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UNITED NATIONS CENTRE FOR TRADE FACILITATION
AND ELECTRONIC BUSINESS (UN/CEFACT)

**BUSINESS REQUIREMENTS SPECIFICATION
(BRS)**

**CROSS DOMAIN APPLICATION ERROR AND
ACKNOWLEDGEMENT PROCESS**

FINAL AFTER PUBLIC REVIEW

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1 Introduction

The current practice of the exchange of business documents (a.k.a. business data exchange structures or messages) by means of telecommunications – usually defined as e-Business presents a major opportunity to improve the competitiveness of companies, especially for Small and Medium Enterprises (SME). The (Cross-Industry) Acknowledgement process has been compiled using the UN/EDIFACT APERAK as a base, with contributions and submissions from: VDA, ODETTE, GS1, UN/CEFACT Japan Committee. Also, existing requirements of sectoral PDA Agriculture and PDA Supply Chain were taken into account. These structures are reworked to a generic design offering industry groups or local user communities the opportunity to contextualize the information by using the UN/CEFACT Core Component Business Document Assembly (CCBDA) methodology.

The essence of the Acknowledgement process is validating the business document received, both technically and semantically (business logic). The process involves a couple of information exchanges in order to inform the sender that his business document has been received, accepted, rejected or changed in process status during its lifecycle. All business partners have an interest that any errors or process changes of life cycle status are identified and communicated, efficiently and unambiguously so that the necessary actions can be made. At the same time, it is crucial that a reason why an error or change in process status has occurred is recorded in an accurate and transparent manner. For speeding up the correction process, the recipient of the business document may provide the needed actions in order to resolve errors.

2 Objective

The objective of this document is to standardize the Business processes, the Business transactions and the Information entities of the Acknowledgement process used by different industries (cross-industry). The business process is the detailed description of the way trading partners intend to play their respective roles, establish business relations and share responsibilities to interact efficiently with the support of their respective information systems. Each Business transaction is realized by an exchange of Business documents. The sequences in which these documents are used, composes a particular instance of a scenario and are presented as activity diagrams in the document.

3 Audience

The audience of this document is all users who are interested in the Acknowledgement process and information data.

4 Reference Documents

Knowledge and application of the following standards is crucial to the development of quality business requirements specifications.

- UN/CEFACT Modelling Methodology (CEFACT/TMG/N090R10, November 2001)
- UN/CEFACT Business Requirement Specification – Template v2.0.1 (May 2012)
- UN/CEFACT Core Components Technical Specification – Part 8 of the ebXML Framework, Version 2.01
- UN/CEFACT Core Components Business Document Assembly Technical Specification, CCBDA, version 1.0
- UN/CEFACT XML Naming and Design Rules for CCTS 2.01 Version 2.1
- dated 27 May 2014
- UN/CEFACT Requirements Specification Mapping (RSM) Documentation Template Guidelines Version 2.0, dated May 2012
- UN/CEFACT Code Management User Guide Version 1.0, dated 2017

5 Change log

Date of Change	Version	Changed	Summary of Changes
1- July – 2020	01.00	-	Initial Draft
8- July- 2020	02.00	Process status and handling warnings compared to errors Recommended code lists and code values added	Review of the process section.
15-July-2020	03.00	Clarification on the use of status.	Preparing document for public review.
22-July-2020	0.400	Further clarification on the use of status.	Fig. 6.3, 6.4 added Party URI Communication added Fig. 8.1 aligned with table 8.2.1 Further clarification added in text.
29-July-2020	0.500	Further clarification on the use of status.	Updated fig. 6.1 till 6.3 Added Process Status to Referenced Document Added principle for issue specification
15-October-2020	0.600	Editorial change	Resolved comments of the public review.
11-November- 2020	0.700	Approved by the UN/CEFACT Bureau	Decision number 2011056
14-December- 2020	1.0	Change in document name. Minor modifications in the Message Core Components. Approved by the UN/CEFACT Bureau	Decision number 2012069

6 Business Requirements View

6.1 Business Domain View

This section describes the extent and limits of the business process within the supply chain being described in this document.

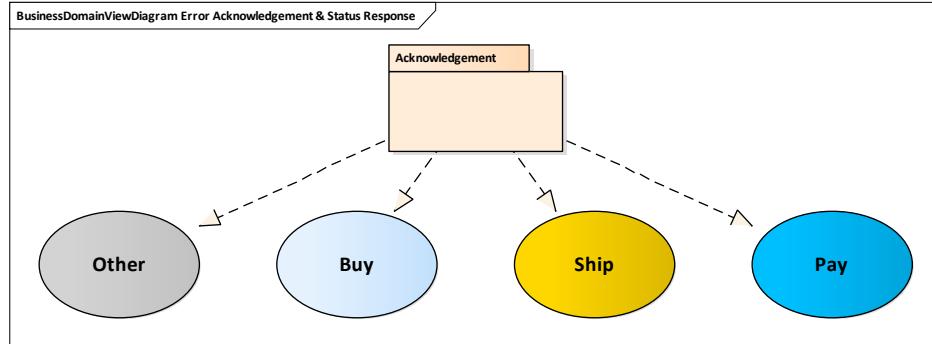


Figure 6-1 Positioning the Acknowledge process within the UN/CEFACT Process Models

Table 6-1 Context categories

Categories	Description and Values
Business Process	Acknowledgement process in all business domains (BUY-SHIP-PAY and other Cross-Industry domains).
Product Classification	All
Industry Classification	All
Geopolitical	Global
Official Constraint	None
Business Process Role	Sender, Recipient
Supporting Role	Issuer, Service Provider
System Capabilities	No limitations

Note:

The processes defined apply in principle to the collaboration between Sender (issuer of a business document) and Recipient (designated Recipient of the business document) but a Sender's Service Provider and Recipient's Service Provider (a.k.a. Access Point) could take a role in the process.

The requirements for the acknowledgement process are specified in below numbered list:

Table 6-2 Business Requirements

Nr.	Business Requirement Statement
A.1	Function of the Cross-Industry Acknowledgement message is to inform the business document sender/issuer that his message: - has been received. - has been accepted (either with or without warnings). - has been rejected. - has a process status change
A.2	The exchanged document may specify a sender, recipient, issuer party.
A.3	The exchanged document and referenced document may have a note.
A.4	The acknowledgement message has 1 and may have 1..n acknowledgement documents which may have 1 or 1..n referenced documents. Commonly the message will have 1 acknowledgement document with 1 referenced document and possibly specifying 1 or more issues. Especially, in case of batch processing, the Acknowledgement message could have multiple Acknowledgement documents or one Acknowledgement Documents referring to one or more documents.

