**EDIFACT**

EDI standards facilitate electronic data interchange (EDI) by providing:

• Rules of syntax

• Definition of the data organization

• Editing rules and conventions

• Published public documentation

EDI standards:

• Allow an ‘open’ system

• Reduce implementation effort

• Provide ‘third-party interfaces

**EDIFACT** is an acronym for **EDI F**or **A**dministration, **C**ommerce and **T**ransport. It coordinates

international standardization by working through the **UN/ECE** (United Nations/Economic

Commission for Europe). It provides:

• an international EDI standard

• a set of syntax rules

• data elements, segments and codes

• messages

As shown in the following diagram, EDIFACT is the product of the evolution in bringing

the Proprietary Standards of the US and Europe together to form a single international

EDI standard.

In order to bring about the evolution of the EDIFACT standard, the UN has created UN/ECE

to coordinate this effort. The organizational structure of the UN/ECE is made up of the following

board members**.**

A message is a single business document. Each message is identified by a six character name.

From the buyer-side these include:

• ORDERS—Purchase Orders

• CUSDEC—Customs Declaration

• IFTMIN—Instruction Message

• REMADV—Remittance Advice

• PAYORD—Payment Order

Seller-side messages include:

• IFTMAN—Arrival Notice

• CUSRES—Custom Response

• INVOIC—Invoices

Messages are made up of a collection of sequenced **segments** within defined **areas**. Some segments

may be used in more than one area. The segments that can be used in each area are defined

by the EDIFACT documentation. EDIFACT provides a hierarchical structure for messages.

Messages begin with the Message Header (UNH) Segment and end with the Message Trailer

(UNT) Segment. These two segments are the first, and innermost, level of the three levels of

“electronic envelopes” within EDIFACT. Here is an example of an Extended Payment Order

(PAYEXT).



The message structure is defined in **segment tables**. These give the ‘rules’ of the message. They

also show which segments are used in a particular message and the order in which the segments

must appear.

Segment tables specify if a segment must appear in a message. This is done using the ‘**Requirements**

**Designator**’ field. Each segment in the table is designated as either **Mandatory** (**M**) or

**Conditional** (**C**). Mandatory means that at least one occurrence of the segment must appear in the

message. Conditional means a segment may be used, if needed, but it is not required.

Segment tables also specify how many times a particular segment may repeat. This is called the

‘**Repetition**’ field. Here are the requirements designators and repetition as displayed in the table

for the Extended Payment Order (PAYEXT) message:

A **segment** is a collection of logically-related **data elements** in a fixed, defined sequence. Segments

contain:

• A three-character alphanumeric code that identifies the segment. This is called the **segment tag**.

• **Variable length data elements**. These can be either **simple** or **composite**.

Segments must be separated by a data element separator (data element delimeter), which is normally

+ and :, and terminated by a segment terminator, normally ‘.

All segments are fully documented in the United Nations Trade Data Interchange Directory

(UNTDID). These tables list the segment position, segment tag and segment name. Segment

tables also specify if a segment must appear in a message using the requirements designator M

(Mandatory) or C (Conditional), and how many times a particular segment may repeat (repetition

field).

In EDIFACT, there are two kinds of segments:

• **Service Segments**

• **Generic Segments**

Service Segments are:

• Envelopes (UNB-UNZ, UNG-UNE, UNH-UNT)

• Delimiter String Advice (UNA)

• Section Separator (UNS)

Generic Segments are:

• DOC to identify and specify documents

• MOA for monetary amounts

• DTM for dates and times

• NAD for name and address data