Interchange Agreement in the Belgian Liberalized Utility Market

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Version 1/Revision L

(Recommendation)

Inhoudstafel

1. Introduction

The aim of this interchange agreement document is to describe the framework that will ensure that information can be exchanged between parties in the Belgian power industry. This document should be read in conjunction with the UMIG (Utility Market Implementation Guidelines). This document together with the UMIG provide the guidelines to which parties operating in the Belgian Liberalised Utility Market should adhere with respect to the exchange of EDIEL messages.

The data exchanged between computer applications of different companies in the Belgian Utility Market is structured in EDIEL-messages. These messages also can be exchanged using a Web-EDI-interface on the internet, provided for by the DGO's.

2. Parties involved in the definition of the exchange framework

2.1 UN/ECE – EDIFACT

Ediel uses the international standard UN/EDIFACT as the basis for message types when describing the information interchanged between participants in the power industry.

When data is interchanged between different parties by tele-transmission methods, a common "language" shall be used with an agreed mode of expressing it, i. e. common protocols, message identification, agreed abbreviations or codes, etc. If a universally accepted standard is not used, the "language" has to be agreed bilaterally between each pair of interchange partners. Taking into account the large number of parties needing to exchange data and the ever-increasing number of potential users of tele-transmission techniques, it is obvious that such a bilateral approach is not viable. Besides using compatible systems, interchange partners should follow uniform rules with respect to communication procedures which include the types of messages acceptable, identification of parties, reference to previously agreed protocols or agreements on character set, language, transliteration and interchange structure.

The principles mentioned above led to the development of the United Nations Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) syntax rules and standard messages. The UN/EDIFACT comprises a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data and, in particular, that related to trade in goods and services between independent, computerised information systems. Recommended within the framework of the United Nations, the rules are approved and published by UN/ECE in the United Nations Trade Data Interchange Directory (UNTDID) and are maintained under agreed procedures.

2.2 ebIX

For several years the Nordic countries have worked together in Ediel Nordic Forum (ENF) to build data interchange standards for the Nordic electricity market. For some years the co-operation has included other European countries to develop standards for the data interchange in the downstream energy market. The countries have been Belgium, France, Germany and The Netherlands.

To formalize this cooperation the European Forum for energy business Exchange in the Energy Market (ebIX) was formed. The objective of ebIX is to promote existing solutions for data interchange standards in place in the participating countries.
As well as defend the EDIEL interests with respect to the recently formed standardisation groups for the energy market (EASEEGAS, EFET, ETSO, IEC TC57).
Last but not least, where the latter organizations mainly cover the data interchange needs of transmission system operators, ebIX will also look into the in the future requirements of the distribution grid operators, which may become especially challenging.

2.3 Atrias

The Atrias organization has been accredited by the Belgian Distribution Grid Operators to assure that the exchange of information as a result of the Liberalization of the Belgian Utility Market will be effective. Hence Atrias has developed the Utility Message Information Guideline (UMIG), which describes the message exchange scenarios and the supporting messages.
All organization wishing to exchange structured information electronically, will have to adhere to this UMIG, and will have to be certified by Atrias.

Atrias also maintains the Utility Market Implementation Recommendations (UMIR), which consists of a set of UMIG supporting documents like, message examples, Interchange Agreement, tentative documents, …. The UMIR documents are recommendations which are not necessarily approved by the Regulator, but which may be in the future.

The Atrias organization is composed of members of the Belgian Distribution Grid operators.

2.4 Regulators

VREG: Vlaamse Reguleringsinstantie voor de elektricteits- en gasmarkt.

The VREG's objective is to render the Flemish Gas and Electricity market more efficient. The VREG appoints Grid Operators, and licenses suppliers for the Flemish market.

The other responsibility is to check (control) that Grid Operators and suppliers are operating according to the law and rules.

The authority of the VREG is limited to Flanders.

CWaPE: Commission wallonne pour l'Energie. This is the Walloon Regulator.

Brugel: Brussel Gas Electriciteit. The Brussels Regulator.

The CREG (Commissie voor de Regulering van de Electriciteit en het Gas) has responsibilities on a federal level.