Nr.	Business Requirement Statement
A.5	A referenced document may specify further details on issues occurred (errors, warnings, process status changes).
A.6	A referenced document may specify a sender, recipient(s) or issuer party.
A.7	A party may have an address, contact and communication details.
A.8	An error, warning can be the result of the message/application validation or the result of a wrong message envelop data (e.g. wrong recipient, document type incorrect, non-processable document).
A.9	Details on occurred issues can be reported per referenced document.
A.10	The issue details may contain further details on an error, warning or process status change, such as an error code, an action code, the invalid information (the received incorrect data), valid information (the expected data to be received) etc.
A.11	A referenced document included note may specify even addition details, such as the error position within the message (e.g. using an xpath), the involved attribute name, a line ID etc).
A.12	It is recommended to differentiate “Accepted” status from “Accepted with warnings”, by this the recipient of the Acknowledgement message can easily filter on documents accepted without or with warnings and can work on the warning to prevent them in documents to be send.

6.1.1 Status and reason on Acknowledgement Document level

Below diagram shows the functions of the acknowledgement message, listed under A.1 of the business requirement statement. The acknowledgement message has two meta data components, the Exchange Document and the Exchanged Document Context. The Acknowledgement message contains one or more Acknowledgement Documents each with one or more referenced documents. On Acknowledgement Document level the status of the referenced document is being specified, possibly with a reason text which occurs especially in case of errors and warnings.

Note: The Acknowledgement Document could refer to multiple referenced documents, as long as the status and reason applies to all of them.

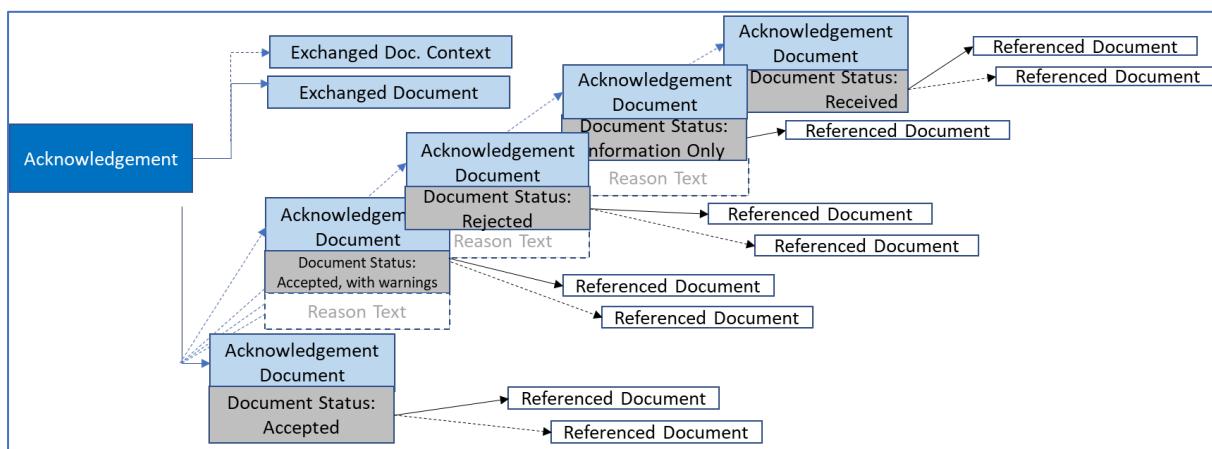


Figure 6-2 Status and reason on Acknowledgement Document level

6.1.2 Status on Acknowledgement level and further details

Below diagram shows the functions of the acknowledgement message, listed under A.1 of the business requirement statement. The acknowledgement message uses the same document meta data as above diagram. The Acknowledgement message contains one or more Acknowledgement Documents each with one or more referenced documents. On Acknowledgement Document the status of the referenced documents is being specified. On the level of the referenced document, structured details can be specified especially in case of errors and warnings.

Details per referenced document may concern:

- Status (document or process related)
- Reason
- Additional reason information

- Reason classification
- Requested Action
- Valid or Invalid Information
- Included Note (for additional information)

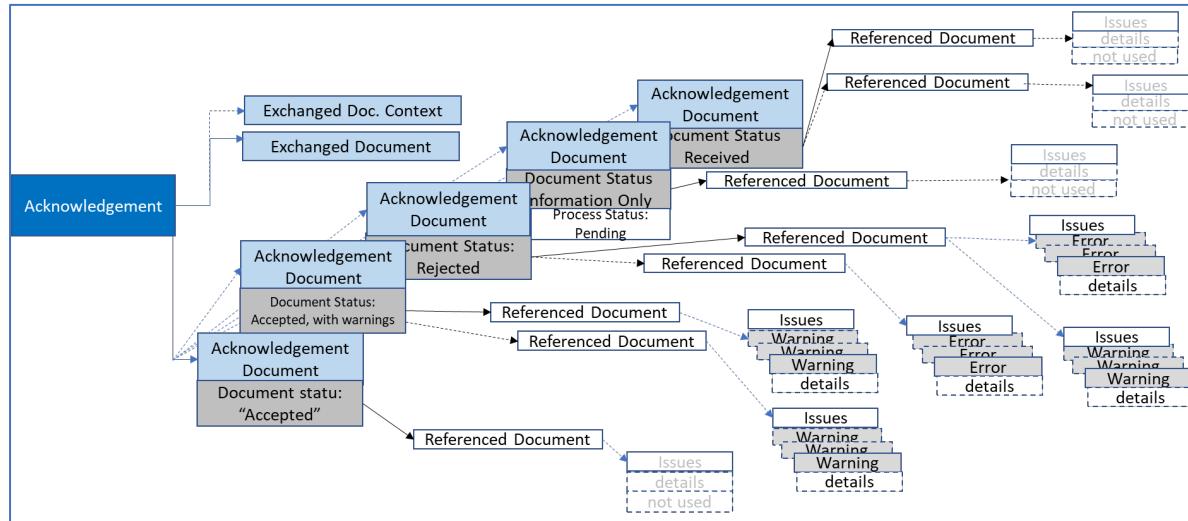


Figure 6-3 Status on Acknowledgement level and further details per referenced document

6.1.1 Status and details on Referenced Document level

Below diagram shows the functions of the acknowledgement message, listed under A.1 of the business requirement statement. The acknowledgement message uses the same document meta data as above diagrams. The Acknowledgement message contains one or more Acknowledgement Documents with one or more referenced documents. The Referenced Document specifies the status and, especially in case of errors or warnings, structured details.

