TRANSALIS®
CONNECTING ORGANISATIONS

Effortless business automation:

The ultimate guide to Electronic Data Interchange (EDI)

Contents

Introduction

Hello and welcome to the ultimate Beginner's guide to understanding. Electronic Data Interchange!

As a business owner or key decision-maker, you understand the importance of staying ahead of the game. And that's where we come in - we want to arm you with the knowledgeand tools to make the best decisions for your business.

With so many supply-chain automation solutions available, we understand that navigating through the jargon, pricing, and product options can be overwhelming - welcome to the world of EDI! But that's why we've created this guide to demystify the complexities and provide you with everything you need to know to make an informed decision.

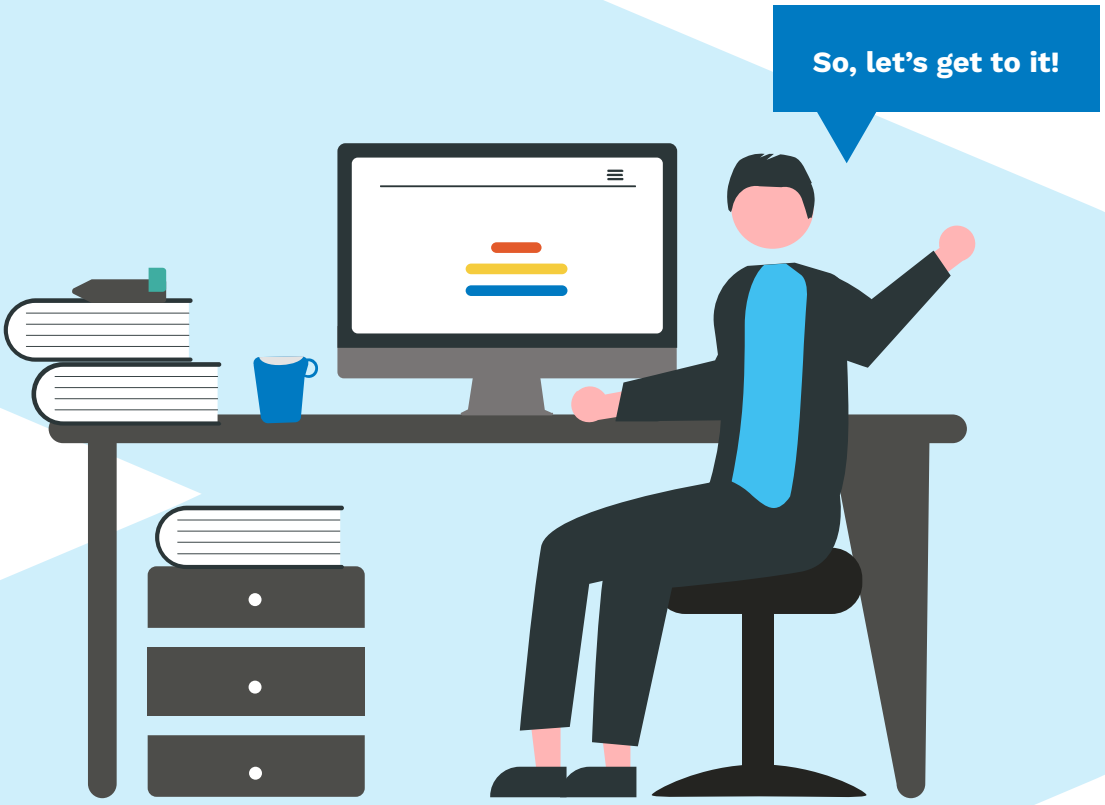
Discover the Freedom Calculator

An easy-to-use, self-serve tool for an instant EDI quote. Select features and functions bespoke to your business to optimise your trading network.

Build your own EDI

This comprehensive guide is broken down into three sections:

- **First**, we start at a very basic level, explaining what Electronic Data Interchange (EDI) is, how it works and why companies use it.
- **Second**, we highlight the differences between EDI solutions and help you identify the right direction for your business.
- **Third**, we guide you through the pre- and postpurchase process, so you know exactly what to expect from the onboarding process.



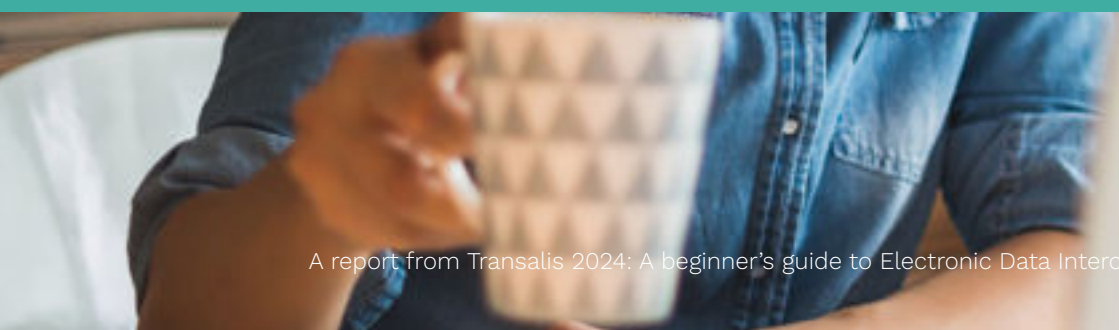
The EDI Basics

This section of our guide gives you a general rundown of Electronic Data Interchange (EDI).

You'll learn:

- What EDI is, how it has evolved, and the key benefits
- What a basic message flow looks like
- The principles of an EDI message
- The difference between EDI protocols

If you already know what EDI is and the basics of how it works, then you can skip ahead to page 12, where we guide you through how to assess what type of solution is right for your business.



What is EDI and why do companies use it?

