

# The shape of an EDIFACT message.

A one - page reference for EDI professionals. EDIFACT - Electronic Data Interchange for Administration, Commerce and Transport is the UN standard that lets businesses across borders and industries exchange invoices, orders and shipments in a single shared syntax.

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## Message structure, nested

AN EDIFACT FILE, PEELED APART

INTERCHANGE · UNB ... UNZ	The outermost envelope wrapping one transmission
GROUP · UNG ... UNE	Optional grouping of related messages
MESSAGE · UNH ... UNT	One business document (e.g. an invoice)
SEGMENT · E.G. NAD, QTY, PRI	A logical group of related data
COMPOSITE DATA ELEMENT · E.G. INV:100.00	Two or more components, joined
DATA ELEMENT · THE SMALLEST ATOMIC VALUE	A single, indivisible piece of information

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## Segments - the building blocks

3-LETTER CODES

### Service segments

PREFIX · UN · ENVELOPE & CONTROL

- UNB** Interchange header
- UNE** Group trailer
- UNG** Group header
- UNH** Message header
- UNO** Object header
- UNP** Object trailer
- UNS** Section control
- UNT** Message trailer
- UNZ** Interchange trailer

### User-data segments

ALL OTHERS · CARRY ACTUAL BUSINESS DATA

- DTM** Date & time
- RFF** References
- QTY** Quantities
- NAD** Names & addresses
- PRI** Prices
- PAC** Number & type of packages
- BGM** Beginning of message
- LIN** Line item
- CUX** Currencies

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## Three kinds of data element

SIMPLE, CODED, COMPOSITE

TYPE 01 · SIMPLE

### Data element

The smallest unit in an EDIFACT file, a single piece of information appearing in a defined sequence inside a segment. Can be optional or mandatory.

Example · QTY segment

**QTY+21: 50'**

↳ qualifier    ↳ value

TYPE 02 · CODED

### Coded element

Holds a short code instead of full text, keeping messages compact and unambiguous across languages. Coded values map to standard lookup tables.

Example · NAD segment

**NAD+BY+ 12345 :: 91'**

↳ BY = Buyer

TYPE 03 · COMPOSITE

### Composite element

Two or more component values grouped inside a single element slot, used when one concept ( a price, an address ) needs several related pieces.

Example · PRI segment

**PRI + INV : 100.00'**

↳ type            ↳ amount

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## The three separators

HOW PARSERS FIND THEIR WAY



### DATA-ELEMENT SEPARATOR

Separates one data element from the next inside a segment.



### COMPOSITE SEPARATOR

Separates the component sub-elements inside a composite data element.



### SEGMENT TERMINATOR

Marks the end of a segment the period at the end of an EDI sentence.

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## Common message types

EACH ONE A SIX-LETTER MNEMONIC

**ORDERS**

Purchase Order

**ORDRSP**

Purchase Order Response

**INVOIC**

Invoice

**ORDCHG**

P.O. Change Request

**ORDCLO**

P.O. Cancellation

**REMADV**

Remittance Advice

**PAYORD**

Payment Order

**CONTROL**

Control Message

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## An invoice, in the wild

```

UNA :+.? '
UNB + UNOC:3 + SENDER:14 + RECEIVER:14 + 230219:1200 + 1234567890 '
UNH + 1+ INVOIC:D:93A:UN:1.3 '
BGM + 380 + INVOICE123 + 9 '
DTM + 137:20230219:102 '
RFF + ON:ORD123456 '
NAD + BY+1234567890123.:9 '
CUX + 2:USD '
LIN + 1.+123456:EN '
PIA + 1+9876543210 '
QTY + 47:100 '
PRI + AAA:20.00 '
UNT + 9+1 '
UNZ + 1+1234567890 '
    
```

**UNB→UNZ**  
Interchange envelope: who, to whom, when.

**UNH → UNT**  
One INVOIC message: header, line items, totals.

**NAD · QTY · PRI**  
The business meaning: party, quantity, price.

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## Why it matters

### One syntax, every border

A standardized structure lets companies in different countries and industries exchange documents without bilateral format negotiations.

01

### Reliable at volume

Large batches of orders, invoice and shipments move accurately in minutes, the foundation of modern supply chains.

02

### Machine-readable by design

Strict syntax rules mean EDI generators and receiving systems can parse, validate and route documents without human intervention.

03

### Fluent troubleshooting

When professionals knows the qualifiers, separators, broken transactions become quick to diagnose.

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