



**ENTSO-E
ACKNOWLEDGEMENT
DOCUMENT
(EAD)
IMPLEMENTATION GUIDE**

2010-11-04

DOCUMENT APPROVED
VERSION 5.1

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Revision History

Version	Release	Date	Paragraphs	Comments
4	0	2006-01-25		Initial version
4	1	2007-01-03	Schema	To correct a datatype error in the schema for the TimeIntervalError
4	2	2007-11-15	Section 2.1	Addition of explanation of when the acknowledgement document should be used
5	0	2007-11-19	3.3.5, 3.3.6, 3.3.7, 3.3.10, 3.3.11	Generalisation of the Acknowledgement Document to cater for errors which make the incoming document unreadable.
5	1	2010-10-09		Modification of the Receiving Payload Name size to allow up to 150 characters
				Approved on 2010-10-20 by Market Committee

58

59

REFERENCE DOCUMENTS.

60

1. The ENTSO-E Harmonised Role Model

61

2. A Common Identification System for The Energy Industry, The Energy Identification Coding Scheme - EIC

62

63

64 **1 OBJECTIVE**

65 The objective of this guide is to define the generic technical and application
66 acknowledgement document that can be used in all ENTSO-E processes.

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

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

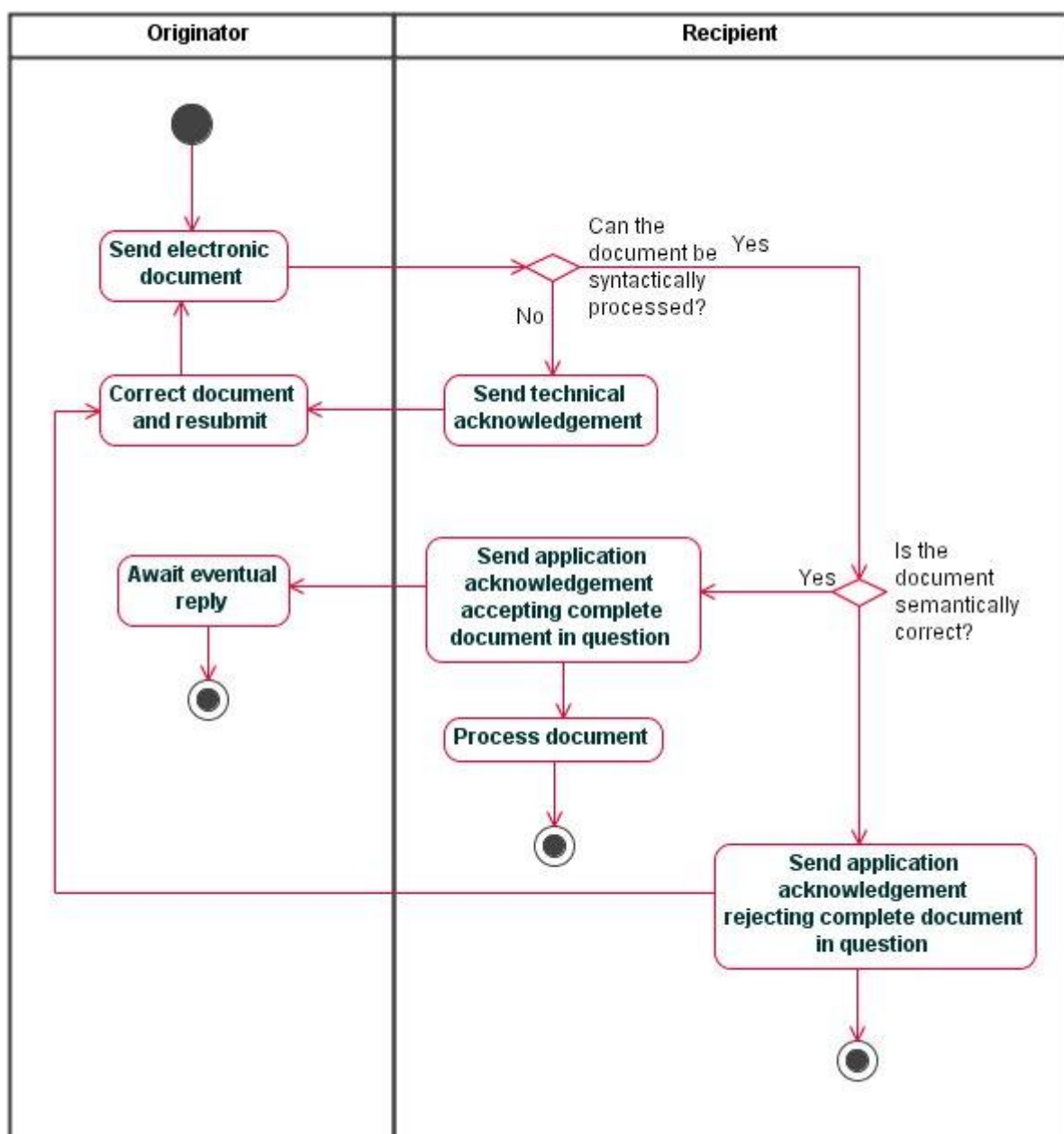
72 If there is a problem encountered at the first level then a technical acknowledgement may be
73 sent to inform the originator of the problem. If errors are encountered at the second level or if
74 the application can successfully process the information then an application
75 acknowledgement may be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

