

Syntax - Version 1

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1. Introduction

This standard describes the rules applicable to the structuring of the user data and the additional service data in view of the exchange of information.

The syntax as described is based on the ISO 9735 standard which has been adopted by the United Nations Economic Committee for Europe (UNECE) as the syntax rules for the electronic exchange of information in administration, commerce and transport (EDIFACT).

This is version 1 of this standard.

2. Scope

This syntax applies to all information exchanges within the Assurnet-2 architecture where different partners are involved (such as the log-deal, the new response-record, ...).

3. Characterset

3.1. Latin-1

Unless the information exchanging partners agree on the usage of some other character set, the Latin-1 character set (ISO 8859-1) will be used, exception made for the NUL character (hexadecimal : 00). This character set comprises all characters used by Western European languages such as Dutch and French.

The NUL character (hexadecimal : 00) has in most development environments some special function, and therefore shall not be used within exchanges.

3.2. Reserved characters

The following characters have some special function :

- the apostrophe (') indicates the end of a segment**
- the plus sign (+) separates the segment header from the data elements**
- the colon (:) separates the constituent data elements from each other**
- the question mark (?) cancels the special function of the following reserved character.**

? preceding ', +, : en ? gives these characters back their regular meaning. This way, and as an example, the meaning of 10?+10=20 is actually 10+10=20. A regular question mark is represented by ??.

4. Structure

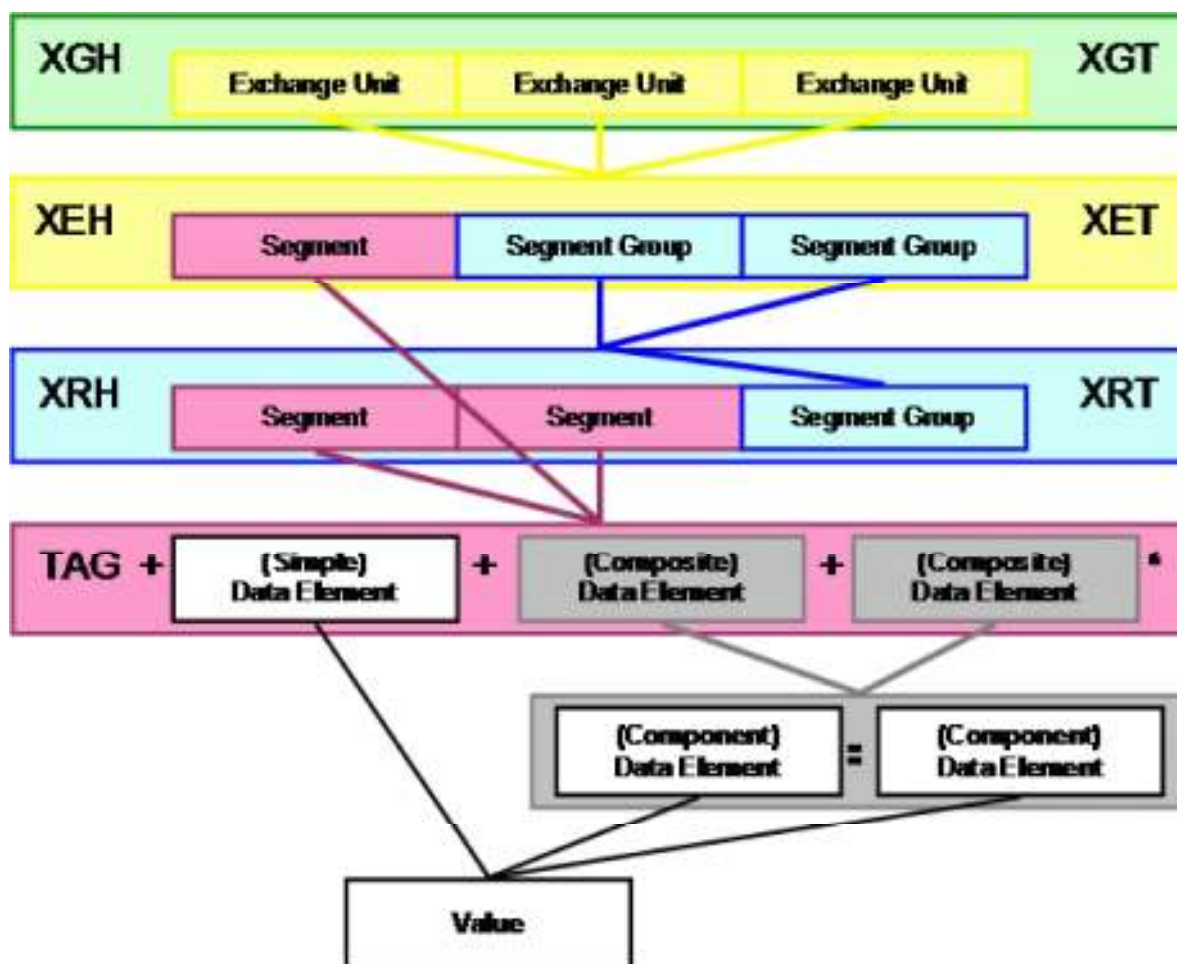
Within a group of exchanged units, the segments must be represented in the order as pictured hereunder.