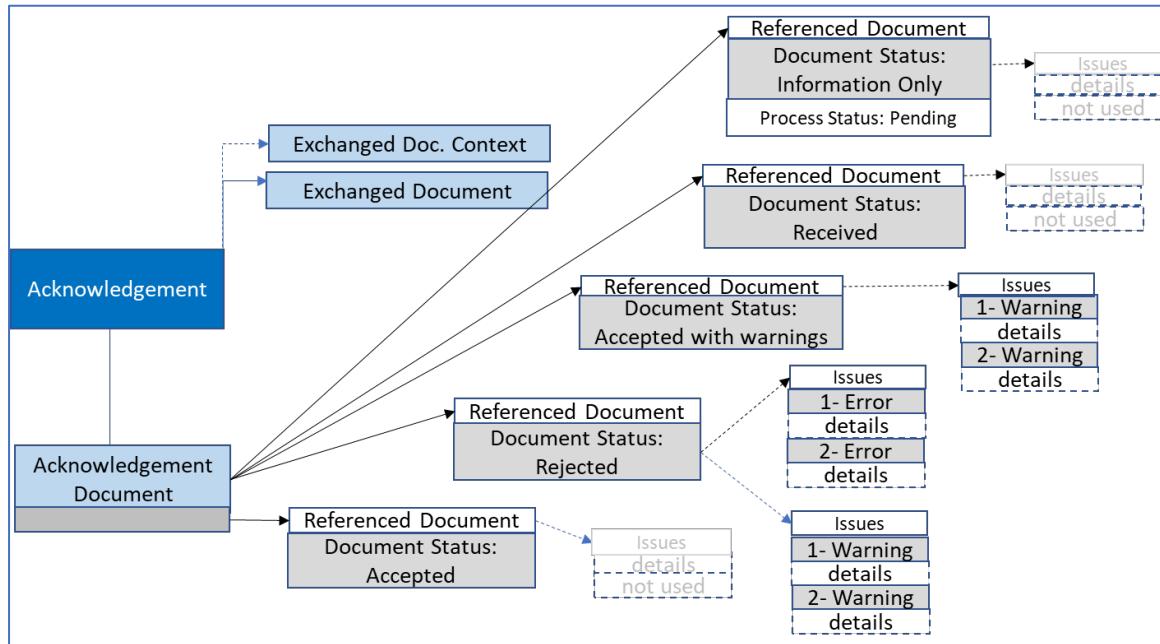


Figure 6-4 Status and details on referenced document level

6.2 Principles

- The recipient of the business document and sender of the acknowledgement should send the necessary details in case of issues being errors and/or warnings.
- The recipient of an Acknowledgement should be able to process the following document statuses:

- Received
 - Accepted
 - Accepted with warnings
 - Rejected
 - Information (*in case of process status reports*)
- The recipient of an Acknowledgement message should be able to document status and process status information regarding the referenced document(s).
 - Each referenced document may contain the “total number of issues found”, either being detailed as errors, warnings or process status changes.
 - A document status and/or process status can be provided on Acknowledgement Document level, Referenced Document level and Referenced Document details (issue) level.
 - In case of multiple specified issues, their “type” should not contradict the essence of the document and/or process status mentioned on a higher level, Referenced Document or Acknowledgement Document. Example: issues of different types, such as errors and warnings, should not contradict the essence of the document status specified on a higher level, such as “Rejected”. It is recommended to cluster issues of the same type for a particular document status or process status.
 - It is recommended to generate per received business document an Acknowledgement message.
 - It is recommended to differentiate Acknowledgement messages invoked during the message validation, application validation and document life cycle (process status). In this document different document type codes can be used for this, see section 8.2.1 Document types codes (1001).

Table 6-3 Data Domains

Data Domains	
B.1	Exchanged Document
B.2	Exchanged Document Context
B.3	Acknowledgement Document
B.4	Party
B.5	Address
B.6	Contact
B.7	Communication
B.8	Referenced Document
B.0	Note
B.10	Issues (error, warning, process status)
B.11	Issue Details (further details on errors, warnings, process statuses occurred)

6.3 Definitions of terms

Table 6-4 Definitions of terms

Term	Definition
Acknowledgement document	The entity containing information about the status (document and/or process status) of a business document previously received by the recipient.
Requested Action	A step to be taken in order to change the status of the business document (e.g. correct data, provide needed information).
Business Document	The entity (class) a.k.a. the business data exchange structure or message (e.g. invoice).
Document Status	The condition of the business document, such as Accepted or Rejected.
Invalid information	The data which caused the status of the business document (e.g. the incorrect value of an attribute).
Issuer	Issuer of the business or referenced document and/or acknowledgement message.
Process status	The status regarding the processing of the business document, such as active (in process), pending (on hold).
Reason	The cause of the status of the document (e.g. an error, warning, process status).

Term	Definition
Reason Classification	A categorization of the reason (e.g. fatal, warning).
Reason information	Additional data regarding the specified reason, such as a related business rule.
Recipient	Recipient of the business or referenced document and/or acknowledgement message.
Referenced Document	The entity containing information about the business document or interchange in case business documents cannot be identified properly.
Sender	Sender of the business or referenced document and/or acknowledgement message.
Valid information	The correct data which is needed to change the status of the business document.

6.4 Business Partner View

Table 6-5 Business Partners

Partner	Definition
Sender	Sender of the acknowledgement message.
Recipient	Recipient of the acknowledgement message.

6.5 Business Entity View

This conceptual model represents the set of data for the electronic exchange of acknowledgement information.