76 The implementation guide is one of the building blocks for using UML (Unified Modelling
77 Language) based techniques in defining processes and electronic documents for interchange
78 between actors in the electrical industry in Europe.

79 **2 THE ACKNOWLEDGEMENT PROCESS OVERVIEW**

80 **2.1 THE OVERALL CONTEXT**

81 The Acknowledgement document fits into a general ENTSO-E acknowledgement process as
 82 outlined in the figure below.



83
 84

FIGURE 1: ACKNOWLEDGEMENT PROCESS

85 The Acknowledgement document shall be used in conjunction with the transmission of all
86 electronic documents defined in the ENTSO-E process Information flow diagrams as
87 required for technical or application acknowledgement.

88 2.1.1 TECHNICAL ACKNOWLEDGEMENT

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

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

97 2.1.2 APPLICATION ACKNOWLEDGEMENT

98 In order to implement effective data exchange there are two specific types of application
99 acknowledgement that must be distinguished:

- 100 a) Data transmission where the originator can be in the market participant type role
101 and recipient can be in an operator type role (such as System Operator,
102 Interconnection Capacity Allocator, ...).
- 103 b) Data transmission where originators can be in an operator type role and
104 recipient can be in market participant type role.
- 105 c) Data transmission where both originator and recipient are in the operator type
106 role.

107 With transmission of type (a) and (c) as described above, the following procedure is to be
108 applied upon reception to verify at the application level that there are no faults in it that could
109 prevent its correct processing:

- 110 1) A document that is valid after this verification shall necessitate the generation of an
111 ENTSO-E Acknowledgement document accepting in its entirety the document in
112 question.
- 113 2) A document that has an error in it shall necessitate the generation of an ENTSO-E
114 Acknowledgement document that can completely or partially reject the document in
115 question.

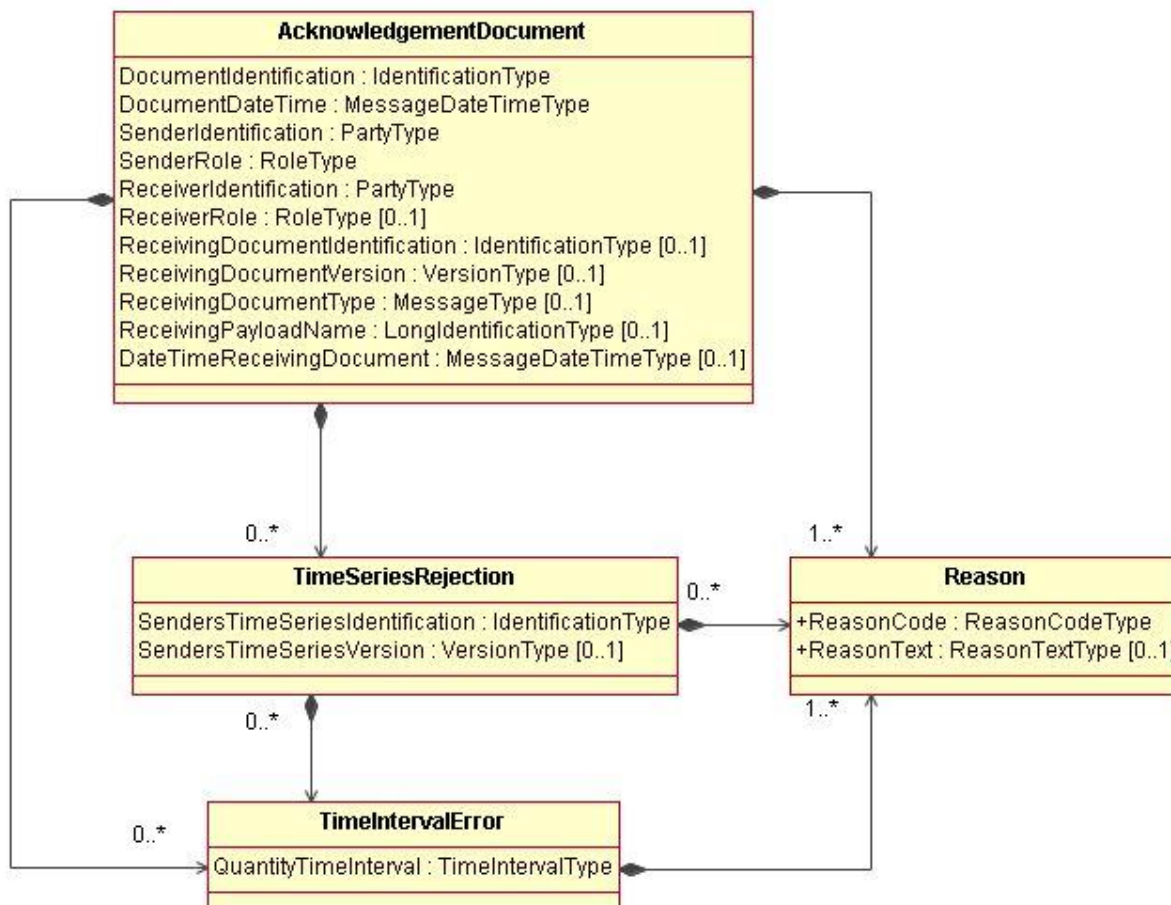
116 This acknowledgment sequence will not be described systematically in the ENTSO-E
117 information flows, but it shall be considered an integral part of each transmission.