A definition

Electronic Data Interchange, or EDI (not to be confused with Equality, Diversity and Inclusion!), is a time-saving technology that automates the exchange of business documents between companies. Effectively, it eliminates the need for manual data entry and paperwork.

EDI supports a B2B supply chain. Companies use it to digitise and standardise the formatting of the documents they exchange with their trading partners (suppliers or buyers). This includes orders, invoices, shipping notices, customs declarations etc. And the best part? These documents are generated and communicated automatically, even being fed directly into specified applications.

The evolution of EDI

For over 40 years, EDI has undergone significant advancements.

Initially created in the 1960s for large organisations, it has since evolved into a mature technology, now utilised by businesses of all sizes and industries. With the addition of Artificial Intelligence (AI) and Machine Learning (ML), EDI has been enhanced to enable even more intelligent and efficient communication between trading partners.

Today, EDI is an essential tool for modern business automation, providing an efficient way to exchange data and documents across global trading networks.

Don’t miss out on the benefits that EDI can bring to your business!

The key benefits

While organisations may have different reasons for implementing EDI, they all will reap the same rewards:

Increased efficiency and productivity

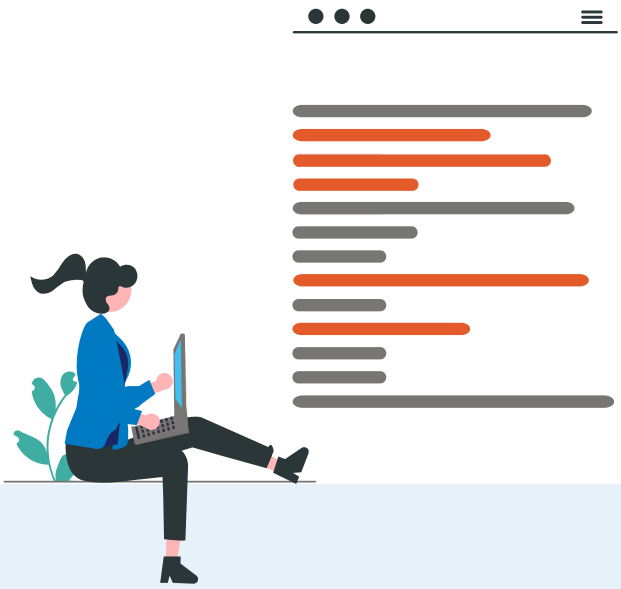
EDI enables the frictionless exchange of business documents and data, eliminating manual data entry and reducing the risk of errors, thereby improving operational efficiency and productivity.

Faster transaction processing

EDI streamlines the exchange of information, enabling faster processing times and reducing lead times for order fulfilment.

Cost savings

By eliminating the need for paper-based transactions, EDI reduces processing costs associated with paper documents such as printing, storage, and mailing. EDI also minimises errors and reduces the need for manual data entry, which saves time and reduces labour costs.

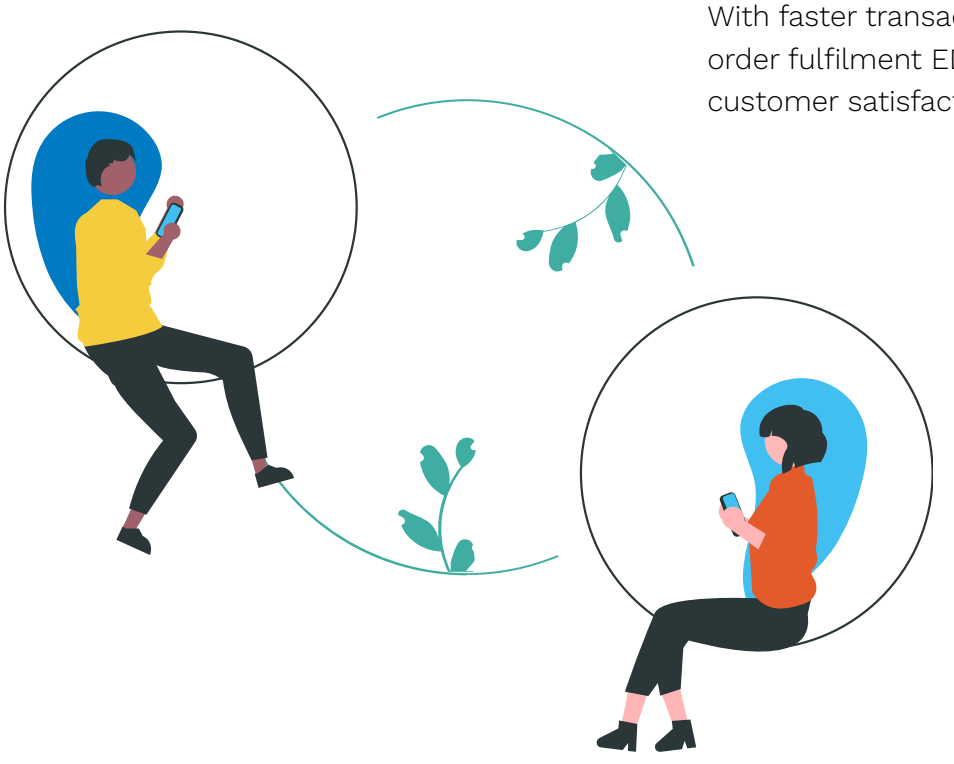


Improved accuracy

EDI eliminates manual data entry and the associated errors, resulting in more accurate and reliable data and transactions. This leads to improved business processes and decision-making.

Increased visibility

EDI provides real-time visibility into transaction status and inventory levels, enabling better supply chain management and improving decision-making.



Improved customer relationships

With faster transaction processing and order fulfilment EDI can greatly improve customer satisfaction.