3. BELGIAN UTILITY MARKET INTERCHANGE AGREEMENT. INTRODUCTION

The VREG has approved the Atrias proposal to communicate via EDIEL messages over a Value Added Network (VAN). However, Suppliers may choose to ask for a direct link with the DGO's if communication costs become too high.
The Distribution Grid Operators have concluded an agreement with an external provider for the delivery of the VAN services.
This Agreement is also based on the EDIEL model and describes the rules that apply to electronic data interchange based on the Ediel framework, as well as the use of the VAN. Interchanges should take place on the conditions stated in this chapter, and no other bilateral agreements should be agreed upon. It is the intention that the agreement shall function as a standard agreement for the use of electronic data interchange (EDI) based on the Belgian UMIG/EDIEL framework.

The Interchange agreement has two parts:

- Part I: General Agreements regarding the handling of the interchanges (see page 7);
- Part II: Technical Agreement describing implementation recommendations in more detail (see page 12)

4. BELGIAN UTILITY MARKET INTERCHANGE AGREEMENT

4.1 Part I – General Agreements.

4.1.1 Article 1: Object and scope

1.1. The 'Belgian Utility Market Interchange Agreement', hereinafter referred to as 'the Agreement', specifies the terms and conditions under which the parties, conducting transactions by the use of electronic data interchange (EDI), operate.
The scope of this agreement is limited to all EDI transaction involving the Belgian Distribution Grid Operators, and resulting from a business process described in the UMIG in the Belgian Utility Market.

1.2. The Agreement consists of the General Agreement set out in the following and a Technical Agreement.

1.3. The provisions of the Agreement are not intended to govern the contractual obligations arising from the underlying transactions effected by the use of EDI.

1.4. This Agreement is based on the European Model EDI Agreement published by the Commission of the European Communities (94/820/EC) adapted by ebIX and customised by Atrias for the Belgian liberalised utility market.

4.1.2 Article 2: Definitions

2.1. For the purpose of the Agreement, the following terms are defined as follows;

2.2. EDI:
Electronic data interchange is the electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI Message.

2.3. EDI message:
An EDI message consists of data, structured using an agreed standard, prepared in a computer readable format and capable of being automatically and unambiguously processed.

2.4. UN/EDIFACT:
As defined by the UN/ECE, the United Nations rules for electronic data interchange for administration, commerce and transport, comprise a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data, and in particular, interchange related to trade in goods and services, between independent computerized information systems.

2.5. Acknowledgement of receipt:
The acknowledgement of receipt of an EDI message is the procedure by which, on receipt of the EDI message, the syntax is checked, and the receiver sends a corresponding acknowledgement.

2.6 Ediel
As defined by the Ediel, the rules for electronic interchange of non-on-line data between parties in the electricity market.

4.1.3 Validity and formation of contract

3.1. The parties, intending to be legally bound by the Agreement, expressly waive any rights to contest the validity of a contract effected by the use of EDI in accordance with the terms and conditions of the Agreement on the sole ground that it was affected by EDI.

3.3. See the relevant UMIG for a more extensive description of the contract validity.

4.1.4 Article 4: Admissibility in evidence of EDI messages

4.1. The parties hereby agree that in the event of dispute, the records of EDI messages, which they have maintained in accordance with the terms and conditions of this Agreement, shall be admissible before the Courts and shall constitute evidence of the facts contained therein unless evidence to the contrary is adduced.

4.1.5 Article 5: Processing and acknowledgement of receipt of EDI messages

5.1. EDI messages shall be processed as soon as possible after receipt and within the time limits specified in the UMIG.

5.2. An acknowledgement of receipt is required as specified in the UMIG.

5.3. The receiver of the EDI message to be acknowledged shall ensure that the acknowledgement is sent within 48 hours of the time of receipt of the EDI message to be acknowledged.
The receiver of an EDI message requiring an acknowledgement shall not act upon the content of the EDI message until such acknowledgement is sent.

5.4. If the sender does not receive the acknowledgement of receipt within the time limit, he will give notification to the receiver to that effect, and treat the EDI message as null and void as from the expiration of that time limit. Both parties may agree an alternative recovery procedure to ensure effective receipt of the acknowledgement.
In case of failure of the recovery procedure, within the time limit, the EDI message will definitely be treated as null and void, as from the expiration of that time limit, upon notification to the receiver.