118 With transmission of type (b) as described above, all electronic documents sent by entities in
119 the role of an operator shall be considered as received and correct and the
120 acknowledgement process is not required unless an Acknowledgement document is required
121 by a specific process.

122 3 ACKNOWLEDGEMENT DOCUMENT

123 IMPLEMENTATION

124 3.1 INFORMATION MODEL



125

126 3.2 RULES GOVERNING THE ACKNOWLEDGEMENT DOCUMENT

127 IMPLEMENTATION

128 An Acknowledgement document is sent to the party to acknowledge reception of the
 129 document identified in the acknowledgement. For example it may be sent to confirm
 130 reception of a schedule document immediately after a first level series of validations
 131 have been carried out.

132 If an electronic document cannot be successfully processed a technical
 133 acknowledgement shall be transmitted to inform the originator that the document in
 134 question cannot be processed and consequently cannot be sent to the application for
 135 processing. This technical acknowledgment may be either through an XML
 136 Acknowledgement document or through another form of communication.

137 The originator of the acknowledgement document is the receiver of the document
 138 being acknowledged. The receiver of the acknowledgment document is the sender of
 139 the document being acknowledged.

140 Generally speaking, the document being acknowledged will have been validated in
 141 situ to ensure that it may be correctly processed by the application. The validation can
 142 also be carried out against a previous version of the same document (in order to
 143 identify an incomplete time series set for example).

144 The Acknowledgement document transmission to the party concerned should not be
 145 delayed.

146 3.3 RULES GOVERNING THE ACKNOWLEDGEMENT DOCUMENT CLASS

147 3.3.1 DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the acknowledgement of a document that has been received.
Description	An acknowledgement document is sent in reply to the receipt of a document. This identification is assigned by the party who is acknowledging the application reception of a document An acknowledgement is sent for the receipt of every document in the information flow as requiring an acknowledgement.
Size	The acknowledgement identification may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

148 3.3.2 DOCUMENT DATE AND TIME

ACTION	DESCRIPTION
Definition of element	Date and time of transmission of the acknowledgement.
Description	The date and time that the document was prepared for transmission by the sender.
Size	The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is mandatory.
Dependence requirements	None.

149 3.3.3 SENDER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party that is the originator of the acknowledgement.
Description	<p>The originator of the acknowledgement is identified by a unique coded identification. This value should be the same as that found in the receiver identification of the document being acknowledged.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E Code list document for valid coding scheme codes.</p>
Size	<p>The maximum length of a sender's identification is 16 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
Applicability	This information is mandatory.
Dependence requirements	None.

150 3.3.4 SENDER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the originator of the document.
Description	<p>The sender role, which identifies the role of the originator within the document.</p> <p>Refer to ENTSO-E Code list document for valid role codes.</p>
Size	The maximum length of a sender role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

151 3.3.5 RECEIVER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is the recipient of the acknowledgement.
Description	<p>The recipient of the document is identified by a unique coded identification. This should be the same value as the sender of the schedule document.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E Code list document for valid coding scheme codes.</p>
Size	<p>The maximum length of a receiver's identification is 16 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
Applicability	This information is mandatory.
Dependence requirements	None.