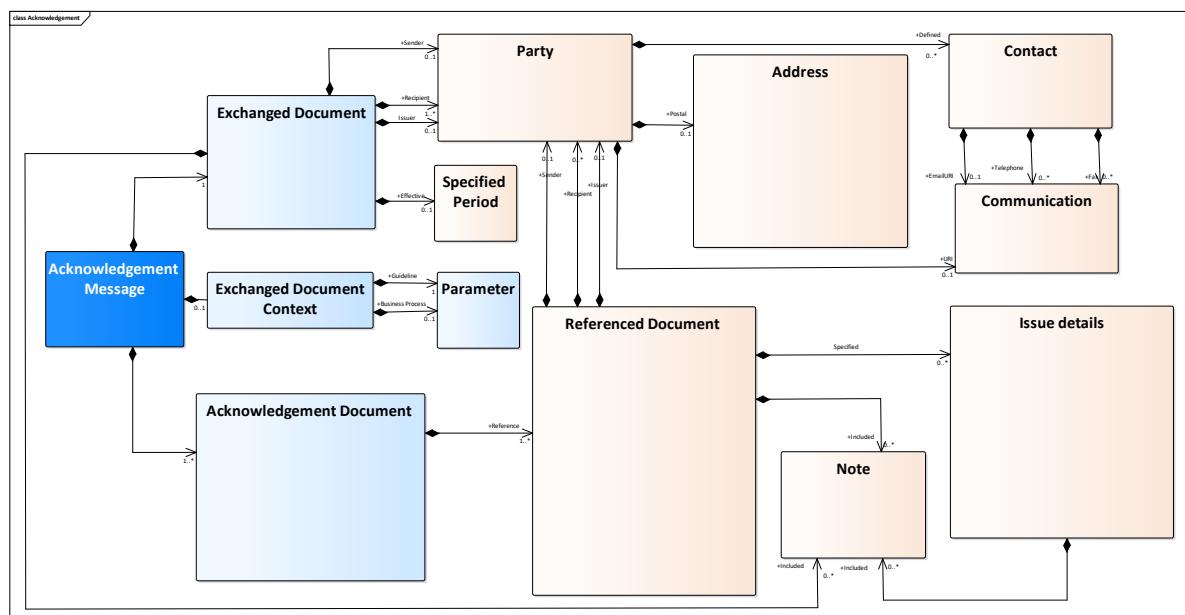


Figure 6-5 Conceptual Data Model

The states that a business document may get, as a result of the business process, can be acknowledge (e.g. the state Active, Pending. Below diagram shows the Entity Life Cycle diagram.

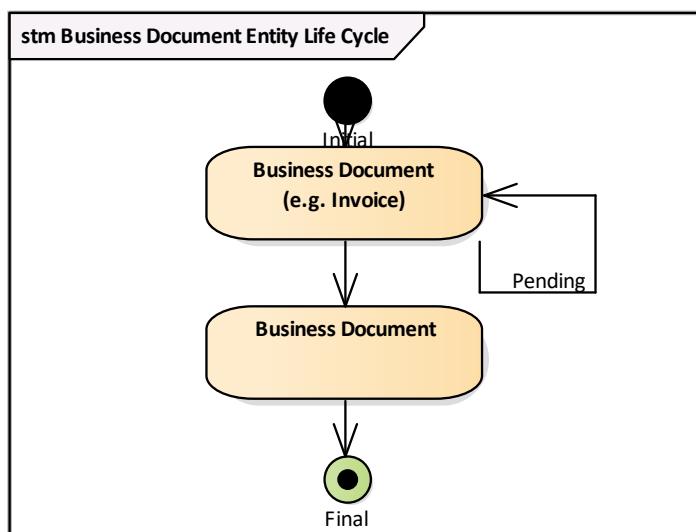


Figure 6-6 Business Document Life Cycle

7 Business Choreography View

7.1 Business Process Elaboration

The process of Acknowledgement is shown in the following Use Case Diagram.

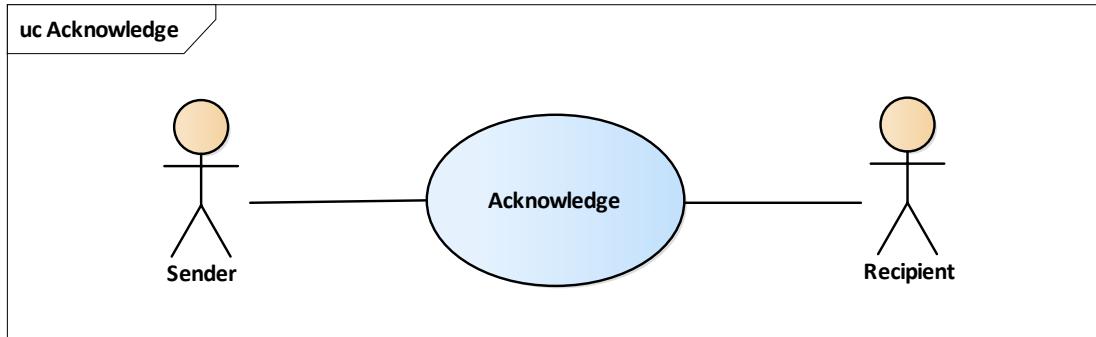


Figure 7-1 Acknowledgement process use case

Receipt process

The sender should ensure that an acknowledgement of receipt is sent by the recipient. Commonly an exchange protocol is used, as this is the tool by which the recipient's system acknowledges the receipt of the interchange file. But, in case of networks where there is no direct connection between the sender and recipient, messages might be transferred through multiple networks to reach the designated recipient. The Acknowledgement of receipt send by these networks might be important for the sender. To minimize the impact of communication failures, parties should agree a timeframe after which the sender can safely assume that the recipient has not received and/or processed the data. The designated recipient should check and process incoming messages preferable without any delay and send Acknowledgements in time.

Message validation Process

The business document is checked against the message schema. It is used to validate the structure, which must comply to the message schema constraints and syntax rules. The message schema defines the elements, attributes and data types. An invalid or non-well-formed business document results in a rejection. Depending on the technical capabilities of the recipient's system, an Acknowledgement may specify any error and its position. Serious errors will result in the rejection of the interchange file or of individual interchange business documents. In case of a warning, the acknowledgement status may still be Accepted (strictly: Accepted with warnings) whilst providing further details on the referenced document. To distinguish the difference between an acknowledgement generated during the message validation process and application validation, the use of a different acknowledge type code is recommended (see for codes further in this document).

Application Validation Process

The business document is checked against business rules. If there are no errors, the document (message) is forwarded for processing. Commonly, this also happens with error-free documents that trigger a warning. If there are errors, an acknowledgement is generated, containing information regarding the error(s). All errors and warnings should be logged and transmitted in the form of an acknowledgement message. A warning is triggered, if some of the information is incorrect but does not impair the processing of the document. An error always prevents the document from being processed. In such a case, the sender of the document must make the necessary actions to correct and transfer the document again. In case of a warning, the acknowledgement status may still be Accepted (strictly: Accepted with warning) whilst providing further details on the referenced document. To distinguish the

difference between an acknowledgement generated during the application validation process and previous message validation process, the use of a different acknowledge type code is recommended (see for codes further in this document).

Status Information Process

The acknowledgement message can provide the sender of the business document with information about a process change of this document.

The results of the message receipt, technical and/or application validation and/or process information can be provided on Acknowledgement Document level and/or on Referenced Document level (see section 6 Business Requirements View).

7.2 Business Process Flow

The sender (issuer) prepares his business document (message) by generating or extracting the necessary data from the database. Assuring that all necessary data is collected, the process of sending the message to the recipient starts. In below business process flow, the recipient is the designated recipient (though the message can go through one or more transport networks, service providers networks).

After reception of the message by the recipient, an acknowledgement of receipt could be sent to the sender.

