SECTION

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General Acknowledgement Message Acknow

Version 5.0



prototype release 3
for Proof of concept
implementation

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EASEE-gas/Edig@s Workgroup

Document version: B

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1 GENERAL OVERVIEW

The objective of this guide is to define the generic technical and application acknowledgement document that can be used in all EDIGAS processes.

A document is controlled within the system environment at two levels:

- It is first controlled at system level to detect syntax errors (XML parsing errors, file processing errors, etc.);
- It is then controlled at the application level to detect any semantic errors (invalid data, wrong process, etc.).

If there is a problem encountered at the first level then a technical acknowledgement may be sent to inform the originator of the problem. If errors are encountered at the second level or if the application can successfully process the information then an application acknowledgement may be sent to inform the originator of the situation.

It is strongly recommended to read the Introduction to the Edig@s MIG before implementing a template since it contains a number of general rules that are applicable for all the Edig@s messages.

2 FUNCTIONAL DEFINITION

The Acknowledgement document fits into a general Edig@s acknowledgement process and is divided into two categories:

2.1 TECHNICAL ACKNOWLEDGEMENT

A technical acknowledgement occurs when an XML document is received that cannot be correctly processed for submission to the application. Such an error could occur for example whenever the XML parser cannot correctly parse the incoming document. Other instances could be the incapacity to correctly identify the sender of the document in relation to the process requested.

In such a case a technical acknowledgement can be sent to the document sender providing the information that the XML document in question cannot be correctly processed by the system.

2.2 APPLICATION ACKNOWLEDGEMENT

Whenever it is necessary to send a response that can provide additional information to the sender and in order to implement effective data exchange the following procedure should be applied upon reception of a document to verify at the application level that it contains no faults that could prevent correct processing:

- A document that is valid after this verification shall necessitate the generation of an Acknowledgement document accepting in its entirety the document in question.
- A document that has an error in it shall necessitate the generation of an Acknowledgement document that can completely or partially reject the document in question.

This acknowledgment sequence will not be described systematically in the information flows, but it shall be flagged as an integral part of each transmission wherever it is required.

87 3 GENERAL ACKNOWLEDGEMENT WORKFLOW.

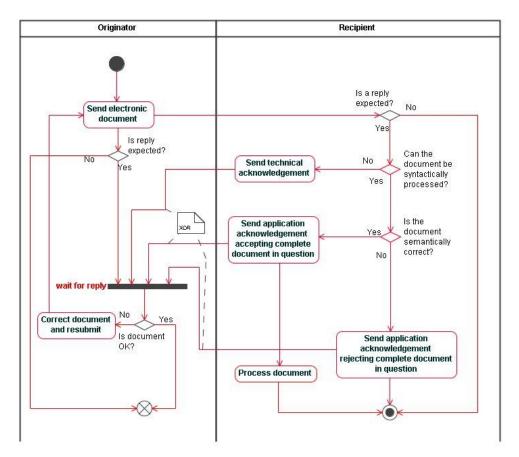


FIGURE 1 GENERAL ACKNOWLEDGEMENT WORKFLOW

The Acknowledgement document shall be used in conjunction with the transmission of electronic documents defined in the EDIGAS process Information flow diagrams as required for a technical or application acknowledgement.

In specific processes it may considered that an acknowledgement is not required.

For example, typically one could consider that the exchange of a NOMINT between a Shipper and a System Operator requires an acknowledgement in order to avoid reclamations from the Shipper if the NOMINT had not been received.

Alternatively in the case of a NOMRES between a System Operator and a Shipper an acknowledgement might not be required since this could hold up processing on the System Operators side waiting for the acknowledgement event that provides no additional processing information. On the Shipper's side no further action can be taken if there is a disagreement with the NOMRES content. In addition if the Shipper does not receive the NOMRES an immediate alarm will be set off querying why the message had not been received.

In general entities of the same business level may require an acknowledgement when exchanging information.

However entities of different business levels will generally require an acknowledgement of information sent from the lower level to the higher level whereas it may not be necessary when something is sent from the higher level to the lower level.