152 3.3.6 RECEIVER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the receiver.
Description	<p>The receiver role, which identifies the role of the receiver within the document.</p> <p>Refer to ENTSO-E Code list document for valid role codes.</p>
Size	The maximum length of a receiver role is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	If a document cannot be successfully parsed on entry then the role of the sender may be unknown (e.g. document incorrect vis a vis the schema, or document file cannot be processed.)

153 3.3.7 RECEIVING DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the document that has been received.
Description	This information identifies the document that has been received by the receiving party. The identification is extracted from the received document.
Size	A receiving document code identification may not exceed 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	If the document cannot be successfully processed this information may not be available

154 3.3.8 RECEIVING DOCUMENT VERSION

ACTION	DESCRIPTION
Definition of element	Version of the document received.
Description	The version of the document that has been received.
Size	A version number may not exceed 3 numeric characters.
Applicability	This information is dependent.
Dependence requirements	The document version must be provided for all documents being acknowledged that have a document version attribute.

155 3.3.9 RECEIVING DOCUMENT TYPE

ACTION	DESCRIPTION
Definition of element	Type of the document received.
Description	The document type is used to identify the type of document being acknowledged.
Size	A document type may not exceed 3 alpha-numeric characters.
Applicability	This information is dependent.
Dependence requirements	The document type is mandatory in contexts where there is potential ambiguity about the document being acknowledged.

156 3.3.10 RECEIVINGPAYLOADNAME

ACTION	DESCRIPTION
Definition of element	The name of the file or the payload identification that contains the document that cannot be processed.
Description	A document can be received via an FTP server, or a Mime payload. Whenever it cannot be processed, this field is used by the technical acknowledgement to identify the container of the document for facilitate the sender in identifying it.
Size	The Receiving Payload Name may not exceed 150 alphanumeric characters.
Applicability	This information is dependent
Dependence requirements	This information is only provided in the case where an electronic document cannot be processed due to a content error by the receiving system.

157 3.3.11 DATE TIME RECEIVING DOCUMENT

ACTION	DESCRIPTION
Definition of element	Date and time of reception of the electronic document
Description	The date and time that the document was received by the receiving system.
Size	The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is dependent.
Dependence requirements	This information is provided only if it has been agreed between the two parties.

158 3.4 RULES GOVERNING THE REASON CLASS

159 If the acknowledgement of a document is without error only one reason element is
 160 necessary at the acknowledgement header level. However, if there are errors then
 161 there may be as many “reason” elements as are necessary to describe any errors
 162 discovered in the received document.

163 At least one reason element must appear associated with the header part of the
 164 document.

165 If there are errors at the time series level as many reason elements as necessary
 166 may be found at that level.

167 If there are errors at the time interval level as many reason elements as necessary
 168 may be used. It should be noted that the relative position transmit in the original
 169 document will have been converted to an absolute time interval whenever errors
 170 occur at this level in the acknowledgement document. Errors concerning the period
 171 class of a document shall be related directly to the time series in question.

172
 173

The reason codes imply that certain elements are absent or present as detailed in the following table:

Reason code	Document level elements	Time series level elements		Interval level elements
A01	M			
A02	M			
A03	M	M	A20	
		M	A21	M A42, A46, A49, A59
		M	A41 (Period)	
		M	A50	
		M	A55	
		M	A56	
		M	A57	
		M	A59	
A04	M			
A51	M			
A52	M			
A53	M			
A59	M			

174

175 3.4.1 REASON CODE

ACTION	DESCRIPTION
Definition of element	<p>A code providing the acknowledgement status. Currently the following status's have been identified:</p> <p><u>At the document level :</u></p> <p>A01: Message fully accepted A02: Message fully rejected A03: Message contains errors at the time series level A04: Schedule time interval incorrect A51: Message identification or version conflict A52: Time series missing from new version of message A53: Receiving party incorrect A59: Not compliant with local market rules A94. Document cannot be processed by receiving system</p> <p><u>At the time series level</u></p> <p>A20: Time series fully rejected A21: Time series accepted with specific time interval errors A41: Resolution inconsistency A50: Senders time series version conflict A55: Time series identification conflict A56: Corresponding time series not netted A57: Deadline limit exceeded A59: Not compliant with local market rules</p> <p>Other codes may be found in the dedicated Implementation Guides.</p>
Description	<p>The reason code provides the status of the acknowledgement. If the receiving document is fully accepted then there is simply a reason code (A01) at the header part of the acknowledgement. For errors as many reason elements as necessary may be used.</p>
Size	<p>The maximum length of this information is 3 alphanumeric characters.</p>
Applicability	<p>This information is mandatory after the Acknowledgement level and TimeIntervalError level. It is dependent at TimeSeriesRejection level.</p>
Dependence requirements	<p>This information is mandatory after the acknowledgement and the TimeIntervalError elements. It is not necessary at the TimeSeriesRejection level if and only if TimeIntervalError elements are identified.</p>

176 **3.4.2 REASON TEXT**

ACTION	DESCRIPTION
Definition of element	Textual description of a rejection.
Description	If the code does not provide all the information to clearly identify an error the reason text may be used.
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 error.