4.1.6 Article 6: Security of EDI messages

6.1. The parties undertake to implement and maintain security procedures and measures in order to ensure the protection of EDI messages against the risks of unauthorized access, alteration, delay, destruction or loss.

6.2. Security procedures and measures include the verification of origin, the verification of integrity, the non-repudiation of origin and receipt and the confidentiality of EDI messages. It is the role of the VAN to guarantee this type of security, within the boundaries of the VAN and as long as all parties have implemented the procedures for VAN communication correctly.
Security procedures and measures for the verification of origin and the verification of integrity, in order to identify the sender of any EDI message and to ascertain that any EDI message received is complete and has not been corrupted, are mandatory for any EDI message.

6.3. If the use of security procedures and measures results in the rejection of, or in the detection of an error in an EDI message, the receiver shall inform the sender thereof, within the specified time limit by the use of a negative acknowledgement messages as described in UMIG.
If a negative acknowledgement message cannot be generated, the receiver shall inform the EDI Contact of the sending party via other means.
The receiver of an EDI Interchange containing messages which have been rejected, or which contains an error shall not act upon the EDI Interchange before receiving instructions from the sender.

4.1.7 Article 7: Confidentiality and protection of personal data

7.1. The parties shall ensure that EDI messages are maintained in confidence and are not disclosed or transmitted to any unauthorized persons nor used for any purposes other than those intended by the parties.

When authorized, further transmission of confidential information shall be limited to that part of the information that is needed to support the business scenarios' specified in the UMIG.

7.2. EDI messages shall not be regarded as containing confidential information to the extent that such information is in the public domain.

4.1.8 Article 8: Recording and storage of EDI messages

8.1. A complete and chronological record of all EDI Interchanges and messages exchanged by the parties in the course of a trade transaction shall be stored by each party, unaltered and securely, in accordance with the time limits and specifications prescribed by the national law, and, in any event, for a minimum of three years following the completion of the transaction.

8.2. EDI Interchanges and messages shall be stored by the sender in the transmitted format and by the receiver in the format in which they are received.

8.3. Parties shall ensure that electronic or computer records of the EDI messages shall be readily accessible, are capable of being reproduced in a human readable form and of being printed, if required. Any operational equipment required in this connection shall be retained.

4.1.9 Article 9: Operational requirements for EDI

9.1. The parties undertake to implement and maintain the operational environment to operate EDI according to the terms and conditions of this Agreement, which includes but is not limited to the following:

9.2. Operational equipment
The parties shall provide and maintain the equipment, software and services necessary to transmit, receive, translate, record and store EDI messages.

9.3. Means of communication
The parties shall use the VAN services contracted by the DGO's, unless agreed upon differently by bilateral agreement between the Distribution Grid Operator and the party in question. However, this alternative means of communication should provide the same facilities with respect to the articles mentioned in this agreement.

9.5. Codes
Data element code lists referred to in EDI messages shall be limited to UN/EDIFACT maintained code lists, international code lists issued as ISO international standards and UN/ECE, Ediel code lists and Belgian UMIG code lists.

4.1.10 Article 10: Technical specifications and requirements

The Technical Annex shall include the operational and organizational specifications and requirements to operate EDI according to the terms of this Agreement, and shall specifically refer to the UMIG.

4.1.11 Article 11: Liability

11.1. No party to this Agreement shall be liable for any special, indirect or consequential damages caused by a failure to perform its obligations of this Agreement.

11.2. No party to this Agreement shall be liable for any loss or damage suffered by the other party caused by any delay or failure to perform in accordance with the provisions of this Agreement, where such delay or failure is caused by an impediment beyond that party's control and which could not reasonably be expected to be taken into account at the time of conclusion of the Agreement or the consequences of which could not be avoided or overcome.

11.3. If a party engages any intermediary to perform such services as the transmission, logging or processing of an EDI message, that party shall be liable for damage arising directly from that intermediary's acts, failures or omissions in the provision of said services.

4.1.12 Article 12: Dispute resolution

12.1 Any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by the arbitration involving Atrias and under the responsibility of the regulator.
Regarding recording and storage of EDI messages or confidentiality and protection of personal data, the Belgian law will apply.