How does EDI work?

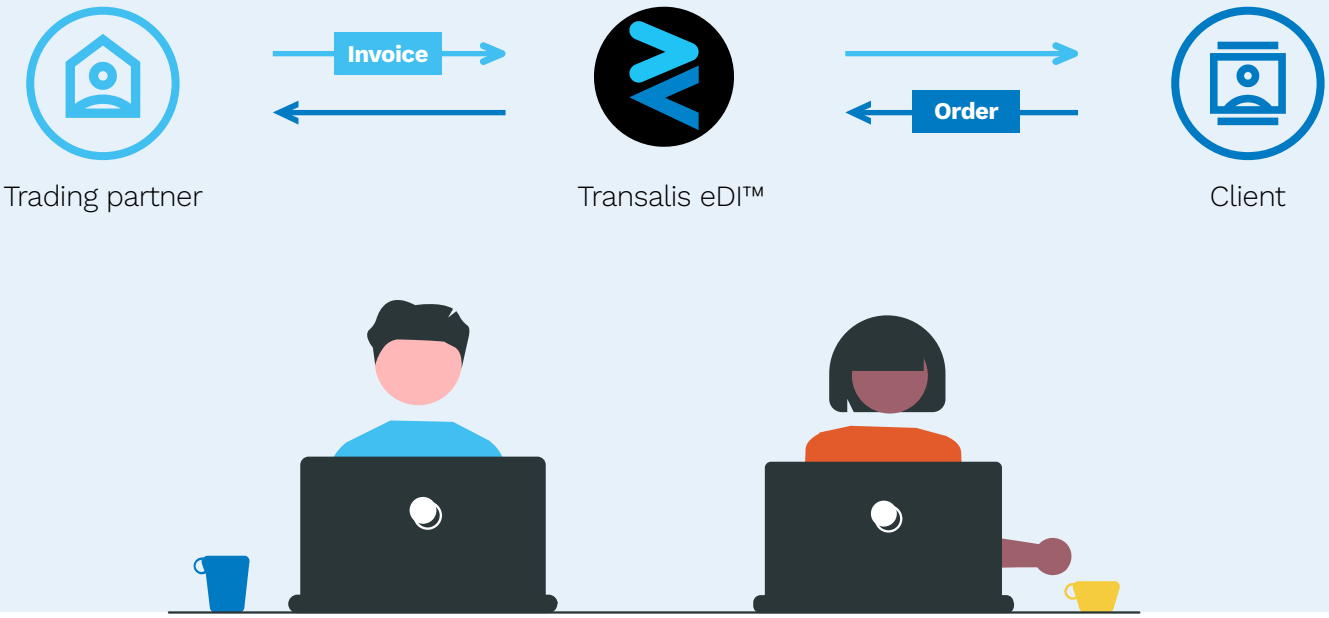
All right, let's dive into how EDI works whilst not boring you with all the technical ins and outs!

EDI works by extracting data from a company's internal systems and formatting it into a standard format. This message is then sent to the recipient through a secure network using a standardised protocol (we cover what these are in the next section). The recipient's computer system processes the message and extracts the relevant data, which can also be integrated into the recipient's internal systems.

EDI messages can include a variety of data and can be customised to meet the specific needs of each trading partner. The use of standard EDI message formats ensures that information can be easily exchanged between different computer systems and trading partners, regardless of the specific software or technology used by each company.

The simple EDI message flow

To help you conceptualise this process, we have put together some visual representations of how it works:



Core principles of an EDI message

At a base level, all EDI messages follow a set of principles which are determined by the EDI protocol (we cover this in a bit). Every message includes Elements, e.g. an item number/cost/the buyer's location. Groups of Elements are known as Segments e.g. the full details of the buyer's address. The completed EDI document is also referred to as a Transaction Set.

Four principles governing EDI messages:

- Syntax – determines the characters and the order they appear
- Codes – aids to interpret common details such as date formats, currencies and the names of countries
- Message designs – the message type structure (such as an invoice or order) and the syntax rules it follows
- Identification values – set out how different values in an EDI document are identified, such as where in the order of information they come

Different protocols and standards

The secret to EDI's success lies in the protocols and standards that make it all possible. These are like a common language that allows different computer systems and applications to communicate with each other, no matter what programming language or hardware they use.

By defining a standard message format and method for sending and receiving messages, EDI makes sure that your data stays accurate and reliable, even as it moves between different systems.

Next, let's check out some of the most commonly used EDI standards and protocols, and how they work.

Glossary of EDI transaction standards

EDIFACT

Electronic Data Interchange For Administration, Commerce and Transport (EDIFACT), developed by the United Nations, is widely accepted as the universal EDI standard for global trade.

ANSI X12

This is the main standard to use if you have trading connections with companies in the USA and is currently used by more than 300,000 companies worldwide.

EANCOM

Developed by the international standards organisation GS1, this is a subset of EDIFACT and is used primarily in the European market.

TRADACOMS

Trading Data Communications (TRADACOMS) is a UKspecific EDI standard that was developed in the 1980s for domestic trade, encompassing 26 message types.

VDA

Developed by the international standards organisation GS1, this is a subset of EDIFACT and is used primarily in the European market.

IDOC

IDOC is an SAP format to exchange data and messages between SAP systems and other external systems, specifically helping to ensure integration with your trading partner's formats.

VDA

Developed by the international standards organisation GS1, this is a subset of EDIFACT and is used primarily in the European market.

Deciding on the right solution

In this section, we guide you through how to assess what type of EDI solution is right for your business and the key questions to consider when approaching different providers.

You'll learn:

- What the basic EDI message set is
- Whether you need additional message types
- The difference between EDI setups
- How factors such as a VAN and additional features affect costs

We have highlighted the most frequently asked questions that our team receives from clients when setting up their solutions. But if you'd like to discuss your unique business needs, then feel free to book a meeting.