An exchange group can comprise multiple exchange units.

An exchange unit can comprise multiple segment groups.

A segment group comprises segments and/or segment groups.

A segment comprises simple data elements and/or composite data elements.



4.1. General structure

An exchange group comprises :

- Exchange Group header - XGH - mandatory
- Exchange Unit header - XEH - mandatory
- Segment(s) (with user data) - - as needed
- Segment group(s) - - as needed
- Exchange Unit trailer - XET - mandatory
- Exchange Group trailer - XGT - mandatory

4.2. Structure of a segment group

A segment group comprises :

- Segment group header - XRH - mandatory
- Segment (with group data) - - mandatory
- Segment(s) (with user data) - - as needed
- Segment group(s) - - as needed
- Segment group trailer - XRT - mandatory

4.3. Structure of a segment

A segment comprises :

- Segment code - - mandatory
- Data element separator - + - mandatory
- Simple or composite data elements - - as needed
- Segment end indicator - ' - mandatory

4.4. Structure of a data element

A data element comprises :

- A simple data element, or**
- A composite data element, with
component data elements
component data element separators**
- A data element separator**

A simple data element comprises only one data element value.

A composite data element comprises multiple component data elements.

A component data element comprises only one data element value.

The last component data element will not be followed by a component data element separator. The last data element will not be followed by a data element separator.

5. Compression techniques

Non-significant characters of data elements must be omitted. These characters will not be exchanged: examples given are zeros heading numeric values, or signs filling alphanumeric values (fillers).

Note that a single zero preceding a decimal separator can be significant, and that a zero can be significant if specified with the data element.

The following rules apply for the compression of the exchange units.

In the examples given the “TAG” represents the segment code, the “DE” represents a data element and the “CE” represents a component data element.

5.1. Exclusion of segments

Segments without data elements must be excluded (omitted completely, together with their code).

5.2. Omitting data elements

Data elements are identified by means of their position in a segment, as defined in the Telebib segments repository. Whenever a data element, which in turn is followed by another data element, is omitted, a data element separator is exchanged in place of such omitted data element.

TAG+DE+DE+++DE+DE+DE' Two data elements have been omitted.

5.3. Truncating data elements

Whenever one or more data elements are omitted at the end of a segment, such segment may be truncated by means of the segment end indicator. In this case the data element separators of the omitted data elements are not exchanged.

TAG+DE+DE+++DE' In the example of point 5.2., the two last data elements were omitted and the segment has been truncated.

5.4. Omitting component data elements

Component data elements are identified by means of their position in a composite data element. Whenever a component data element is omitted, a component data element separator is exchanged in place of such omitted component data element.

TAG+DE+CE:CE+CE:::CE' Two component data elements were omitted in the third data element.

5.5. Truncating component data elements

Whenever one or more component data elements are omitted at the end of a composite data element, such composite data element may be truncated by means of the data element separator. In this case the component data element separators of the omitted component data elements are not exchanged.

TAG+DE+CE+CE' In the example of point 5.4., the last component data element of the first composite data element is omitted, and the last three component data elements of the second composite data element are omitted. Both composite data elements have been truncated, which is shown in the first by the data element separator, and in the last by the segment end indicator.

6. Segments

6.1. XGH segment, header of a group of exchange units

6.1.1. Function

Opens a group of exchange units

6.1.2. Content

Syntax version number - (mandatory)
Sender identification (composite d.e.) - (mandatory)
 Sender domain address - (mandatory)
 Sender user address
 Sender type, coded
Recipient identification (composite d.e.) - (mandatory)
 Recipient domain address - (mandatory)
 Recipient user address
 Recipient type, coded
Group type

6.2. XGT segment, trailer of a group of exchange units

6.2.1. Function

Closes a group of exchange units

6.2.2. Content

Syntax version number - (mandatory)

6.3. XEH segment, header of an exchange unit

6.3.1. Function

Opens and specifies an exchange unit

6.3.2. Content

Exchange unit type - (mandatory)
Exchange unit type version number - (mandatory)
Exchange unit / action, coded