Not to transmit an acknowledgement when it supplies no new information provides a means of preventing a system waiting for something which will not in the end be processed.

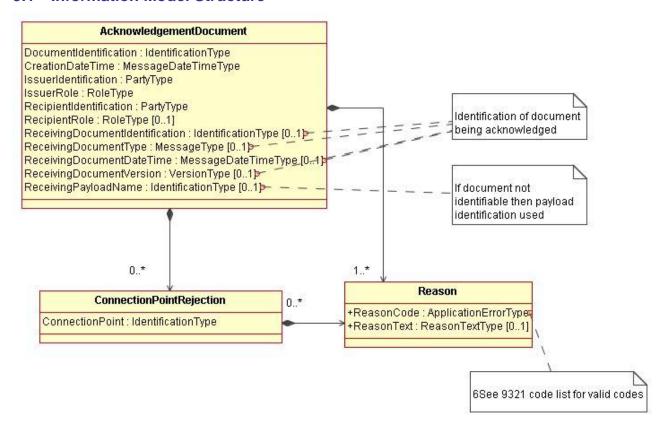
The ACKNOW message may be generated in two contexts:

 $\begin{array}{c} 113 \\ 114 \end{array}$

117 118			>	At the system level when a technical incident prevents it from being processed by an application.
119 120 121			>	At the application level where it should be generated by the application software and NOT by EDI-translator software. In this context it must mention the parties as stated in the message that is being acknowledged.
122	4	REFERENCES		
123 124				content of the ACKNOW message is based on the definition of terms and as agreed by the Edig@s Workgroup.

125 5 INFORMATION MODEL FOR ACKNOW

126 5.1 Information Model Structure



128 5.2 INFORMATION MODEL DESCRIPTION

129 **5.2.1** Rules governing the Acknowledgement document Class

130 5.2.1.1 DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the document describing the
	Acknowledgement Document.
Description	An Acknowledgement Document must have a unique
	identification assigned by the initiator of the document to be
	sent to a recipient.
	The identification may take the following form: ACKNOW
	followed by the date in the form YYYYMMDD followed by the
	letter "A" followed by a 5 character sequential number (e.g.
	00001) providing the unique identification of the document.
	Example "ACKNOW20090101A00001".
	The sender must guarantee that this identification is unique
	over time
Size	The identification of an Acknowledgement Document may not
	exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None

5.2.1.2 CREATION DATE TIME

ACTION	DESCRIPTION
Definition of element	Date and time of the creation of the document.
Description	The date and time that the document was prepared for
	transmission by the application of the initiator.
Size	Refer to section 1.20 of the Edig@s General Guidelines for
	information on the attribute structure.
Applicability	This information is mandatory.
Dependence requirements	None.

132 5.2.1.3 ISSUER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who sending the acknowledgement.
Description	The party sending the acknowledgement is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It should indicate either the code "321" if it is an Edig@s code or the code "305" if it is an EIC code.
Size	The maximum length of a sender's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

133 **5.2.1.4 ISSUER ROLE**

ACTION	DESCRIPTION
Definition of element	Identification of the role that the party that is sending the acknowledgement document is playing.
Description	The role being played by the initiator of the document for this transmission. This should be the same role as identified in the receiving document
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

134 5.2.1.5 RECIPIENT IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who has initiated the document that
	is being acknowledged.
Description	The initiator of the document being acknowledged is identified
	by a unique coded identification.
	The codification scheme used for the coded identification is
	indicated by the coding scheme attribute.
	It should indicate either the code "321" if it is an Edig@s code
	or the code "305" if it is an EIC code.
Size	The maximum length of an original initiator's identification is
	16 alphanumeric characters.
	The maximum length of the coding scheme code is 3
	alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

135 **5.2.1.6 RECIPIENT ROLE**

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ACTION	DESCRIPTION
Definition of element	Identification of the role that the party who has initiated the
	document being acknowledged is playing.
Description	The role being played by the initiator of the document for this
	transmission. This should be the same role as identified in the
	receiving document
Size	The maximum length of this information is 3 alphanumeric
	characters.
Applicability	This information is mandatory.
Dependence requirements	None.