Although modern tools can prevent the occurrence of message level errors, it is still needed to technically validate the received message. When there are no (syntax) errors, the application validation will start. In case of errors or warnings, the sender will receive an acknowledgement with providing information on these errors or warnings. In case of warnings the Acknowledgement may provide the status of Accepted, Accepted with warnings or Rejected (depending on the agreements between sender and recipient). It's recommended that the recipient provides detailed information on warnings. When the message validation cannot be performed, the sender may receive an acknowledgement with a referenced document identifier along with the reference type code INN¹ instead of the business document identifier.

During the application validation a number of business rules (constraints etc.) will be checked. In case all rules are valid, the business document can be included within the application's database. If not, the sender will receive an acknowledgement with information about errors or warnings. In case of an error, the sender has to correct his business document and regenerate it in order to resend the message. In case of a warning, the recipient might accept the business document and provide an acknowledgement with status Accepted with warnings or even Accepted (recommended is Accepted with warnings).

Note

In below diagram the Acknowledgement of type Status Report (Information Only) is not adopted for reason of clarity. In case of warnings the Acknowledgement may contain information on actions to be done by the sender of the referenced document in order to fix the problem causing warnings.

¹ Number assigned by the interchange sender to identify one specific interchange. This number points to the actual interchange.

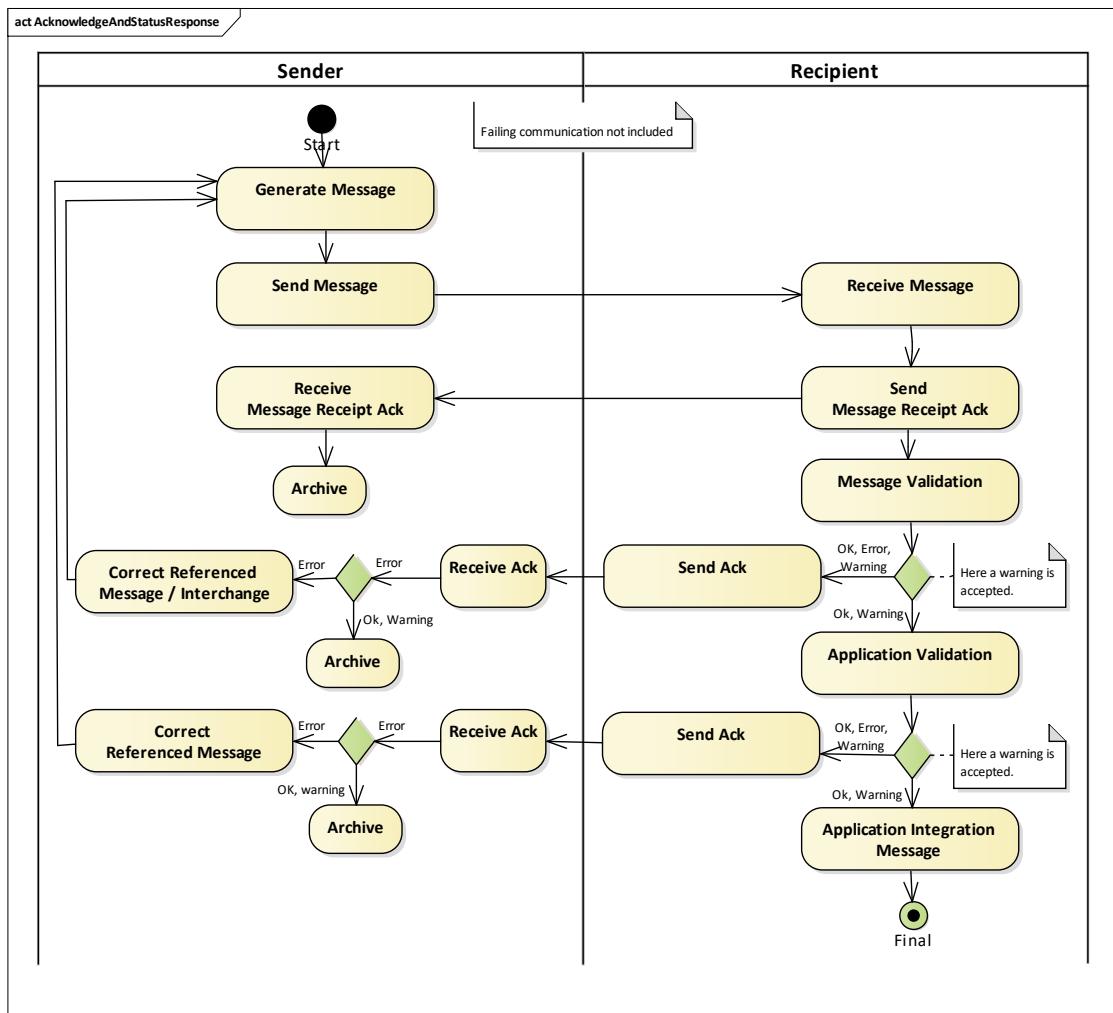


Figure 7-2 Business Process use case activity diagram

During the life cycle of the business document the recipient may send an Acknowledgement of type Status Report providing information on a process status change of the referenced document, such as Pending. to the sender.

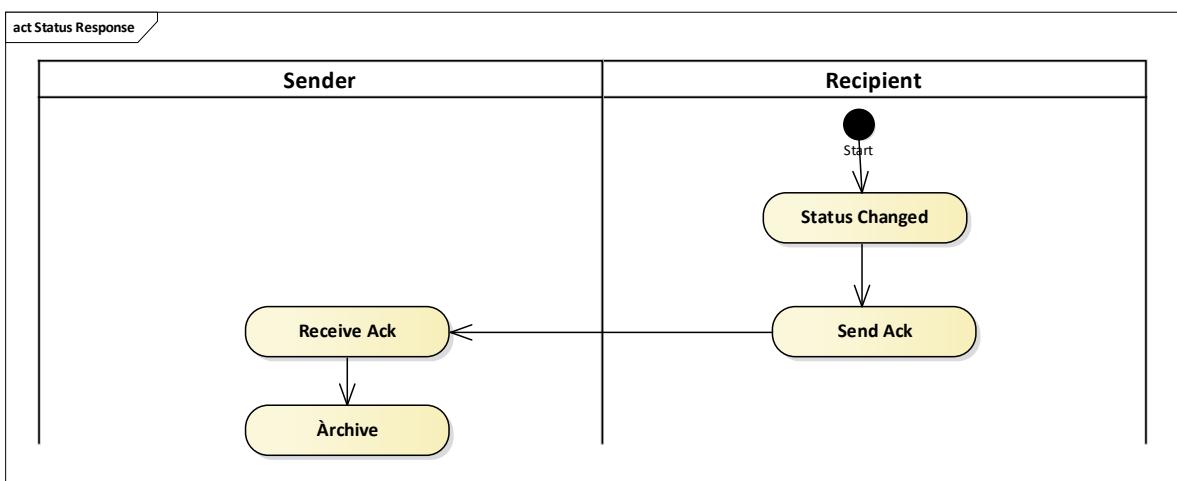


figure 7-3 Business Process Activity Diagram

7.3 Business Collaboration

The Business Collaboration Use Case Diagram “Acknowledgement” shows the transactions that make up the Acknowledgement process in case of an error, warning or

process status change. It also links the authorised roles from each transaction to the Business Partner Types (Sender and Recipient).