What EDI messages can I exchange?

The beauty of EDI is that there is such great scope and flexibility when it comes to the exchange of important information across your supply chain network.

The basic EDI message set

The two message types that most businesses start with are orders and invoices. As you'll likely agree, these are some of the most commonly used documents that sit at the core of an organisation's operations.

Therefore, digitising the exchange of these vital business documents between trading parties can free up valuable time for teams, as well as increase the accuracy and speed of processing.

Additional message types

Whilst orders and invoices may be the base message set to start with, there are a whole array of other EDI message types that you can utilise.

Depending on the EDI protocol you are following (see page 11) the messages you can exchange will vary.

However, there are many similarities in message categories that run across the different protocols, including (but not limited to):

- Procurement message sets
- Order message sets
- Transport and shipping message sets
- Customs message sets
- Payment message sets
- Reporting message sets
- Master data message sets

For example, you can view the full list of EDIFACT messages and compare the differences with the list of EANCOM messages.

How to know what EDI messages you need to exchange?

The EDI message set you require depends on the retail partner you wish to connect with. Your organisation's internal processes may also indicate the EDI messages and formats that need to be enabled for your systems.

If you are in the process of setting up a trading relationship with a retailer, usually, they will provide you with their set of requirements. This documentation is commonly referred to as a Message Implementation Guide (MIG). A MIG will typically include the EDI message types thatm they mandate for their suppliers to use, as well as the specific EDI protocol(s) they follow.

We have familiarity with the general EDI requirements for the top retailers and distributors across many industry verticals. You can view our Trading Network to get an idea or talk to our team directly to outline your requirements.

On-premise, web portal, or integrated – what to choose?

Organisations looking at EDI have a choice of strategy. Depending on requirements and the organisational structure, you can choose to set up and manage your own on-premise EDI solution, or employ the services of an external SaaS (Software as a Service) provider.

Struggling to remember all these acronyms? We don't blame you! Rest assured they are all logged in the index of this guide (page 27).

The difference between setups

On-premise EDI

An on-premise EDI solution is often referred to as a legacy system. This is because the technology tends to be older, and therefore, less sophisticated.

Legacy systems are entirely managed in-house by the organisation. This includes the initial technical installation, daily running, and any necessary updates (e.g. security and legislative requirements), of the EDI solution.

The main downfalls of on-premise EDI are that it is:

- Reliant on employing and retaining the technical skills to oversee the solution
- Dependent on the use of internal servers and storage for the solution to work
- Out of budget for smaller organisations, due to the large overhead and resourcing costs

Managed EDI services

To avoid all the headache described above, we'd recommend all EDI newcomers to onboard with a dedicated SaaS provider.

Taking this approach is preferable as SaaS providers offer a fully-managedservice. This takes away all the responsibility from your organisation's shoulders. Instead, the EDI provider takes on the full onboarding and setup process, as well as the day-today technical management of the solution.

Plus, the use of internal servers is no longer a problem. SaaS EDI is far more accessible because it tends to be hosted in the cloud and can be accessed remotely via a web browser or API (yes, another acronym, sorry).

Choice of SaaS EDI

With SaaS EDI, organisations have an additional choice as to their setup; a web-based EDI portal, or the integration of EDI with existing business systems/applications.

Granted, an integrated EDI solution is slicker by automating even more processes within a business, but it is not always the right choice. Don't get us wrong, we are huge advocates for the integration of automation services, but the business need must warrant it.

We would not recommend integrated EDI solutions to clients that would not fully benefit from it. E.g. organisations wanting an EDI connection for just one trading partner and with simple message types would be much more suited to a web-based platform setup.

With a lower cost and quicker onboarding time, businesses with this simpler setup can get up and running with EDI in next to no time. This is particularly important for SMEs just starting with their first big retailer contract that mandates EDI. Speed, cost, and ease of use are vital to maintaining Business As Usual (BAU).

Key indicators to help you choose

So how to make sure you make the right choice of EDI setup for your business? We have summarised some key indicators to help guide you in the right direction.

Size of the trading network

The number of trading partners you need to connect with through EDI will impact your choice of setup. An organisation with a large network of trading connections, each with its own message requirements and EDI protocols will benefit from an integrated EDI solution or middleware EDI to facilitate this scale and complexity.

However, an organisation that only needs simple connections with a handful of trading partners will gain greater ROI (Return On Investment) from a web-based EDI platform.

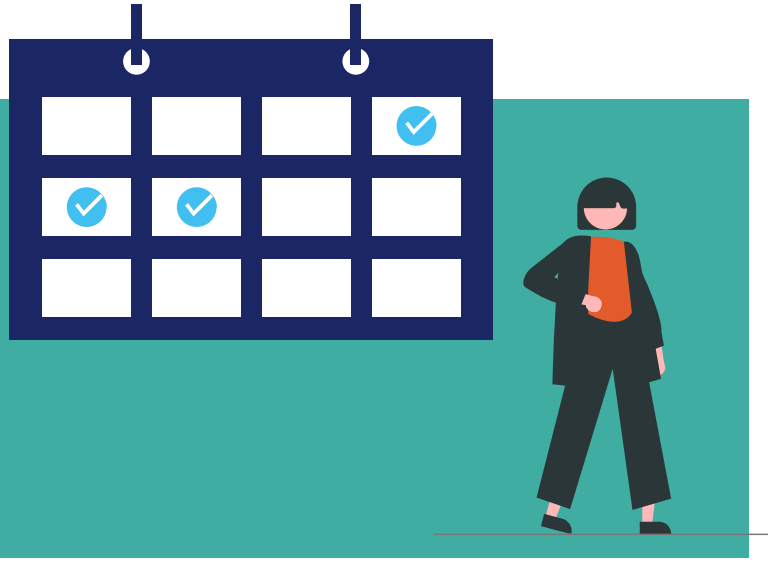
Type of trading partners

The type of trading partners your organisation has is also a factor to consider when deciding on an EDI setup. Whether your trading partner is a retail marketplace, a third-party warehouse, or a dropship manufacturer could indicate the need for a wide variety of standard and bespoke message types, making an integration the most optimal solution.