5.2.1.7 RECEIVING DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the document being acknowledged
Description	This provides the identification of the original message being acknowledged
Size	The identification of a Document may not exceed 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The information is only provided if the document can be successfully interpreted. Otherwise the payload identification shall be used to identify the exchange.

137 5.2.1.8 RECEIVING DOCUMENT TYPE

ACTION	DESCRIPTION
Definition of element	Identification of the type of document being received.
Description	Identification of the type of document being acknowledged.
	This corresponds to the code used by Edigas to identify a type
	of document
Size	The maximum length of this information is 3 alphanumeric
	characters
Applicability	This information is dependent.
Dependence requirements	The information is only provided if the document can be
	successfully interpreted. Otherwise the payload identification
	shall be used to identify the exchange.

5.2.1.9 RECEIVING DOCUMENT DATE TIME

138

ACTION	DESCRIPTION
Definition of element	The date and time of the creation of the original message.
Description	The date and time of the creation of the original message
	being acknowledged.
Size	Refer to section 1.20 of the Edig@s General Guidelines for
	information on the attribute structure.
Applicability	This information is dependent.
Dependence requirements	The information is only provided if the document can be
	successfully interpreted. Otherwise the payload identification
	shall be used to identify the exchange.

139 5.2.1.10 RECEIVING DOCUMENT VERSION

ACTION	DESCRIPTION
Definition of element	Version of the document being acknowledged.
Description	The version of the receiving document is provided if the
	document being acknowledged has a version.
Size	A version number may not exceed 3 numeric characters.
Applicability	This information is dependent.
Dependence requirements	The information is only provided if the document can be successfully interpreted and has a Version attribute. If there is no Receiving Document Identification there shall be no Receiving Document Version.

140 5.2.1.11 RECEIVING PAYLOAD NAME

ACTION	DESCRIPTION		
Definition of element	The identification of the payload object used to transmit the		
	document		
Description	This provides the identification of the payload object, such as a		
	file name, that has been used to transmit the document		
Size	The maximum length of the status is 35 alphanumeric		
	characters		
Applicability	The status is dependent.		
Dependence requirements	This identification is only provided if the document cannot be		
	successfully interpreted.		
	The attributes Receiving Document Identification, Receiving		
	Document Type and Receiving Document Data Time shall not be		
	provided.		

141 5.2.2 Rules governing the Connection Point Rejection class

If a specific Connection Point is being rejected this class shall be used to identify it.

5.2.2.1 CONNECTION POINT - CODING SCHEME

ACTION	DESCRIPTION	
Definition of element	The identification of a Connection Point.	
Description	The identification of a connection point whose information is being rejected within a document. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It should indicate either the code "321" if it is an Edig@s code,	
	the code "305" if it is an EIC code, the code "9" if it is a GS1 code or the code "ZSO" if it is a System Operator code.	
Size	The maximum length of the connection point identification is 16 alphanumeric characters. The maximum length of the coding scheme is 3 alphanumeric characters	
Applicability	Both the connection point identification and the coding scheme are dependent	
Dependence requirements	This is only used whenever a specific connection point is being rejected in a document	

144 5.2.3 Rules governing the Reason class

The Reason class shall provide any coded or textual information that is necessary to completely describe the conditions of the acknowledgement. It may provide additional information at the Connection Point level describing any eventual amendment or rejection.

5.2.3.1 REASON CODE

ACTION	DESCRIPTION	
Definition of element	A code providing the conditions of the acknowledgement.	
Description	The reason code provides the conditions of the acknowledgement as well as at the Connection Point level the reason for and eventual amendments or rejections. As many reason elements as necessary may be used.	
	Refer to the Edigas 9321 codelist for the list of valid codes	
Size	The maximum length of this information is 3 alphanumeric characters.	
Applicability	This information is mandatory at the header level and dependent at the Connection Point level.	
Dependence requirements	None at the header level. It may provide additional	
	information at the Connection Point Level describing an	
	eventual amendment or rejection.	