177 **3.5 RULES GOVERNING THE TIME SERIES REJECTION CLASS**

178 A time series rejection element is used in three circumstances.

- 179 1. In the first case to identify a time series which has been completely rejected.
- 180 2. In the second case to identify a time series where there are selective errors at
- 181 the time interval level.
- 182 3. In the third case it is used to identify time intervals that are not in balance in
- 183 the context of the global position of the incoming document. In this case the
- 184 class is dependent on the document level as opposed to the time series level.
- 185 This is because it is not possible to identify the specific time series where the
- 186 imbalance occurs. This class at the document level can only exist when an
- 187 error condition A54 occurs. In all other cases it is invalid.

188 If the time series is completely rejected one or multiple reason elements are required

189 to identify the error.

190 If there are selective errors a reason element is not required after the time series,

191 however, if it provides useful information such an element may be used.

192 **3.5.1 SENDERS TIME SERIES IDENTIFICATION**

ACTION	DESCRIPTION
Definition of element	Sender's identification of the time series instance that was received.
Description	The identification code provided in the schedule document to identify a time series.
Size	The maximum length of this information is 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Used only to identify specific time series that is subject to rejection. If the schedule document is completely accepted this information is not transmitted.

193 **3.5.2 SENDERS TIME SERIES VERSION**

ACTION	DESCRIPTION
Definition of element	The time series version assigned by the schedule document sender to a specific sender's time series identification.
Description	The version number associated with the time series identification to which an error is referring.
Size	The maximum length of this information is 3 numeric characters.
Applicability	This information is dependent.
Dependence requirements	Used only to identify specific time series that is subject to rejection. If the schedule document is completely accepted this information is not transmit.

194 **3.6 RULES GOVERNING THE TIME INTERVAL ERROR CLASS**

195 In this case of a rejection this element may be used to identify specific time series
 196 intervals that are in error. The intervals in question are calculated by the receiver from
 197 the position as identified in the incoming document. In this case of a global position
 198 imbalance it is determined from the imbalance calculation.

