croatia, UAE, Japan) and the sources cited in them. Examples are illustrative; the group in section 07 is fictitious.

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