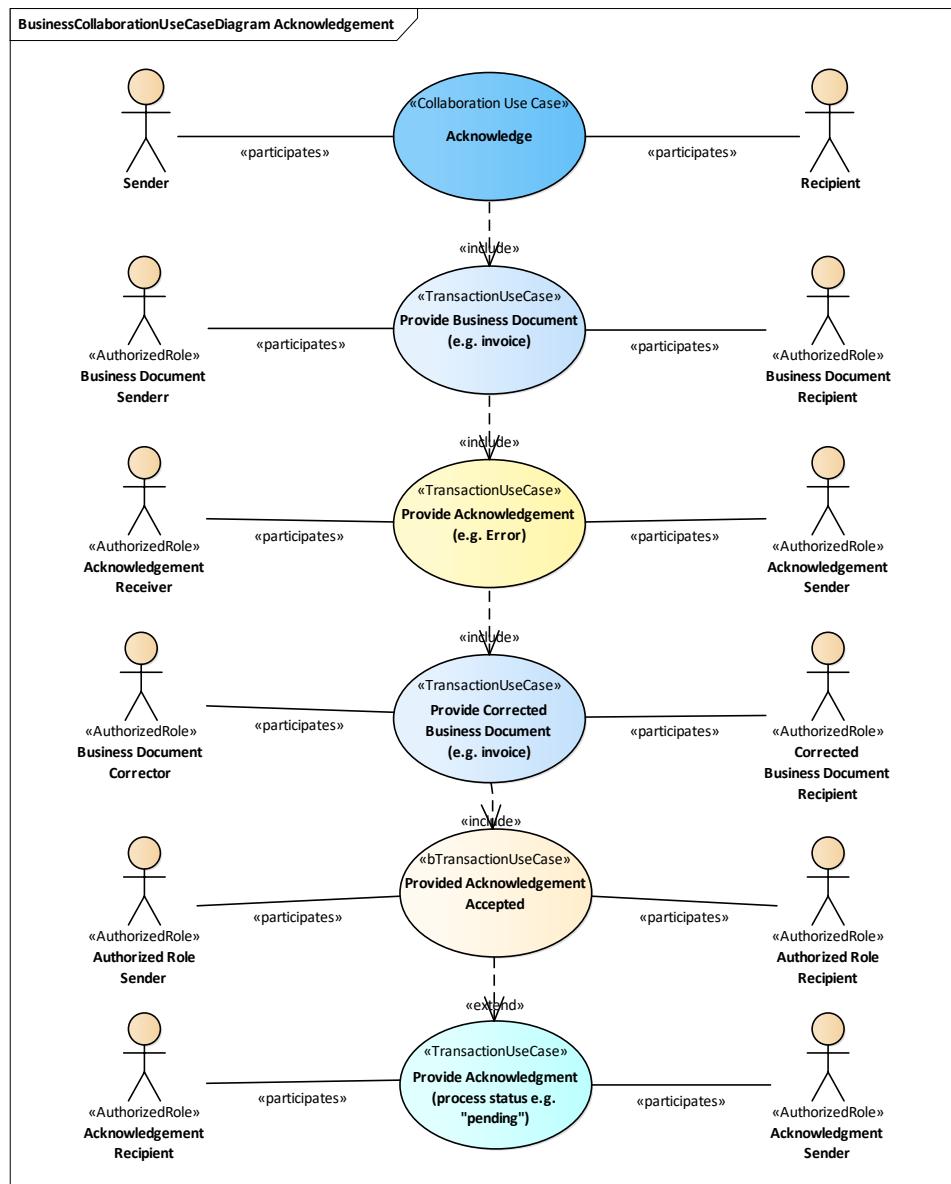


Figure 7-4 The Business Collaboration Use Case diagram

The Business Collaboration Use Case Diagram above shows also the transaction use case for reporting a process status change of a referenced document which may occur. A process status change occurs during the life cycle of the document once it has accepted by the application of the designated recipient. The sender of the business documents will be acknowledged of any other changes after its initial acceptance. When a process change occurs the sender of the business document could also be informed about an action to be undertaken which might lead to regenerated the business document, for example if additional information is needed at a particular point in time.

7.4 Business Transaction View

7.4.1 Business Transaction Use Case

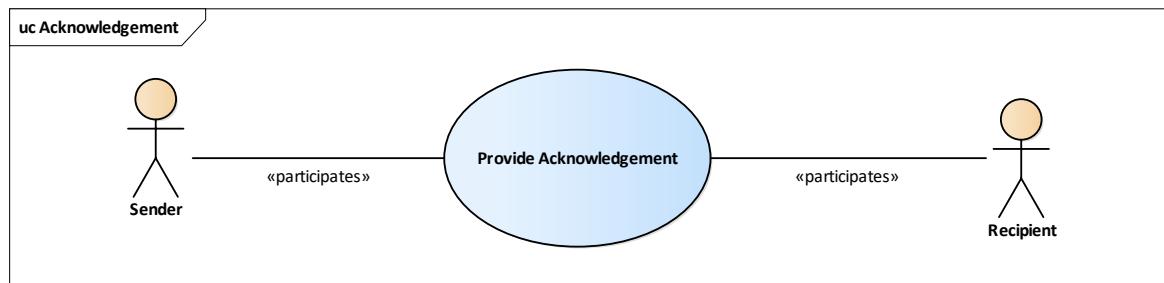


Figure 7-5 Business Transaction Use Case Diagram Acknowledgement

Table 7-1 Business Transaction Use Case Description Acknowledgement

Identifier	Provide Acknowledgement
Business Message Type	Acknowledgement
Description	A business document has been received by the recipient; the Recipient sends an Acknowledgement to the Sender to inform him about the state of his document. Once the Recipient has received a state of his business document, the process ends.
Partner Types	Sender, Recipient
Authorized Roles	All party roles, such as Issuer, Buyer, Seller, Sales Representative etc.
Legal Implications	None
Initial/Terminal Events	<ul style="list-style-type: none"> Initial: the business document is finalized and ready to be generated as a business document to be send to the Recipient. Final: the business document has been received by the recipient and the recipient has send an acknowledgement with reference to the business document or its interchange file (in case non processable business document).
Scope	Information exchange between Sender and Recipient concerning the state of a business document received earlier.
Boundary Constraints	