199 In general the reason text can be used to explain clearly the motivation for the
 200 rejection.

201 A reason element is mandatory with every time period error element.

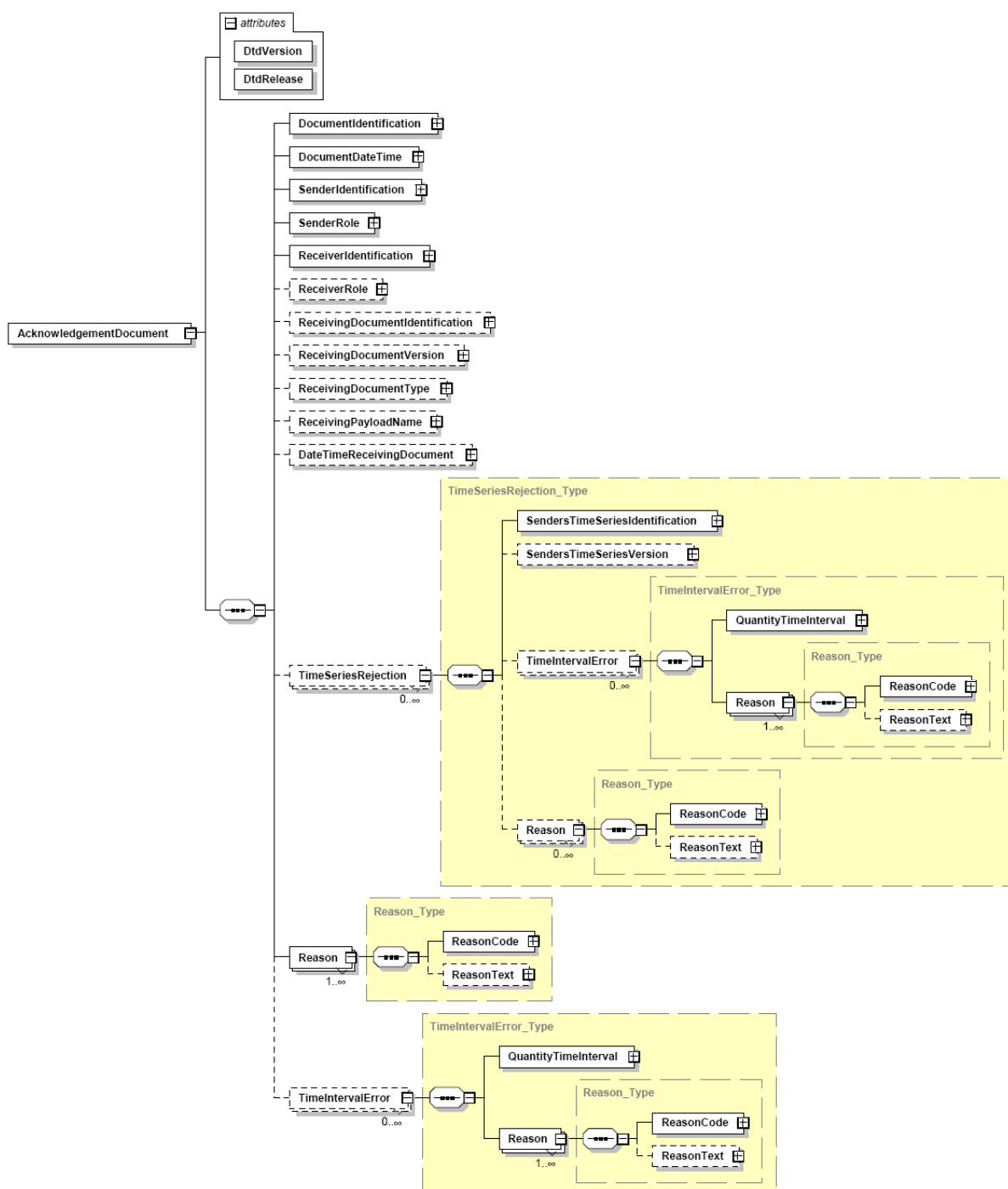
202 **3.6.1 QUANTITY TIME INTERVAL**

ACTION	DESCRIPTION
Definition of element	The start and end date and time of the time period in error.
Description	This information is used to identify the time interval that has been identified as being in error. This is a calculated value using the position in question, the resolution and the start of the time interval of the period. If the reason code is insufficient to explain the motivation for the rejection, the reason text may be used.
Size	YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.
Applicability	This information is dependent.
Dependence requirements	Used only if a specific time interval is to be identified.

203 **4 XML DEFINITIONS**

204 **4.1 ACKNOWLEDGEMENT DOCUMENT - SCHEMA STRUCTURE**

205



206

207 4.2 ACKNOWLEDGEMENT DOCUMENT – SCHEMA DEFINITION

```

208 <?xml version="1.0" encoding="UTF-8"?>
209 <xsd:schema xmlns:ecc="etso-core-cmpts.xsd" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
210 elementFormDefault="qualified" attributeFormDefault="unqualified" ecc:VersionRelease="13.0">
211   <xsd:import namespace="etso-core-cmpts.xsd" schemaLocation="../core/etso-core-cmpts.xsd"/>
212   <!--
213           ENTSO-E Document Automatically generated from a UML class diagram using XML.
214           Generation tool version 1.7
215   -->
216   <xsd:element name="AcknowledgementDocument">
217     <xsd:complexType>
218       <xsd:annotation>
219         <xsd:documentation/>
220       </xsd:annotation>
221       <xsd:sequence>
222         <xsd:element name="DocumentIdentification" type="ecc:IdentificationType">
223           <xsd:annotation>
224             <xsd:documentation/>
225           </xsd:annotation>
226         </xsd:element>
227         <xsd:element name="DocumentDateTime" type="ecc:MessageDateTimeType">
228           <xsd:annotation>
229             <xsd:documentation/>
230           </xsd:annotation>
231         </xsd:element>
232         <xsd:element name="SenderIdIdentification" type="ecc:PartyType">
233           <xsd:annotation>
234             <xsd:documentation/>
235           </xsd:annotation>
236         </xsd:element>
237         <xsd:element name="SenderRole" type="ecc:RoleType">
238           <xsd:annotation>
239             <xsd:documentation/>
240           </xsd:annotation>
241         </xsd:element>
242         <xsd:element name="ReceiverIdentification" type="ecc:PartyType">
243           <xsd:annotation>
244             <xsd:documentation/>
245           </xsd:annotation>
246         </xsd:element>
247         <xsd:element name="ReceiverRole" type="ecc:RoleType" minOccurs="0">
248           <xsd:annotation>
249             <xsd:documentation/>
250           </xsd:annotation>
251         </xsd:element>
252         <xsd:element name="ReceivingDocumentIdentification" type="ecc:IdentificationType"
253           minOccurs="0">
254           <xsd:annotation>
255             <xsd:documentation/>
256           </xsd:annotation>
257         </xsd:element>
258         <xsd:element name="ReceivingDocumentVersion" type="ecc:VersionType"
259           minOccurs="0">
260           <xsd:annotation>
261             <xsd:documentation/>
262           </xsd:annotation>
263         </xsd:element>
264         <xsd:element name="ReceivingDocumentType" type="ecc:MessageType"
265           minOccurs="0">
266           <xsd:annotation>
267             <xsd:documentation/>
268           </xsd:annotation>
269         </xsd:element>
270         <xsd:element name="ReceivingPayloadName" type="ecc:LongIdentificationType"
271           minOccurs="0">
272           <xsd:annotation>
273             <xsd:documentation/>
274           </xsd:annotation>
275         </xsd:element>