Unsure of anything?

Schedule a meeting with one of our team to determine the right solution for your business.

Book a meeting



What are the costs?

When it comes to the cost of business automation solutions and services there can be a lot of smoke and mirrors. This can make the process of comparing providers and different EDI software confusing for organisations that want to make the most costeffective choice.

Understanding the pricing structures and the determiners of cost is vital before agreeing a contract.

To support organisations that are navigating this, we have put together some insight into factors and features that affect the cost of an EDI solution.

Functionality and features

Not all EDI solutions are made equal. Understanding the required features and functionalities for your EDI setup will help determine costs:

- Number of message types
- Bespoke message types
- Number of trading partners
- B2G connections
- Integration with systems/applications
- Reporting and archiving
- Scope of support

Value-Added Network

The vast majority of EDI companies charge their customers to use a Value-Added Network (VAN) to send messages and documents to trading partners. With a VAN, users pay for every transaction, based on the number of characters in a document.

VAN charges can be expensive, they often make it very difficult to forecast how much an EDI solution will cost and companies are often penalised when they grow (and their VAN traffic increases). Companies are also often caught out by the small print, such as minimum record lengths, envelope costs, and more.

This is why when exploring the options available to your business, you must ensure that you understand the costing model and that the pricing of the solution you choose is completely transparent.

At Transalis, we do offer this exact transparency, no smoke and mirrors and no hidden fees. The price you're quoted is the price you'll pay. You can take a look at our bundled EDI solutions or even use our eDI Freedom calculator to work out which is the best option.

Introducing the Freedom Calculator

The Freedom Calculator is an easy-to-use, self-serve tool designed to provide an instant quote for your bespoke EDI solution. Tailored to meet the unique needs of your business, the Freedom Calculator allows you to select the specific EDI features and functions that will optimise your trading network. Here's how it works:

Customisable options:

- Choose from a wide range of EDI functionalities to create a solution that fits your precise business requirements.
- Instant quotes: Receive an immediate estimate based on the EDI features you select, ensuring transparency and efficiency.
- Cost-effective solutions: Tailor your EDI setup to avoid unnecessary costs and only pay for the features you need.

Build your own EDI

How to buy EDI

Now you know the EDI basics and how to determine your requirements, this section covers everything to expect from the purchase and onboarding process with Transalis.

You'll learn:

- What information you need to give your EDI provider
- What onboarding framework Transalis uses
- How your EDI solution can evolve with your business

P.S. whilst this section focuses on the onboarding process with Transalis specifically, a lot of this information will be true for many EDI providers.

What information do I need to give to my solution provider?

There are some critical pieces of information that any organisation will need to share with their EDI provider. They ensure that your service provider can map the endpoints between trading parties, enable the correct message formats and follow the right protocols, as well as test the solution before pushing live.

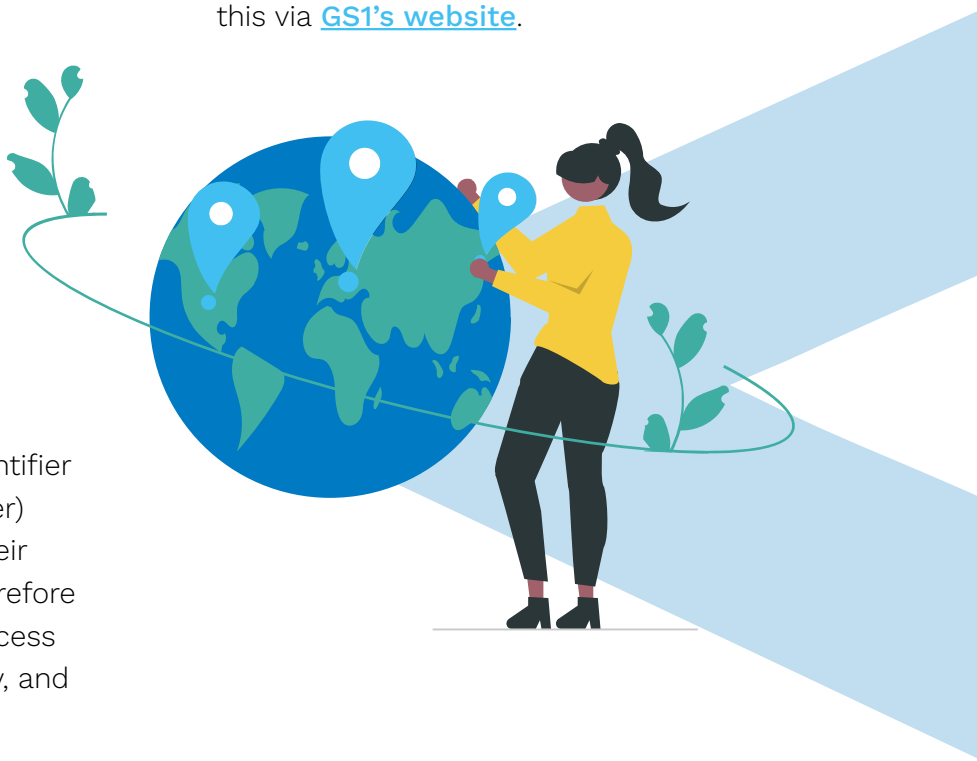
Global Location Number

First up is a GLN, or Global Location Number.