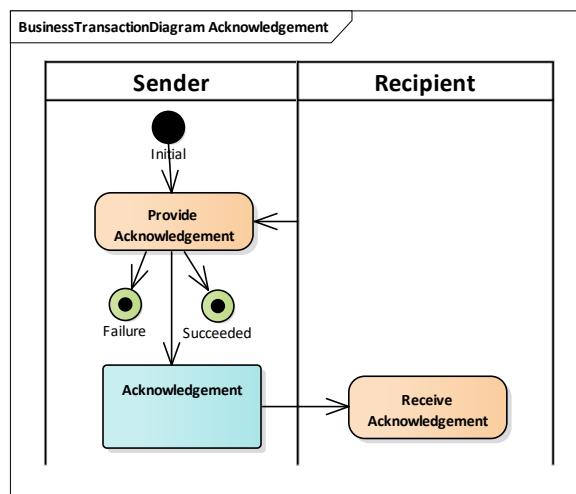


Figure 7-6 Activity Diagram Acknowledgement

7.4.2 Business Transaction Sequence

Below example message sequence diagram shows a business document first being acknowledged as received, followed by the process status Pending and followed by an acknowledgement of rejection, invoked during message validation. The sender of the business document corrects the document and resends it to the recipient. For reasons of clarity, the recipient's system does not acknowledge the receipt of the document, but acknowledge the acceptance of the document, as a result of the validation by the application. Due to a process status change of the document the sender receives an acknowledgement of type Status Report with a process status change.