149 **5.2.3.2 REASON T EXT**

ACTION	DESCRIPTION		
Definition of element	Textual explanation of the reason code.		
Description	If the code does not provide all the information to clearly identify the justification of an eventual amendment or a rejection then the textual information may be provided.		
Size	The maximum length of this information is 512 alphanumeric characters.		
Applicability	This information is dependent.		
Dependence requirements	Used only if the reason code is insufficient to identify an amendment or an error.		

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151 6 XML IMPLEMENTATION OF ACKNOW

6.1 INTRODUCTION

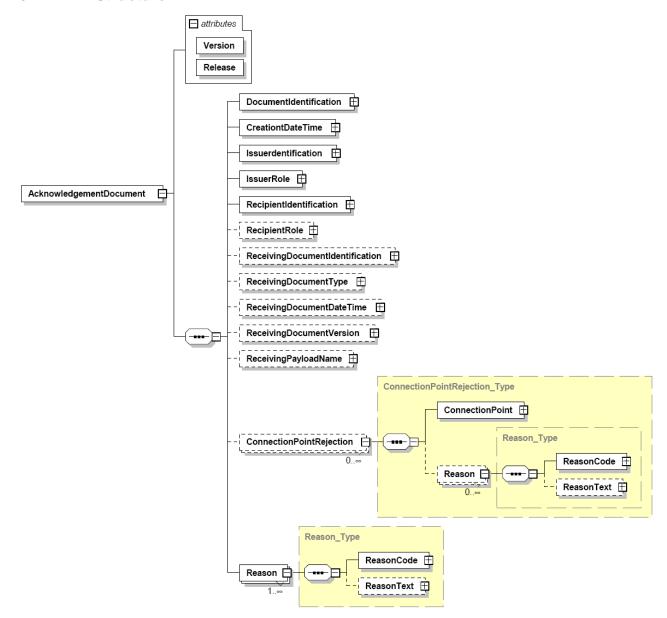
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- 153 All electronic documents using this Implementation guide Specification shall complete the document 154 Version and Release attributes as follows:
 - Version: "EGAS50". This corresponds to the Edig@s package identification.
 - Release: "A". This corresponds to the Message Implementation Guide Version number.