4.1.13 Article 14: Effect, modifications, term and sever ability

14.1 Effect
The Agreement shall be effective from the date on which the parties start to exchange messages.

14.2 Modifications
This Agreement cannot be changed by the parties.
The parties accept that the Agreement can be modified by Atrias. New releases will be introduced at approximately the same time as new UMIG releases. Atrias is responsible for the distribution of the modified versions of the Agreement.

14.3 Term
This Agreement cannot be terminated by the parties as long as electronic messages are exchanged and no other bilateral agreements are in effect.
Termination of the Agreement shall only affect transactions after that date.
Notwithstanding termination for any reason, the rights and obligations of the parties referred to in Articles 4, 6, 7 and 8 shall survive termination.

14.4 Sever ability

Should any Article or part of an Article of the Agreement be deemed invalid, all other Articles shall remain in full force and effect.

4.2 PART II: Technical Agreement

4.2.1 Implementation guides and message types

4.2.1.1 Message Types

The UMIG describes the use of following types of messages:

- UTILMD: Master data exchange for structuring the market.
- UTILTS: Metered services consumption reports.
- CONTRL: Syntax Control Message
- INVOIC : Grid Fee Billing

4.2.1.2 Version Control

The UMIG standard will be adapted to changing market conditions and procedures. Hence users should be prepared to support at least 2 versions of a UMIG at the same time. During the transmission period of one month, the DGO receives old and new versions of trigger messages. The DGO replies new messages according to new rules.

Users should not expect to see more than two UMIG releases per year. (Probably November 1st and May 1st)

4.2.1.3 Terms used for Time

CET Central European Time = UTC + 1

CEST Central European daylight Saving Time = UTC + 2

GMT Greenwich Mean Time, same as UTC

UTC Universal Time Coordinated, same as GMT

Normal Time or Standard Time, UTC + time zone

Pls. refer to the UMIG for a more extensive list of terms used for time.

4.2.1.4 EDIFACT Notation

For an overview of the EDIFACT notations use pls. See appendix A.

4.2.2 General Implementation rules

4.2.2.1 Use of processing start/end date

In several messages the beginning and ending of the processing date/period is required (Time series, consumption). The period shall be used for control purposes. A message with a period in the detailed section not within the period in the header section shall be discarded.

4.2.2.2 Use of time zones

In Belgium only one time zone for all communication will be used: CET = UTC+1.

This means that no switching to and from “CEST = Central European daylight Saving Time” will take place.

Gas day will be from 06h00 to 06h00 local time, converted to CET in message.
Electricity day will be from 0h00 to 0h00 local time, converted to CET in message.

4.2.2.3 Reference Time:

The UMIG specifies a number of periods for processing a message or accomplishing a business process. The start or reference time for these periods is the mailbox message reception time at the receiving party (logged by the VAN). The message date/time of preparation specified in the UNB segment (S004) should be roughly equivalent, and might be used for operational purposes. However, in case of disagreement, it is the time logged on the VAN that takes precedence.

4.2.2.4 Codes and qualifiers

Codes and qualifiers used in Ediel are case sensitive. Uppercase is normally used.

4.2.2.5 Data elements classified as "Optional"

If the classification of a data element is "O" (Optional) its use shall be bilaterally agreed. It is not required for a receiver to process a data element that is classified as optional.

4.2.2.6 Data elements classified as "Not Used"

The receiver should accept data elements or segments that are not mandatory, required, dependent or bilaterally agreed, even if they are marked as "X" (Not used) in the Implementation Guides, although it may not be necessary to process them.

4.2.2.7 Data elements classified as "Dependent"

Data elements and values may be required in certain conditions only. These elements are called dependent data elements.
The dependency is described in the notes section of the UMIG or described as business rules, and is usually based on specific values of other data elements.

4.2.2.8 Compression

Atrias decrees the exchange of compressed data in case of time series (UTILTS) and billing information (INVOIC) sent by the MDR. For this purpose Atrias has introduced new "Application References" (EDIEL – UNB 0026): "PTS.GZ" for UTILTS and "PIV.GZ" for INVOIC production data, "STS.GZ" for UTILTS and "SIV.GZ" for INVOIC syntax test data, "TTS.GZ" for UTILTS and "TIV.GZ" for INVOIC scenario test data.