By definition, these are numbers used as reference keys to computer files that hold information about an organisation or specific location. GLNs are uniquely identifiable worldwide for any legal, physical and functional location.

Your organisation will need to share your own GLN with your EDI provider. It ensures that the provider can route EDI messages and data to the correct client endpoints.

If you are unsure of what your GLN is or if you need to generate one, then you can do this via GS1's website.



Supplier Number

When you have arranged with your trading partner to use EDI for transactions, they will assign your organisation a Supplier Number.

This number is another unique identifier for the trading partner (e.g. a retailer) to be able to accurately identify their supplier across EDI messages. Therefore the retail partner can correctly process purchase orders, manage inventory, and issue invoices to the right supplier.

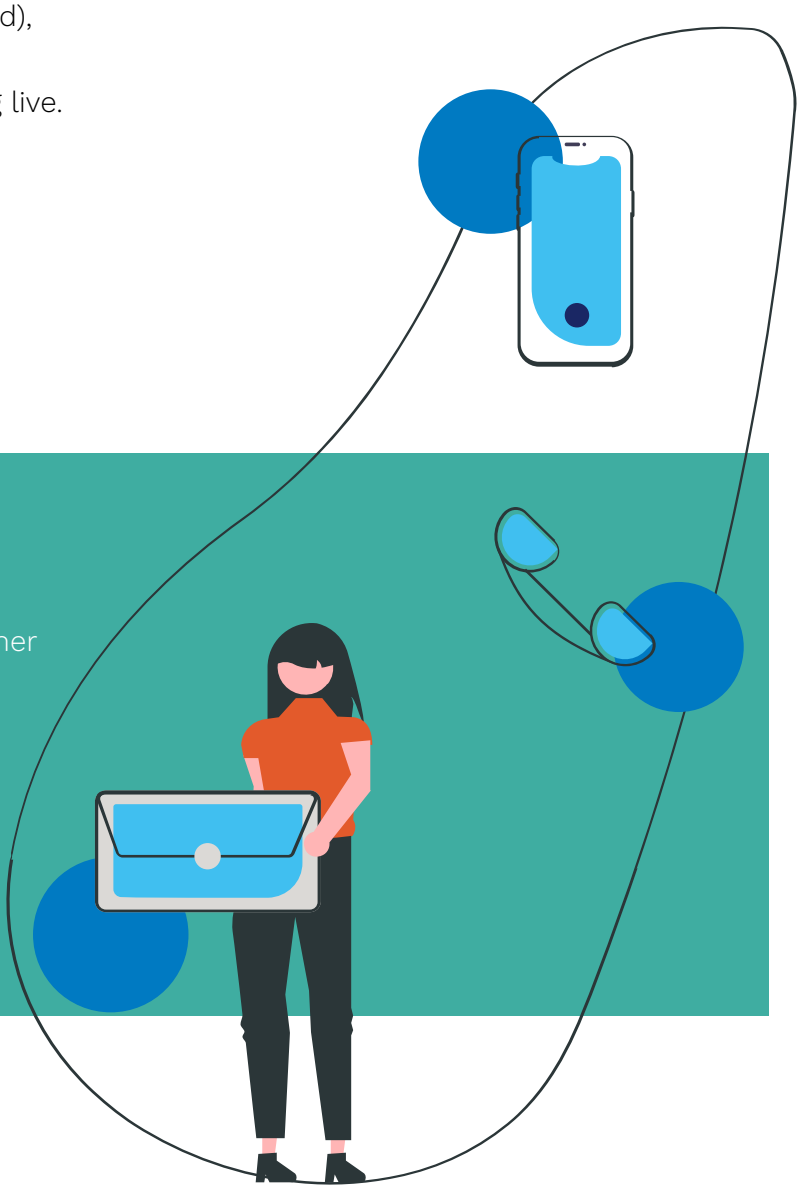
The assigned Supplier Number will also need to be shared with your chosen SaaS EDI provider.

Trading partner contact details

To maintain a smooth onboarding process, it is best to share the contact details of your trading partner with your EDI provider.

Through communication with the trading partner contact, the EDI provider can gain access to the MIG (if not already provided), as well as correctly configure, test, and validate the EDI connection before going live.

Having direct communication with the trading partner also bolsters the ongoing support your EDI provider can offer, as troubleshooting can be performed efficiently if any issues arise.