6.2 XML Structure



6.3 XML Schema

```
160
         <?xml version="1.0" encoding="UTF-8"?>
161
         <xsd:schema xmlns:ecc="core-cmpts.xsd" xmlns:xsd="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
162
         attributeFormDefault="unqualified" ecc:VersionRelease="1.0">
163
                  <xsd:import namespace="core-cmpts.xsd" schemaLocation="../cclib/core-cmpts.xsd"/>
164
165
                                     EDIGAS Document Automatically generated from a UML class diagram using XMI.
166
                                     Generation tool version 1.7
167
168
                  <xsd:element name="AcknowledgementDocument">
169
                            <xsd:complexType>
170
                                     <xsd:annotation>
171
                                               <xsd:documentation/>
172
                                     </xsd:annotation>
                                     <xsd:sequence>
                                               <xsd:element name="DocumentIdentification" type="ecc:IdentificationType">
175
                                                         <xsd:annotation>
                                                                   <xsd:documentation/>
177
                                                         </xsd:annotation>
178
179
                                               </xsd:element>
                                               <xsd:element name="CreationtDateTime" type="ecc:MessageDateTimeType">
180
                                                         <xsd:annotation>
181
                                                                  <xsd:documentation/>
                                                         </xsd:annotation>
183
                                               </xsd:element>
184
                                               <xsd:element name="Issuerdentification" type="ecc:PartyType">
185
                                                         <xsd:annotation>
186
                                                                  <xsd:documentation/>
187
                                                         </xsd:annotation>
188
                                               </xsd:element>
189
                                               <xsd:element name="IssuerRole" type="ecc:RoleType">
190
                                                         <xsd:annotation>
                                                                  <xsd:documentation/>
                                                         </xsd:annotation>
192
                                               </xsd:element>
194
                                               <xsd:element name="RecipientIdentification" type="ecc:PartyType">
195
                                                         <xsd:annotation>
196
                                                                  <xsd:documentation/>
197
                                                         </xsd:annotation>
198
                                               </xsd:element>
199
                                               <xsd:element name="RecipientRole" type="ecc:RoleType" minOccurs="0">
200
                                                         <xsd:annotation>
201
                                                                  <xsd:documentation/>
202
                                                         </xsd:annotation>
203
                                               </xsd:element>
204
                                               <xsd:element name="ReceivingDocumentIdentification" type="ecc:IdentificationType"</p>
205
         minOccurs="0">
206
                                                         <xsd:annotation>
207
                                                                  <xsd:documentation/>
208
                                                         </xsd:annotation>
209
                                               </xsd:element>
210
                                               <xsd:element name="ReceivingDocumentType" type="ecc:MessageType" minOccurs="0">
211
                                                         <xsd:annotation>
212
213
                                                                  <xsd:documentation/>
                                                         </xsd:annotation>
214
                                               </xsd:element>
215
216
                                               <xsd:element name="ReceivingDocumentDateTime" type="ecc:MessageDateTimeType"</p>
         minOccurs="0">
217
                                                         <xsd:annotation>
218
219
                                                                  <xsd:documentation/>
                                                         </xsd:annotation>
220
221
222
                                               </xsd:element>
                                               <xsd:element name="ReceivingDocumentVersion" type="ecc:VersionType" minOccurs="0">
                                                         <xsd:annotation>
223
224
225
226
227
228
                                                                   <xsd:documentation/>
                                                         </xsd:annotation>
                                               </xsd:element>
                                               <xsd:element name="ReceivingPayloadName" type="ecc:IdentificationType" minOccurs="0">
                                                         <xsd:annotation>
                                                                  <xsd:documentation/>
229
                                                         </xsd:annotation>
230
231
                                               </xsd:element>
                                               <xsd:element name="ConnectionPointRejection" type="ConnectionPointRejection_Type"</p>
        minOccurs="0" maxOccurs="unbounded"/>
233
                                               <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
234
                                     <xsd:attribute name="Version" type="xsd:string" use="required"/>
```

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250
251
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265
266
267
                                         <xsd:attribute name="Release" type="xsd:string" use="required"/>
                              </xsd:complexType>
                    </xsd:element>
                    <xsd:complexType name="ConnectionPointRejection_Type">
                              <xsd:annotation>
                                         <xsd:documentation/>
                              </xsd:annotation>
                              <xsd:sequence>
                                         <xsd:element name="ConnectionPoint" type="ecc:IdentificationType">
                                                   <xsd:annotation>
                                                              <xsd:documentation/>
                                                   </xsd:annotation>
                                         </xsd:element>
                                         <xsd:element name="Reason" type="Reason_Type" minOccurs="0" maxOccurs="unbounded"/>
                              </xsd:sequence>
                    </xsd:complexType>
                    <xsd:complexType name="Reason_Type">
                              <xsd:annotation>
                                        <xsd:documentation/>
                              </xsd:annotation>
                              <xsd:sequence>
                                         <xsd:element name="ReasonCode" type="ecc:ApplicationErrorType">
                                                   <xsd:annotation>
                                                             <xsd:documentation/>
                                                   </xsd:annotation>
                                         </xsd:element>
                                         <xsd:element name="ReasonText" type="ecc:ReasonTextType" minOccurs="0">
                                                   <xsd:annotation>
                                                              <xsd:documentation/>
                                                   </xsd:annotation>
                                         </xsd:element>
                              </xsd:sequence>
268
                    </xsd:complexType>
269
270
         </xsd:schema>
```

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7 DOCUMENT CHANGE LOG

Package	Version	Date	Description
5.0	А	2010-02-17	Initial release of the prototype for proof of concept implementation
5.0	В	2011-03-25	Added the description of ReceivingDocumentVersion that was missing in the text