```

```

276                                     <xsd:element name="DateTimeReceivingDocument"
277 type="ecc:MessageDateTimeType" minOccurs="0">
278                                     <xsd:annotation>
279                                         <xsd:documentation/>
280                                     </xsd:annotation>
281                                     </xsd:element>
282                                     <xsd:element name="TimeSeriesRejection" type="TimeSeriesRejection_Type"
283 minOccurs="0" maxOccurs="unbounded"/>
284                                     <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
285                                     <xsd:element name="TimeIntervalError" type="TimeIntervalError_Type" minOccurs="0"
286 maxOccurs="unbounded"/>
287                                     </xsd:sequence>
288                                     <xsd:attribute name="DtdVersion" type="xsd:string" use="required"/>
289                                     <xsd:attribute name="DtdRelease" type="xsd:string" use="required"/>
290                                 </xsd:complexType>
291 </xsd:element>
292 <xsd:complexType name="TimeSeriesRejection_Type">
293     <xsd:annotation>
294         <xsd:documentation/>
295     </xsd:annotation>
296     <xsd:sequence>
297         <xsd:element name="SendersTimeSeriesIdentification" type="ecc:IdentificationType">
298             <xsd:annotation>
299                 <xsd:documentation/>
300             </xsd:annotation>
301         </xsd:element>
302         <xsd:element name="SendersTimeSeriesVersion" type="ecc:VersionType" minOccurs="0">
303             <xsd:annotation>
304                 <xsd:documentation/>
305             </xsd:annotation>
306         </xsd:element>
307         <xsd:element name="TimeIntervalError" type="TimeIntervalError_Type" minOccurs="0"
308 maxOccurs="unbounded"/>
309         <xsd:element name="Reason" type="Reason_Type" minOccurs="0" maxOccurs="unbounded"/>
310     </xsd:sequence>
311 </xsd:complexType>
312 <xsd:complexType name="TimeIntervalError_Type">
313     <xsd:annotation>
314         <xsd:documentation/>
315     </xsd:annotation>
316     <xsd:sequence>
317         <xsd:element name="QuantityTimeInterval" type="ecc:TimeIntervalType">
318             <xsd:annotation>
319                 <xsd:documentation/>
320             </xsd:annotation>
321         </xsd:element>
322         <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
323     </xsd:sequence>
324 </xsd:complexType>
325 <xsd:complexType name="Reason_Type">
326     <xsd:annotation>
327         <xsd:documentation/>
328     </xsd:annotation>
329     <xsd:sequence>
330         <xsd:element name="ReasonCode" type="ecc:ReasonCodeType">
331             <xsd:annotation>
332                 <xsd:documentation/>
333             </xsd:annotation>
334         </xsd:element>
335         <xsd:element name="ReasonText" type="ecc:ReasonTextType" minOccurs="0">
336             <xsd:annotation>
337                 <xsd:documentation/>
338             </xsd:annotation>
339         </xsd:element>
340     </xsd:sequence>
341 </xsd:complexType>
342 </xsd:schema>