Seamless Trading Network Onboarding with Transalis

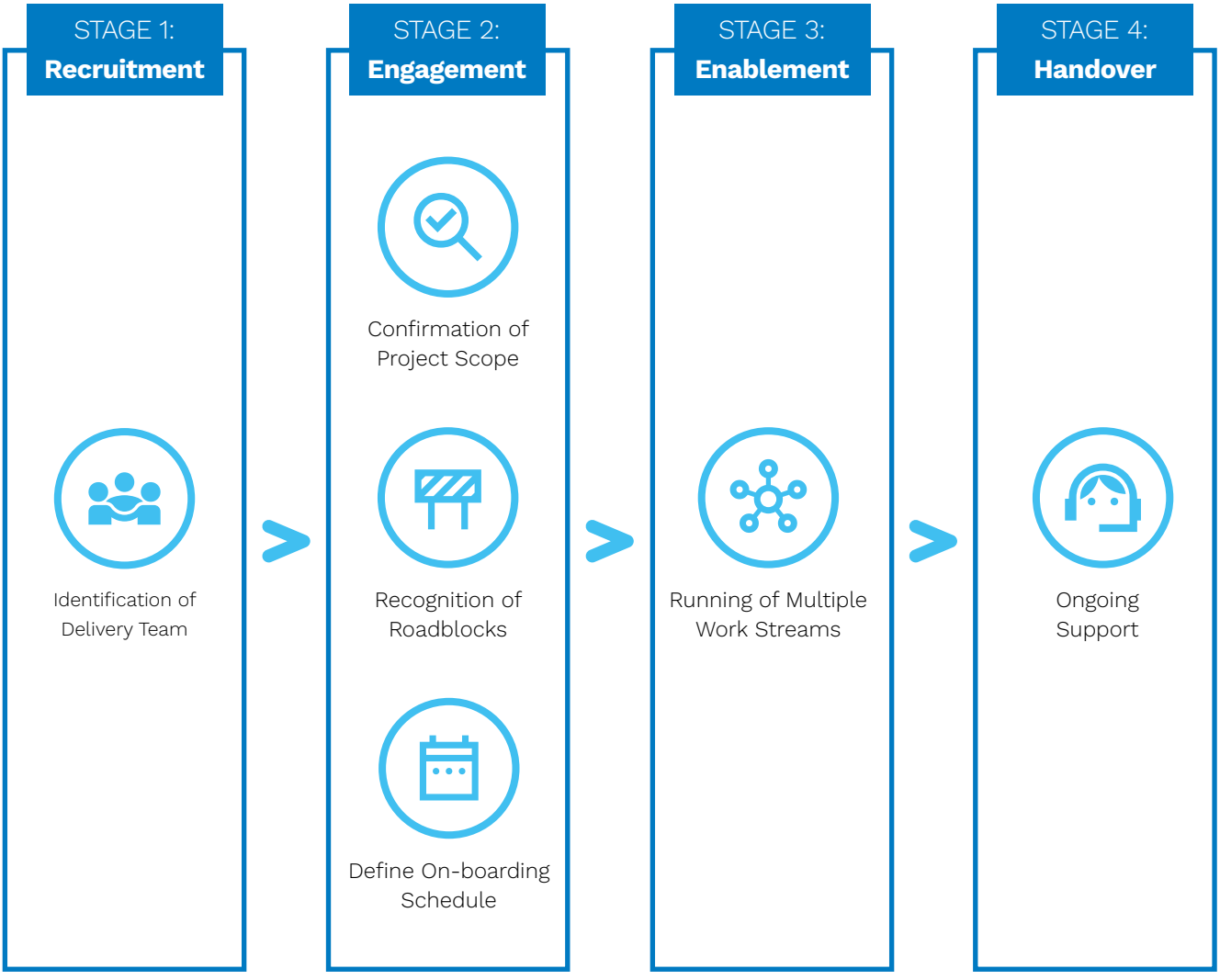
Learn how Huw Davies, Transalis Customer Service Director, ensures efficient and effective EDI onboarding of all new an existing trading partners.

Huw's onboarding Q&A

What should I expect after I purchase from Transalis?

Once you have purchased an EDI solution with Transalis we are completely on hand to assist with any enquiries and inform you of the progression of implementing your setup.

Our key to success when on-boarding any client is the framework we follow:

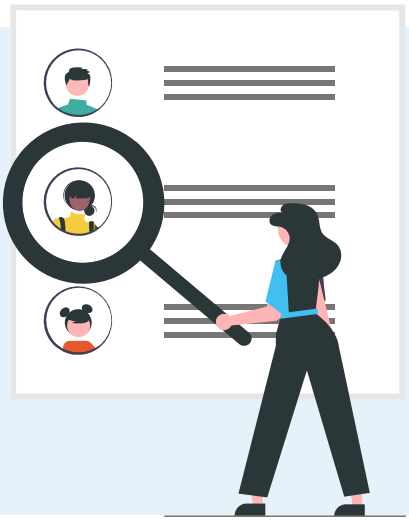


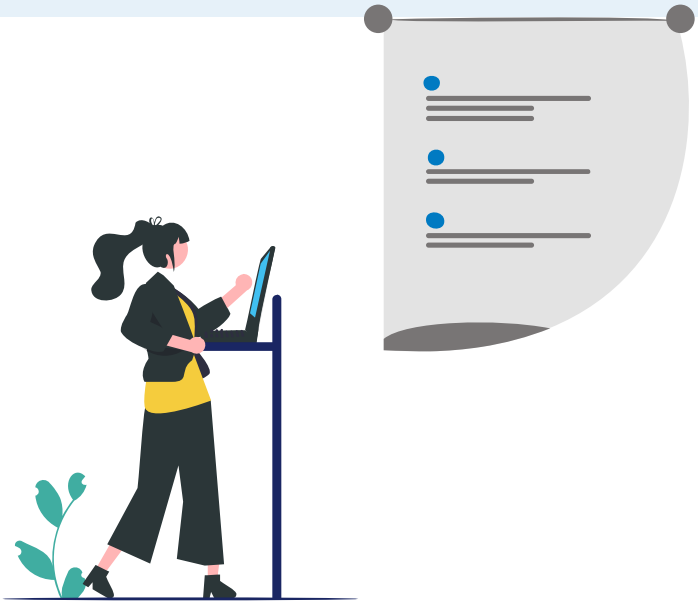
You can find a full explanation of the process in the next following page.

Full explanation of the process:

Stage 1. Recruitment:

Stage 1. is critical in identifying the delivery team and defining their roles in the process. This extends to all parties to include the EDI vendor, the supplier, and the trading partner(s).





