

# **Message handbook for UIC Railway Energy Metered Data for Billing**

## **Implementation guide for THE EDIFACT CONTRL MESSAGE**

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**C O N T E N T**

<b>1</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>2</b>	<b>GENERAL DESCRIPTION OF THE APERAK MESSAGE .....</b>	<b>4</b>
2.1	FUNCTIONAL DEFINITION .....	4
2.2	PRINCIPLES .....	4
<b>3</b>	<b>REFERENCES.....</b>	<b>5</b>
3.1	PRECEDENCE.....	5
<b>4</b>	<b>QUALITY ASSURANCE.....</b>	<b>6</b>
4.1	VERSION NUMBER.....	6
4.2	CHANGE LOG .....	6
<b>5</b>	<b>SPECIAL CONDITIONS.....</b>	<b>6</b>
<b>6</b>	<b>OVERVIEW OF THE MESSAGE.....</b>	<b>7</b>
6.1	CLASS DIAGRAM FOR APERAK .....	<b>ERREUR ! SIGNET NON DÉFINI.</b>
6.2	CUE LIST .....	7
6.3	MESSAGE DIAGRAM.....	8
6.4	SEGMENT TABLE .....	9
<b>7</b>	<b>DETAILED DESCRIPTION OF THE MESSAGE.....</b>	<b>10</b>
	<b>APPENDIX A – MESSAGE EXAMPLES .....</b>	<b>13</b>
A.1	EXAMPLES TO BE ADDED.....	13

# **Railway Energy Billing CONTRL**

## **1 INTRODUCTION**

This document is an Implementation Guide (IG) for the CONTRL message, to be used for Railway Energy Billing. The IG describes the EDIFACT-message CONTRL in detail.

This IG is based on the "Message handbook for ebIX", which contains a set of IG's for different messages used in the energy industry and ebIX common rules and recommendations. The ebIX common rules and recommendations contain common descriptions for the different Implementation Guides. This includes relationships between the different message types, use of codes and code lists, special conditions within and between countries (such as use of time zones), terms and notation, use of header and trailer segments (UNB and UNZ), etc.

The objective of this document is to achieve harmonisation within the European railway and energy industry.

Process descriptions are available in the ebIX document Recommendations for acknowledgement and error handling.

# **Railway Energy Billing CONTRL**

## **2 GENERAL DESCRIPTION OF THE CONTRL MESSAGE**

### **2.1 Functional Definition**

The CONTRL-message is normally used to accept or reject whole Interchanges (i. e. UNA/UNB - UNZ) within ebIX. This means that the segments used in ebIX are UNH, UCI and UNT. We advise you to configure your EDI-software in a way that makes it possible to receive a CONTRL message, with more segments than specified in ebIX, without rejecting the CONTRL message.

### **2.2 Principles**

The EDIFACT CONTRL-message shall be sent if an error occurs when receiving an EDIFACT Interchange.

The parties can choose whether or not to use an EDIFACT CONTRL-message as a positive acknowledgement. If used, this shall be pointed out in the UNB segment (data element 0031 with value 1) for the sender of the original message.

**Note:** If an APERAK message is requested a CONTRL message is not normally necessary.

### 3 REFERENCES

This Implementation guide is based on the following documents.

ISO/TC 154-UN/CEFACT  
**Joint Syntax Working Group (JSWG)**  
<http://www.gefeg.com/jswg>

- [1] ISO/TC 154-UN/CEFACT, Joint Syntax Working Group (JSWG), Syntax version 3, <http://www.gefeg.com/jswg>
- [2] ebIX common rules and recommendations, <http://www.ebix.org/>
- [3] ISO 9735, version 2, 1990.11.01, <http://www.unece.org/trade/untdid/>
- [4] ebIX model for metered data, [www.ebix.org](http://www.ebix.org)
- [5] ebIX Code list, [www.ebix.org](http://www.ebix.org)
- [6] ebIX Core component registry, [www.ebix.org](http://www.ebix.org)
- [7] UIC Leaflet 930 for Exchange of data in connection with cross-border railway energy settlement

#### 3.1 Precedence

If there should be any conflict regarding this Implementation guide or between this Implementation guide and other documents, the following precedence shall be used:

- 1 ISO/TC 154-UN/CEFACT, Joint Syntax Working Group (JSWG), Syntax version 3 **Erreur ! Source du renvoi introuvable.**
- 2 ebIX common rules and recommendations [1]
- 3 UIC Leaflet 930 for exchange of data in connection with cross-border railway energy settlement **Erreur ! Source du renvoi introuvable.**
- 4 This Implementation guide.