4.2.3 Syntax and service messages

4.2.3.1 Interchange Structure

The Service String Advice, UNA, and the service segments UNB to UNZ shall appear in an interchange in the order stated below. Functional groups are not to be used.
There may be several messages within an interchange, but they should all be of the same type and version.
A message consists of segments. The segment structures and data elements structure are documented in each Implementation Guide.

An interchange consists of:

Service String Advice	UNA	Mandatory
Interchange Header	UNB	Mandatory
Message Header	UNH	Mandatory
User Data Segments		As specified in UMIG
Message Trailer	UNT	Mandatory
Interchange Trailer	UNZ	Mandatory

4.2.3.2 EDIFACT - character set

For interchanges the characterset to be used is UNOC as defined in ISO 8859-1, with separation characters from UNOA. The UNA segment shall be used. EDIFACT syntax version shall be 3.

Default Separation characters:

Apostrophe	'	segment terminator
Plus sign	+	segment tag and data element separator
Colon	:	component data element separator
Question mark	?	release character
Decimal Notation	.	full stop is preferred.

? immediately preceding one of the characters ' + : ? restores their normal meaning. E. g. 10?+10=20 means 10+10=20. Question mark is represented by ??.

Other character sets can be agreed in an Interchange Agreement.

4.2.3.3 Numeric values

4.2.3.3.1 Decimal Mark

In the utility market a full stop is used as Decimal Mark. However, in Belgium, the comma can be used as well and should be specifically set in UNA, as it is not part of the defaults separation character set.

The decimal mark shall not be counted as a character of the value when computing the maximum field length of a data element. However, allowance has to be made for the character in transmission and reception.

When a decimal mark is transmitted, there shall be at least one digit before and after the decimal mark. For values represented by integers only, neither decimal mark nor decimal zeroes are used unless there is a need to indicate the degree of precision.

Allowed:	0.5 and 2 and 2.0
Not allowed:	.5 or 2. or 02.

4.2.3.3.2 Triad Separator

Triad separators shall not be used in interchange.

Allowed: 2500000
Not allowed: 2,500,000 or 2.500.000 or 2 500 000

4.2.3.3.3 Sign

Numeric data element values shall be regarded as positive. Although conceptually a deduction is negative, it shall be represented by a positive value and such cases shall be indicated in the data element directory.

If a value is to be indicated to be negative, it shall in transmission be immediately preceded by a minus sign e.g. -112

The minus sign shall not be counted as a character of the value when computing the maximum field length of a data element. However, allowance has to be made for the character in transmission and reception.

This means that a DE with length 5 may contain a negative number up to –99999. Mappers have to provide for this.

4.2.3.4 Compressing of data elements

In data elements for which the Data Elements Directory specifies variable length and there are no other restrictions, insignificant character positions shall be suppressed. In the case of insignificant characters, leading zeroes and trailing spaces shall be suppressed.

4.2.4 Service segments

4.2.4.1 UNA

UNA Service String advice
Function: To define the characters selected for use as delimiters and indicators in the rest of the interchange that follows.
Classification: Required (R1).
Comments: The specifications in the Service string advice take precedence over the specifications for delimiters etc. in segment UNB.
Example: UNA:+.? '

Ref.	Name	Cl.	Form.	Description
	COMPONENT DATA ELEMENT SEPARATOR	M	an1	«:» (Colon)
	DATA ELEMENT SEPARATOR	M	an1	«+» (Plus sign)
	DECIMAL NOTATION	M	an1	«.» (full stop)
	RELEASE INDICATOR	M	an1	«?» (Question mark)
	Reserved for future use	M	an1	Insert space character
	SEGMENT TERMINATOR	M	an1	«'» (Apostrophe)

4.2.4.2 UNB

Note: See also the chapter concerning "Addressing within Ediel"

UNB Interchange Header

Function: To start, identify and specify an interchange.

Classification: Mandatory (M1).

Comments:
- The use of the UNB segment shall be agreed in an Interchange Agreement.