Sender exchange unit identifier
Recipient exchange unit identifier
Domain
Application return code
Error code
Currency conversion indicator
Exchange unit issue date/time
Exchange unit issuing details (composite data element)
 Exchange unit issuing format
 Exchange unit issuing application
 Exchange unit issuing application version number
 Exchange unit business content description
 Exchange unit business content description version

6.4. XET segment, trailer of an exchange unit

6.4.1. Function

Closes an exchange unit

6.4.2. Content

Exchange unit type - (mandatory)

6.5. XRH segment, header of a segment group

6.5.1. Function

Opens a segment group and indicates the nesting level

6.5.2. Content

Segment group level number - (mandatory)

6.6. XRT segment, trailer of a segment group

6.6.1. Function

Closes a segment group

6.6.2. Content

Segment group level number - (mandatory)

7. Formal grammar

This part describes the formal grammar of our syntax in BNF notation.

***exchange* is the root element of the tree structure, and represents the exchange group as described in the above text.**

exchange:

exchange-group-header exchange-unit-list exchange-group-trailer

exchange-group-header:**XGH+ syntax-version + address + address '** **XGH+ syntax-version + address + address + string '** **exchange-group-trailer:****XGT+ syntax-version '** **exchange-unit-list:****exchange-unit****exchange-unit-list exchange-unit****exchange-unit:****exchange-unit-header segment-list block-list exchange-unit-trailer****exchange-unit-header:****XEH+ string + exchange-unit-version '** **XEH+ string + exchange-unit-version + string '** **XEH+ string + exchange-unit-version + string_{opt} + string '** **XEH+ string + exchange-unit-version + string_{opt} + string_{opt} + string '** **XEH+ string + exchange-unit-version + string_{opt} + string_{opt} + string_{opt} + string '** **exchange-unit-trailer:****XET+ string '** **segment-list:****segment_{opt}****segment-list segment****block-list:****block_{opt}****block-list block****segment:****tag + data-element-list '** **block:****block-header id-segment segment-list block-list block-trailer****block-header:****XRH+ number '** **block-trailer:****XRT+ number '** **id-segment:****segment****tag:****tag-letter tag-letter tag-letter****data-element-list:****data-element****data-element-list list-plus data-element****list-plus:****+****list-plus +**

data-element:
simple-data-element
composite-data-element

simple-data-element:
string
number

composite-data-element:
simple-data-element
composite-data-element list-colon simple-data-element

list-colon:
:
list-colon :

syntax-version:
1
01

exchange-unit-version:
digit
digit digit

address:
string
string : string

string:
init-string
string list-space_{opt} init-string

init-string:
not-reserved
escape-sequence

list-space:
space
list-space *space*

number:
digit-list
- digit-list

digit-list:
digit
digit-list digit

digit:
one of the following figures
0 1 2 3 4 5 6 7 8 9

escape-sequence:
?+
?:
?'
??

tag-letter:*one of the following letters***A B C D E F G H I J K L M N O P Q R S T U V W X Y Z****not-reserved:***a character from the Latin-1 character set except + : ' ? , the binary nul and the space character*

8. Example

Syntax as used in TELEBIB2

<u>(Business) information</u>	<u>value</u>	<u>syntax</u>
		XGH+1+LR212+0079'
		XEH+01+2'
Contract start date	23.02.1996	
Contract start time	00.00	DTM+033:23021996000000:002'
Renewal date	23.02	DTM+004:2302:003'
Fraction, coded	1	ATT+A325+1'
Paymentmeans, coded	4	ATT+A600+4'
		XRH+1'
Intermediate's agency id at insurer	16048	PTY+002+16084:002:0060'
Intermediate's reference	0051105000	RFF+017:0051105000'
		XRT+1'
		XRH+1'
		PTY+003'
Policyholder, name	Lessens	
Policyholder, firstname	Véronique	
Policyholder, title, coded	3	NME+001+LESSENS:VERONIQUE+3'
Policyholder, address, street	rue Ernest Cambier	
Policyholder, address, building number	23	
Policyholder, address, box number	2	
Policyholder, address, postal code	7800	
Policyholder, address, city	Ath	
Policyholder, address, country, coded	B	ADR+002+RUE ERNEST Cambier:23:2+7800+ATH+B'
Policyholder, Date of birth	16.03.1969	DTM+001:16031969'
Policyholder, Driver since	20.02.1989	DTM+009:20021989'
Policyholder, Telephone	068.28.34.87	COM+001:068283487'
Policyholder, Language, coded	1	ATT+A10C+1'