In this Implementation guide the EDIFACT message type is described in different ways. If there should be any conflict regarding the different descriptions, the detailed description in the last chapter should be used.

## 4 QUALITY ASSURANCE

This document is written by EdiSys AS on behalf of the UIC Railway Energy Billing project.

### 4.1 Version number

The Implementation Guide will have 2 levels of version numbering. This will be Version and Release. In addition there will be a Revision number.

- The Version number (first number) will be updated when there have been major changes like new versions of the message type.
- The Release number will be updated when there have been small changes to the IG, like adding new segments, new data elements etc. within the EDIFACT directory. These changes shall not influence existing implementations.
- The Revision number will be updated when there have been minor changes, like correction of examples, adding new codes etc. These changes shall not influence existing implementations.

### 4.2 Change log

In addition to minor text corrections the following changes has been made to this version of the IG:

Ver.	Rel	Rev.	Date	Changes
3 D	1.0	A	26.10.2010	First approved version.

## 5 SPECIAL CONDITIONS

This MIG has been developed for use in exchange of data in connection with cross-border railway energy settlement.

## Railway Energy Billing CONTRL

### 6 OVERVIEW OF THE MESSAGE

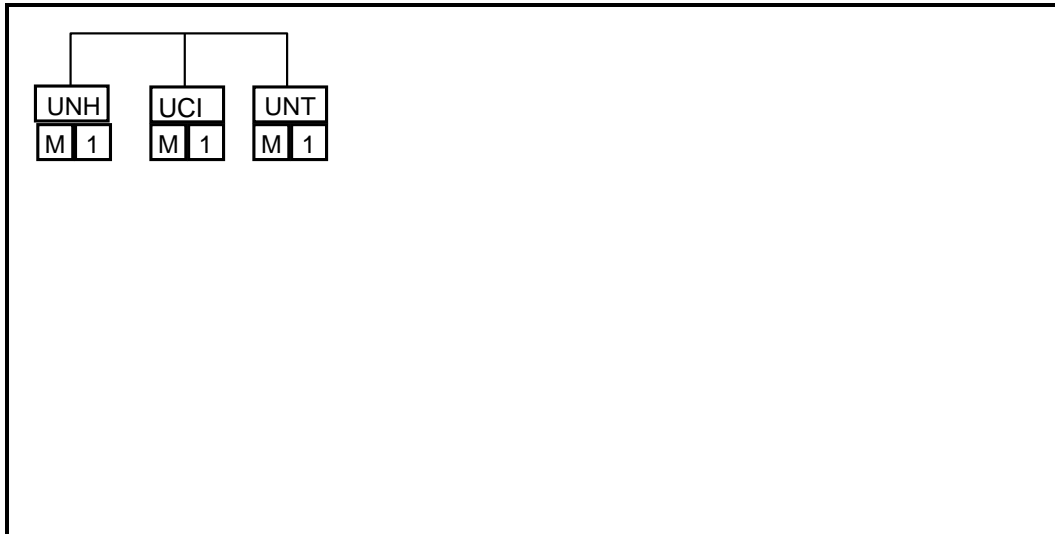
#### 6.1 Cue list

Below is a table describing the EDIFACT message and the relationships to the attributes in the class diagram.

General information about the message			
UNH	M	1	(Message reference) (Message type)
UCI	M	1	Interchange reference sender from received message Interchange reference receiver from received message Action, coded
Message trailer			
UNT	M	1	Message trailer

## 6.2 Message diagram

The Message diagram below shows the subset of the standard EDIFACT message that is used in this IG. The segments and segment groups in grey are not used in this subset.



**Figure 3** *Message diagram for Syntax and service report message*



## Railway Energy Billing CONTRL

### 6.3 Segment table


In this chapter the segment table for the Application error and acknowledgement message (APERAK) is shown by the way it is described in version D, release 05A of the EDIFACT directory. The segments and segment groups that are used in this IG are shown in bold type.

Pos	Tag Name	S	R
<b>0010</b>	<b>UNH Message header</b>	<b>M</b>	<b>1</b>
<b>0020</b>	<b>UCI Interchange response</b>	<b>M</b>	<b>1</b>
0030	----- Segment group 1 -----	C	999999-----+
0040	UCM Message response	M	1
0050	----- Segment group 2 -----	C	999 -----+
0060	UCS Segment error indicator	M	1
0070	UCD Data element error indicator	C	99 -----+
0080	----- Segment group 3 -----	C	999999-----+
0090	UCF Functional group reponse	M	1
0100	----- Segment group 4 -----	C	999999-----+
0110	UCM Message response	M	1
0120	----- Segment group 5 -----	C	999 -----+
0130	UCS Segment error indicator	M	1
0140	UCD Data element error indication	C	99 -----+
<b>0150</b>	<b>UNT Message trailer</b>	<b>M</b>	<b>1</b>

## 7 DETAILED DESCRIPTION OF THE MESSAGE

In this chapter all segments and segment groups are specified in detail. In the left column you will find a list of the attributes used.