Stage 2. Engagement

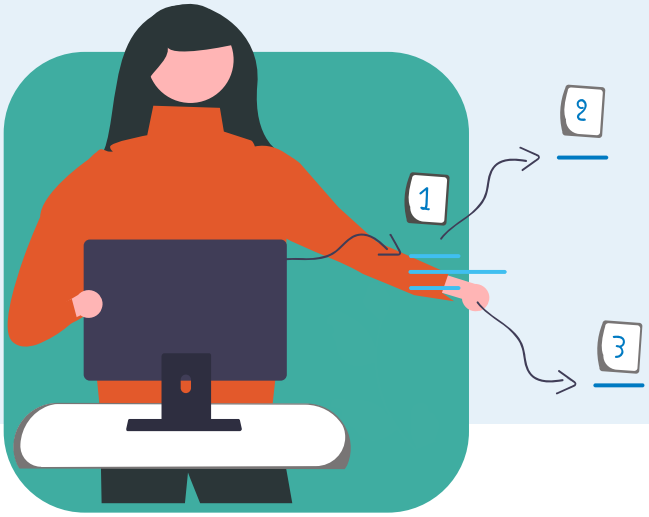
Outlining the plan with all parties provides an opportunity to;

- Confirm the project scope
- Highlight potential roadblocks
- Set the timeline

This is also a good point to run a Proof Of Concept (POC) to establish strengths and weaknesses within the onboarding plan.

Stage 3. Enablement:

Once the project plan has been signed off by all parties, the onboarding can start. For large projects with multiple connections to push live, the main objective is to run multiple work streams for rapid configuration and testing.



Stage 4. Handover

Once all connections are live, Transalis Operations team hands over to Technical Support and Customer Experience (CX) for ongoing management and service. As you know, Transalis believes in transparency. You can rest assured that you will be kept up-to-date with any developments through our various avenues of communication.

Here are some of the ways we keep you informed;

- Welcome contact – confirmation of the project and key contact details if you have any questions
- Account Manager – your direct point of contact from project initiation onwards
- Production team – meeting to confirm the project scope and clarify any technical details
- Progress updates – notifications as each stage of the project is completed
- Support – if technical queries arise, you can submit support tickets with our dedicated team

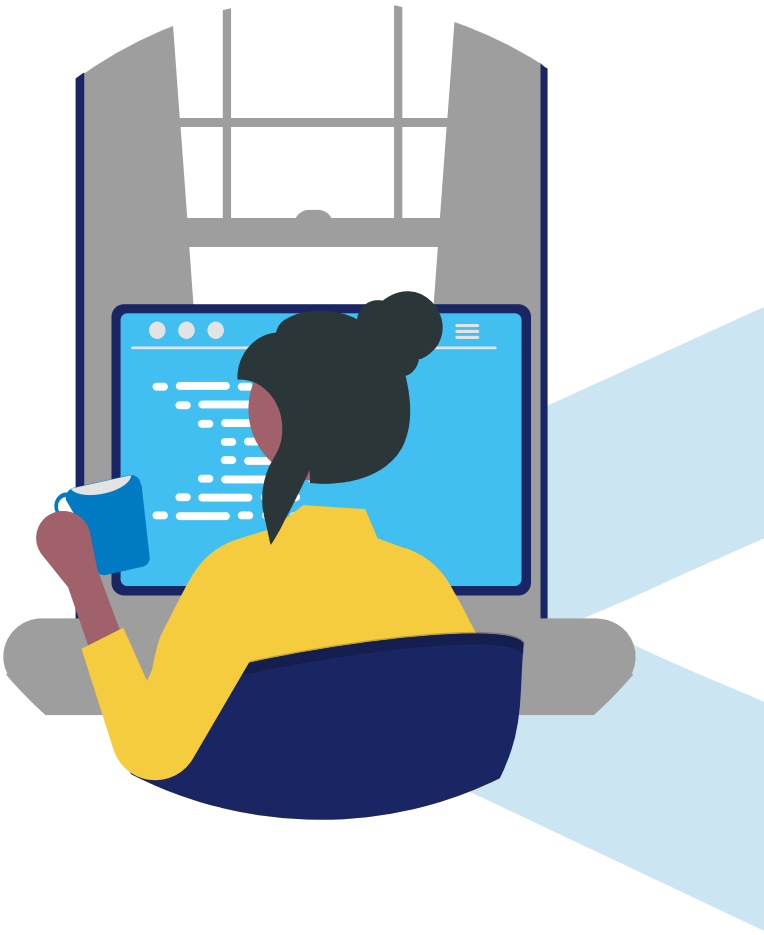
Can I make changes to my EDI solution after it has been set up?

It is no surprise to us that as time moves on so do business needs change.

Having an EDI provider to support you as you scale, your trading partners change, or a greater requirement for automation becomes apparent, is necessary for success. Accommodating for this inevitable change is what we do best, creating agility and flexibility for our clients.

Most changes to your EDI solution understandably will incur a cost (additional trading partner, new integration, extra message types) unless it applies to changing the endpoints of an existing connection (e.g. new mailbox ID or different GLN). With Transalis, all change requests will be properly scoped and transparently quoted.

We recommend taking on an EDI solution that allows some flexibility over time. In fact, with eDI Instant, you can purchase additional trading partner connections with the 2 standard message types, as and when you need them. You can even request extra message types such as Advance Shipping Notices (ASNs).



There we have it! You have made it to the final page of this ultimate guide to understanding Electronic Data Interchange – Now, there's only one thing left to do...

Build your own EDI

Index

Important acronyms to remember (in order of appearance)	
EDI	Electronic Data Interchange
B2B	Business to Business
AI	Artificial Intelligence
ML	Machine Learning
VAN	Value-Added Network
ML	Machine Learning
MIG	Message Implementation Guide
SaaS	Software as a Service
API	Application Programming Interface
BAU	Business As Usual
ROI	Return On Investment
B2G	Business to Government
GLN	Global Location Number

Get in touch

If you would like to know more, why not book a meeting with one of our EDI specialists who is there to answer all your questions.

Book a Meeting

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