```

343 5 ACKNOWLEDGEMENT DOCUMENT – DTD

```
344 <?xml version="1.0" encoding="ISO-8859-1"?>
345 <!--DTD generated by XMLSPY v2004 rel. 3 U (http://www.xmlspy.com)-->
346 <!ELEMENT AcknowledgementDocument (DocumentIdentification, DocumentDateTime, SenderIdentification, SenderRole,
347 ReceiverIdentification, ReceiverRole?, ReceivingDocumentIdentification?, ReceivingDocumentVersion?,
348 ReceivingDocumentType?, ReceivingPayloadName?, DateTimeReceivingDocument?, TimeSeriesRejection*, Reason+,
349 TimeIntervalError*)>
350 <!ATTLIST AcknowledgementDocument
351     DtdVersion CDATA #REQUIRED
352     DtdRelease CDATA #REQUIRED
353 >
354 <!ELEMENT DocumentIdentification EMPTY>
355 <!ATTLIST DocumentIdentification
356     v CDATA #REQUIRED
357 >
358 <!ELEMENT DocumentDateTime EMPTY>
359 <!ATTLIST DocumentDateTime
360     v CDATA #REQUIRED
361 >
362 <!ELEMENT SenderIdentification EMPTY>
363 <!ATTLIST SenderIdentification
364     v CDATA #REQUIRED
365     codingScheme NMTOKEN #REQUIRED
366 >
367 <!ELEMENT SenderRole EMPTY>
368 <!ATTLIST SenderRole
369     v NMTOKEN #REQUIRED
370 >
371 <!ELEMENT ReceiverIdentification EMPTY>
372 <!ATTLIST ReceiverIdentification
373     v CDATA #REQUIRED
374     codingScheme NMTOKEN #REQUIRED
375 >
376 <!ELEMENT ReceiverRole EMPTY>
377 <!ATTLIST ReceiverRole
378     v NMTOKEN #REQUIRED
379 >
380 <!ELEMENT ReceivingDocumentIdentification EMPTY>
381 <!ATTLIST ReceivingDocumentIdentification
382     v CDATA #REQUIRED
383 >
384 <!ELEMENT ReceivingDocumentVersion EMPTY>
385 <!ATTLIST ReceivingDocumentVersion
386     v CDATA #REQUIRED
387 >
388 <!ELEMENT ReceivingDocumentType EMPTY>
389 <!ATTLIST ReceivingDocumentType
390     v NMTOKEN #REQUIRED
391 >
392 <!ELEMENT ReceivingPayloadName EMPTY>
393 <!ATTLIST ReceivingPayloadName
394     v CDATA #REQUIRED
395 >
396 <!ELEMENT DateTimeReceivingDocument EMPTY>
397 <!ATTLIST DateTimeReceivingDocument
398     v CDATA #REQUIRED
399 >
400 <!ELEMENT TimeSeriesRejection (SendersTimeSeriesIdentification, SendersTimeSeriesVersion?, TimeIntervalError*,
401 Reason*)>
402 <!ELEMENT Reason (ReasonCode, ReasonText?)>
```

```

403 <ELEMENT TimeIntervalError (QuantityTimeInterval, Reason+)>
404 <ELEMENT SendersTimeSeriesIdentification EMPTY>
405 <!ATTLIST SendersTimeSeriesIdentification
406     v CDATA #REQUIRED
407 >
408 <ELEMENT SendersTimeSeriesVersion EMPTY>
409 <!ATTLIST SendersTimeSeriesVersion
410     v CDATA #REQUIRED
411 >
412 <ELEMENT ReasonCode EMPTY>
413 <!ATTLIST ReasonCode
414     v NMTOKEN #REQUIRED
415 >
416 <ELEMENT ReasonText EMPTY>
417 <!ATTLIST ReasonText
418     v CDATA #REQUIRED
419 >
420 <ELEMENT QuantityTimeInterval EMPTY>
421 <!--v:
422     ISO 8601 time intervals are always expressed in the form
423     yyyy-mm-ddThh:mmZ/yyyy-mm-ddThh:mmZ
424     Note: The minimum XML form of dateTime is yyyy-mm-ddThh:mm:ssZ
425     -->
426 <!ATTLIST QuantityTimeInterval
427     v CDATA #REQUIRED
428 >

```

429 6 ACKNOWLEDGEMENT DOCUMENT - DATA INSTANCE

```

430 <?xml version="1.0" encoding="UTF-8"?>
431 <?xml-stylesheet type="text/xsl" href="acknowledgement-document.xsl"?>
432 <!--Sample XML file generated by XMLSPY v2004 rel. 3 U (http://www.xmlspy.com)-->
433 <AcknowledgementDocument DtdVersion="4" DtdRelease="0">
434     <DocumentIdentification v="MyAcknowledgement"/>
435     <DocumentDateTime v="2005-10-03T11:14:00Z"/>
436     <SenderIdentification v="10XRECEIVER-OFD8" codingScheme="A01"/>
437     <SenderRole v="A04"/>
438     <ReceiverIdentification v="10XSENDER-OF-DO5" codingScheme="A01"/>
439     <ReceiverRole v="A27"/>
440     <ReceivingDocumentIdentification v="MyIdentification"/>
441     <ReceivingDocumentVersion v="1"/>
442     <Reason>
443         <ReasonCode v="A05"/>
444     </Reason>
445 </AcknowledgementDocument>

```

446 7 CONTRIBUTORS

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