Example: UNB+UNOC:3+5499939053105:14+5499764353302:14+021203:1135+021203113536++TMD++1'

Ref.	Name	Cl.	Form.	Description
S001	SYNTAX IDENTIFIER	M		
0001	Syntax identifier	M	a4	**Code:** UNOC
0002	Syntax version number	M	n1	**Code:** 3 Version 3 of EDIFACT-syntax shall be used if Syntax identifier is "UNOC"
S002	INTERCHANGE SENDER	M		
0004	Sender identification	M	an..35	To be defined by the ***sender*** of the message, choose one of the following: • GS1 Location code. (14)
0007	Partner identification code qualifier	R	an..4	**Code:** 14 GS1 (formerly EAN International: (European Article Numbering Association)
0008	Address for reverse routing	X	an..14	To be defined by the ***sender*** of the message.
S003	INTERCHANGE RECIPIENT	M		
0010	Recipient Identification	M	an..35	To be defined by the ***receiver*** of the message, choose one of the following: • GS1 Location no. (14)
0007	Partner identification	R	an..4	**Code:** 14 GS1 (formerly EAN International: (European Article Numbering Association)
0014	Routing address	X	an..14	To be defined by the ***receiver*** of the message
S004	DATE/TIME OF PREPARATION	M		
0017	Date	M	n6	Date for creation of interchange (YYMMDD)
0019	Time	M	n4	Time for creation of interchange (HHmm)
0020	INTERCHANGE CONTROL REFERENCE	M	an..14	Reference assigned by sender. Shall be unique over time for the sender defined in S002. If not unique the latest shall automatically be rejected.
S005	RECIPIENTS REFERENCE, PASSWORD	X		

0022 0025	Recipient's reference/ password Recipient's reference/ password qualifier	X X	an..14 an2	
0026	APPLICATION REFERENCE	M	an..14	PMD, PTS(.GZ), PCL and PIV(.GZ) for respectively production UTILMD, UTILTS, CONTRL and INVOIC msgs. SMD, STS(.GZ), SCL, SIV(.GZ) for respectively syntax checking test UTILMD, UTILTS, CONTRL and INVOIC msgs. TMD, TTS(.GZ), TCL, TIV(.GZ) for respectively Full Test UTILMD, UTILTS, CONTRL and INVOIC msgs. (.GZ will be used for compressed data)
0029	PROCESSING PRIORITY CODE	X	a1	
0031	ACKNOWLEDGEMENT REQUEST	D	n1	**Code:** 1 if sender requests an EDIFACT CONTRL message, i. e. UNB and UNZ segments received and identified, otherwise not used. Not used for CONTRL message
0032	COMMUNICATIONS AGREEMENT	X	an..35	
0035	TEST INDICATOR	D	n1	**Code:** 1 if the interchange is a test, otherwise not used.

4.2.4.3 UNZ

UNZ Interchange Trailer

Function: To end and check the completeness of an interchange.

Classification: Mandatory (M1).

Comments:

Example: UNZ+1+358765298'

Ref.	Name	Cl.	Form.	Description
0036	INTERCHANGE CONTROL COUNT	M	n..6	The count of the number of messages in the interchange
0020	INTERCHANGE CONTROL REFERENCE	M	an..14	Shall be identical to 0020 in UNB.

4.2.4.4 UNH

The UNH segment is described in the UMIG and will not be detailed described in this functional description. Below common definitions of some of the data elements used in UNH can be found.