Policyholder, Nationality, coded	B	ATT+A121+B'
Policyholder, Gender, coded	2	ATT+A124+2'
Policyholder, Civil status, coded	2	ATT+A123+2'
Policyholder, Physical or Legal person, coded	1	ATT+A131+1'
		XRH+2'
Policyholder, declaration, driver's licence history, coded	2	QRS+5V0D+2'
		XRT+2'
		XRH+2'
Policyholder, declaration, legal action pending, coded	2	QRS+5V0E+2'
		XRT+2'
		XRH+2'
		DOC+003'
Policyholder, driver licence, date	20.02.1989	DTM+010:20021989'
Policyholder, driver licence, reference	FA074290	RFF+009:FA074290'
Policyholder, driver licence, type, coded	B	ATT+A192+B'
		XRT+2'
		XRT+1'
		XRH+1'
		ROD+001'
Vehicle, action, coded	3	GIS+500C+3'
Vehicle, make	Volkswagen	
Vehicle, model	Golf	
Vehicle, type	1.9 D	NME+005+VOLKSWAGEN:GOLF:1.9 D'
Vehicle, year	1994	DTM+012:1994:004'
Vehicle, registration date	23.01.1995	DTM+013:23021995'
Vehicle, chassisnumber	VWZW1HZTB0799	RFF+011:VWZW1HZTB0799'
Vehicle, conformitynumber	934472	RFF+012:934472'
Vehicle, usage, coded	11	ATT+5200+11'
Vehicle, fueltype, coded	2	ATT+5015+2'
Vehicle, fleet, coded	2	BIN+5230+2'
Vehicle, convertible, coded	1	BIN+5601+1'
Vehicle, sports, coded	2	BIN+5602+2'
Vehicle, financed, coded	2	BIN+5606+2'
Vehicle, antitheftsystem, coded	1	BIN+5608+1'
Vehicle, roadtax coverage, coded	1	BIN+5401+1'
Vehicle, catalogvalue (VAT excl.)	513719	MOA+008:513719'
Vehicle, insurable value (VAT excl.)	557189	MOA+011:557189'
Vehicle, roadtax	20000	MOA+038:20000'
Vehicle, power in kW	66	QTY+004:66::001'

Vehicle, seats number	4	QTY+002:4' XRH+2' PTY+004'
Vehicle, regular driver = policyholder, coded	1	GIS+A20Z+1' XRT+2' XRH+2' ICD+510'
Vehicle, liability, action, coded	6	GIS+P000+6'
Vehicle, liability, startdate	23.02.1996	DTM+008:23021996'
Vehicle, liability, bonus level, coded	06	ATT+5340+06' XRT+2' XRH+2' ICD+541'
Vehicle, own damages, action, coded	6	GIS+P000+6'
Vehicle, own damages, startdate	23.02.1996	DTM+008:23021996'
Vehicle, own damages, value type, coded	2	ATT+5400+2'
Vehicle, own damages, exemption type, coded	1	ATT+P11T+1'
Vehicle, own damages, finite period, coded	2	BIN+P10U+2'
Vehicle, own damages, exemption percentage	3	PCD+014:3' XRT+2' XRH+2' ICD+551'
Vehicle, fire, action, coded	6	GIS+P000+6'
Vehicle, fire, startdate	23.02.1996	DTM+008:23021996'
Vehicle, fire, finite period, coded	2	BIN+P10U+2' XRT+2' XRH+2' ICD+552'
Vehicle, theft, action, coded	6	GIS+P000+6'
Vehicle, theft, startdate	23.02.1996	DTM+008:23021996'
Vehicle, theft, exemption type, coded	1	ATT+P11T+1'
Vehicle, theft, finite period, coded	2	BIN+P10U+2'
Vehicle, theft, exemption percentage	3	PCD+014:3' XRT+2' XRH+2' ICD+553'
Vehicle, windscreen, action, coded	6	GIS+P000+6'

Vehicle, windscreen, startdate	23.02.1996	DTM+008:23021996'
Vehicle, windscreen, finite period, coded	2	BIN+P10U+2'
		XRT+2'
		XRH+2'
		ICD+SA:002:0060'
Vehicle, special cover, action, coded	6	GIS+P000+6'
Vehicle, special cover, startdate	23.02.1996	DTM+008:23021996'
Vehicle, special cover, duration (years)	1	DTM+006:1:104'
Vehicle, special cover, exemption type, coded	1	ATT+P11T+1'
Vehicle, special cover, finite period, coded	2	BIN+P10U+2'
Vehicle, special cover, exemption percentage	3	PCD+014:3'
		XRT+2'
		XRH+2'
		SRO+001'
Vehicle, accessory, type 1, value	7430	MOA+010:7430'
		XRT+2'
		XRH+2'
		SRO+004'
Vehicle, accessory, type 4, value	25300	MOA+010:25300'
		XRT+2'
		XRH+2'
		SRO+004'
Vehicle, accessory, type 4, value	10000	MOA+010:10000'
		XRT+2'
		XRT+1'
		XET+01'
		XGT+1'