The EDIFACT segments listed are copies of those defined in the original UN/EDIFACT directory except for data elements defined as conditional (C) which are redefined using the ebIX classification.



MESSAGE: CONTRL

SG 0

Function:

The Syntax and Service Report Message (CONTRL) is a message that indicates interchange receipt and acknowledgement or rejection.

Segments:

UNH, UCI

UNH

Message header

Function:

A service segment starting and uniquely identifying a message.

Classification:

Mandatory (M1).

Comments:

Example:

UNH+1+CONTRL:D:3:UN:R01A'

Message-reference

>

Ref.	Name	Cl.	Form.	Description
0062	MESSAGE REFERENCE NUMBER	M	an..14	The message reference uniquely identifies the message in the interchange. This can for instance be done by using a sequence number that identifies each message in the interchange. The first message will have reference no. 1, the second message will have reference 2, etc. The reference can be set to 1 in the first message of the next interchange.
S009	MESSAGE IDENTIFIER	M		
0065	Message type identifier	M	an..6	Code: CONTRL
0052	Message type version number	M	an..3	Code: D
0054	Message type release number	M	an..3	Code: 3
0051	Controlling agency	M	an..2	Code: UN
0057	Association assigned code	R	an..6	Code: R01A
0068	COMMON ACCESS REFERENCE	X	an..35	
S010	STATUS OF THE TRANSFER	X		
0070	Sequence message transfer number	X	n..2	
0073	First/last seq. mess. transfer. indicator.	X	a1	

Message-type

**UCI** Interchange response

**Function:** A segment identifying the interchange being responded to (the subject interchange). It also indicates interchange receipt, acknowledgement or rejection.

**Classification:** Mandatory (M1).

**Comments:**

- The content of data element 0020 and composite element S002 and S003 shall be the same as the corresponding elements in the UNB segment of the received message.
- If other codes than «1» and «4» is used in data element 0083, this shall be specified bilaterally.

**Example:** UCI+2345+1021234567891:14+1007777701234:14+1'

Ref.	Name	Cl.	Form.	Description
>	0020 INTERCHANGE CONTROL REFERENCE	M	an..14	«Interchange control reference» from received message.
	> S002 INTERCHANGE SENDER	M		
	0004 Sender identification	M	an..35	«Sender Id.» from received message.
	0007 Partner identification code qualifier	D	an..4	«Partner identification code qualifier» from received message. Code: 14 EAN (European Article Numbering Association)
	0008 Address for reverse routing	O	an..14	«Address for reverse routing» from received message. Only used if nationally or bilaterally agreed.
>	S003 INTERCHANGE RECIPIENT	M		
	0010 Recipient identification	M	an..35	«Recipient identification» from received message.
	0007 Partner identification code qualifier	D	an..4	«Partner identification code qualifier» from received message. Code: 14 EAN (European Article Numbering Association)
	0014 Routing address	O	an..14	«Routing address» from received message. Only used if nationally or bilaterally agreed.
>	0083 ACTION, CODED	M	an..3	<b>Code:</b> 1 Acknowledged (this level and all lower levels) 4 This level and all lower levels rejected
	0085 SYNTAX ERROR, CODED	X	an..3	
	0013 SEGMENT TAG	X	a3	
	S011 DATA ELEMENT IDENTIFICATION	X		
	0098 Erroneous data element position in segment	X	n..3	
	0104 Erroneous component data element position	X	n..3	

## Railway Energy Billing CONTRL

**UNT** Message trailer  
**Function:** A service segment ending a message, giving the total number of segments in the message and the control reference number of the message.  
**Classification:** Mandatory (M1).  
**Comments:**  
**Example:** UNT+3+1'

Ref.	Name	Cl.	Form.	Description
0074	NUMBER OF SEGMENTS IN THE MESSAGE	M	n..6	Number of segments in the message, including UNH and UNT.
0062	MESSAGE REFERENCE NUMBER	M	an..14	Control reference number. Equal to 0062 in UNH

## **Railway Energy Billing CONTRL**

### Appendix A – Message examples

#### **A.1 Examples to be added**