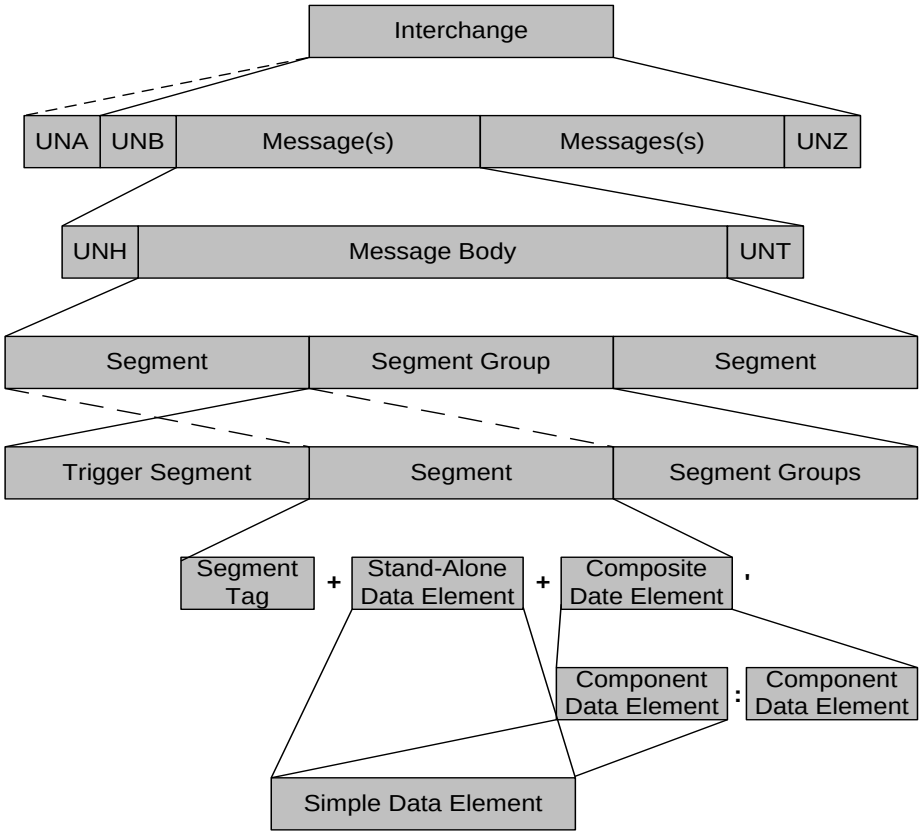
The message reference number is transferred in data element 0062 in the UNH segment. The message reference uniquely identifies the message in the interchange, hence uniqueness of the message reference

number need to be guaranteed by the sender. Using a sequence number that identifies each message in the interchange can for instance do this. The first message will have reference no. 1; the second message will have reference 2, etc.

Note: The message reference number (alphanumeric) is defined by the sender of the message and may have other values than a sequence number (1,2,3….), as long as it remains an unique identifier per sender.

5. APPENDIX A : EDI MESSAGE STRUCTURE. EDIFACT NOTATION

5.1 EDI –Structure



An **INTERCHANGE** contains:

- UNA, Service String Advice
- UNB, Interchange Header
- message(s)
- UNZ, Interchange Trailer

A **MESSAGE** contains:

- UNH, Message Header
- a message body
- UNT, Message Trailer

A **MESSAGE BODY** contains:

- segment(s) and/or segment group(s)

A **SEGMENT GROUP** contains:

- a trigger segment
- segment(s) and possibly segment group(s)

A **SEGMENT** contains:

- a segment tag

- stand-alone data element(s) and/or composite data element(s)

A **COMPOSITE DATA ELEMENT** contains:

- two or more component data elements

A **COMPONENT DATA ELEMENT** is:

- a simple data element

A **STAND-ALONE DATA ELEMENT** is:

- a simple data element

A **SIMPLE DATA ELEMENT** contains:

- a single data element value

5.2 Segment groups

Most of the information in an EDIFACT message is organised in segment groups. A segment group consists of different segments containing information of a certain type. A segment group can also consist of other segment groups.

Segment groups are described by the following elements:

Function	The function of the segment group.
Comments	Special comments on the use of the segment group.
Segments in the segment group	A list of the segments that are used in the segment group. The segments listed are described in detail later.

5.3 Segments

Segments are described by the following elements:

Function	The function the segment has.
Classification	The segment classification (see below).
Comments	Special comments on the use of the segment.
EDIFACT-segment	A copy of the segment in the way it is described in the EDIFACT segment directory.
Description	A list of the data elements used in the Implementation guides. Data elements containing codes are normally described with a full list of codes allowed.

5.4 Classification

Below there is a list with the classification used:

M	Mandatory, the object must be used to satisfy the demands from EDIFACT.
D	Dependent, the object must be used in certain conditions.
O	Optional, the object is Optional.
X	Not used, the object shall not be used.

Together with the classification there will be a number indicating the maximum number of repeats of the segment or segment group.