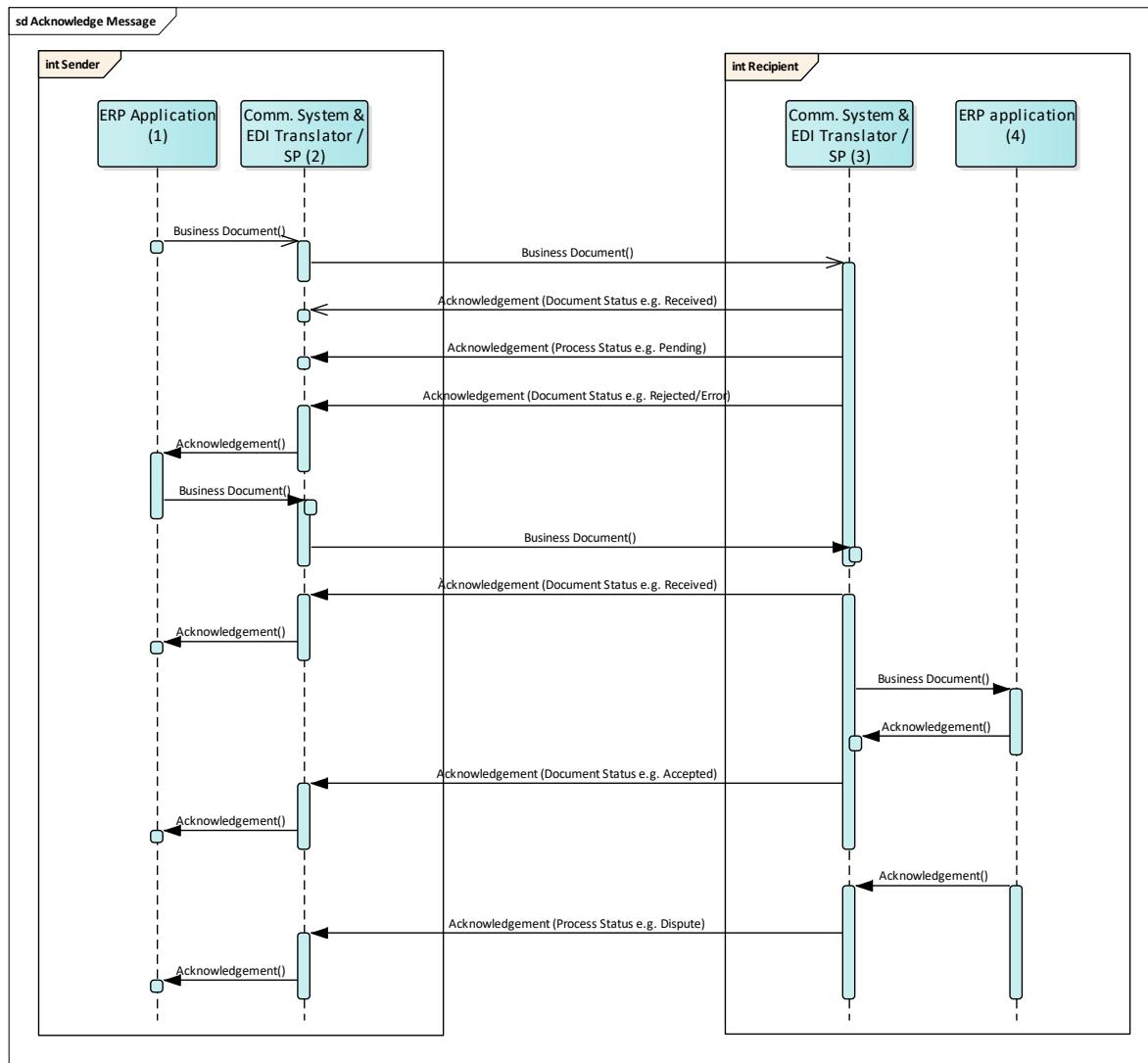


Figure 7-7 Message Sequence Diagram

8 Business Information View

8.1 Business Information Class Diagram

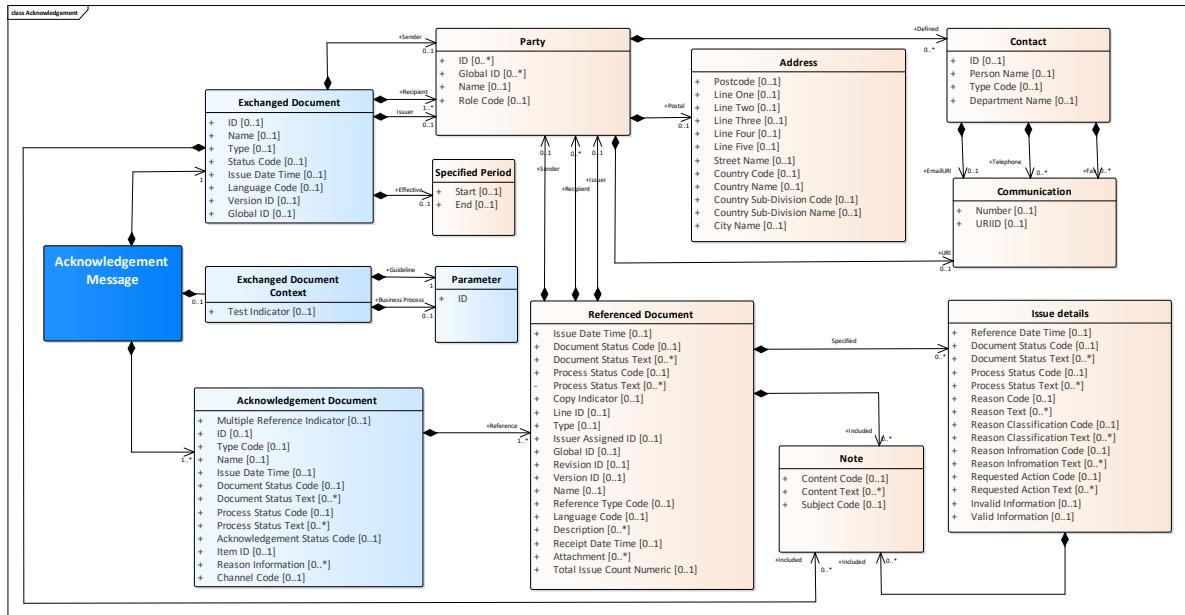


Figure 8-1 Acknowledgement Message Class Diagram

8.2 Business Document

8.2.1 Document types codes (1001)

Table 8-1 Recommended Message type Codes

Type	Name	Definition	Constraint
305	Application error and acknowledgement	A message to inform a message issuer that a previously sent message has been received by the addressee's application, or that a previously sent message has been rejected by the addressee's application.	In case of a message and/or application validation (syntax and application level). Recommended to use if multiple Acknowledgement Documents of different types are used within the Acknowledgement message (see fig. 62).
294	Application acknowledgement and error report	A message used by an application to acknowledge reception of a message and/or to report any errors.	In case of a message validation (syntax level).
312	Acknowledgement message	Message providing acknowledgement information at the business application level concerning the processing of a message.	In case of an application validation (application level).
23	Status information	Information regarding the status of a related message.	In case of reporting a process status change.
....

8.2.2 Document status codes (1373)

Table 8-2 Examples of Document Status codes

Code	Name	Definition
TBD ²	Received	The document is received.
1	Accepted	The specified document is accepted.
TBD ²	Accepted with warnings	The specified document is accepted, but has generated warnings.
8	Rejected	The specified document is rejected.
5	Information Only	Notice that the specific document or message is for information only.

² To be determined. These codes will be submitted as Code Data Maintenance Request to UN/CEFACT Library Maintanance Focal Point.

Code	Name	Definition
....

8.2.3 Process Status codes (4405)

Table 8-3 Examples of Process Status codes

Code	Name	Definition
97	Pending	Awaiting decision or settlement.
112	Active	In operation.
22	Subject to agreed condition.	Subject to agreed condition.
39	Approved	Approval has been given.
41	Rejected	Item is rejected.
73	Confirmed	Officially acknowledged.
5	Subject for final Payment	The amount is subject to finality.
90	Dispute	Questioned validity.
...

8.2.1 Message Assembly (MA)

Table 8-4 Message Assembly

Cross-Industry Acknowledgement					
Type	Name	Definition	Min	Max	
Root	Exchanged Document Context	The set of context parameters specified for a use of this master message assembly.	0	1	
Root	Exchanged Document	A collection of data for a that is exchanged between two or more parties in written, printed or electronic form.	1	1	
Root	Acknowledgement Document	This data exchange provides the means to send Acknowledgement information to a data provider.	1	unbounded	

8.2.1 Message core components

Table 8-5 Message core components

Cross-Industry Acknowledgement						
Type	Name	Definition	Example	TDED	Min	Max
Entity	Exchanged Document Context	The set of context parameters specified for a use of this message.				
Attr.	Test Indicator	The indication of whether or not this document is a test.		0035	0	1
Assoc.	Business Process Parameter	The business process parameter for this document.			0	1
Assoc.	Guideline Parameter	The guideline parameter for this document.			1	1
Entity	Document Context Parameter	A parameter that is fixed for a particular document				
Attr.	Parameter ID	The ID of this parameter.			1	1
Entity	Exchanged Document	A collection of data that is exchanged between two or more parties.				
Attr.	ID	The ID.		1004	0	1
Attr.	Name	The name of the document.		1000	0	1
Attr.	Type Code	The code specifying the type.	e.g. 305, 294, 312, 23	1001	0	1
Attr.	Status Code	The code specifying the status.		1373	0	1
Attr.	Issue Date Time	The date time for the issuance.		2380	0	1
Attr.	Language Code	The language code for this exchanged document.	e.g. DE (German)	3453	0	1
Attr.	Version ID	The ID for the version.		1056	0	1
Attr.	Global ID	The global ID.		1004	0	1
Assoc.	Included Note	A note included.			0	Unbounded

Cross-Industry Acknowledgement						
Type	Name	Definition	Example	TDED	Min	Max
Assoc.	Sender	The party that sends this document.			0	1
Assoc.	Issuer	The party that issues this document.			0	1
Assoc.	Recipient	A party that receives this document.			0	Unbounded
Assoc.	Effective Period	The period within which this document is effective.			0	1
Entity	Note	A remark or additional information.				
Attr.	Content Code	The code specifying the content.			0	1
Attr.	Content Text	A content.		4440	0	Unbounded
Attr.	Subject Code	The code specifying the subject.	e.g. AAI (general information)	4451	0	1
Entity	Party	An individual, a group, or a body having a role in a business function.				
Attr.	ID	A ID.		3039	0	Unbounded
Attr.	Global ID	A Global ID.		3039	0	Unbounded
Attr.	Name Text	The name.		3036	0	1
Attr.	Role Code	The code specifying the role.	e.g. BY (Buyer)	3035	0	1
Assoc.	Contact	A contact.			0	Unbounded
Assoc.	URI Communication	Uniform Resource Identifier (URI) communication information for this party, such as a web or an email address.			0	1
Entity	Address	The location at which an organization or person may be found or reached.				
Attr.	Postcode	The code specifying the postcode.		3251	0	1
Attr.	Line One	The first free form line.		3124	0	1
Attr.	Line Two	The second free form line.		3124	0	1
Attr.	Line Three	The third free form line.		3124	0	1
Attr.	Line Four	The fourth free form line.		3124	0	1
Attr.	Line Five	The fifth free form line.		3124	0	1
Attr.	Street Name	The name of a street or thoroughfare.		3042	0	1
Attr.	City Name	The name of the city, town or village.		3164	0	1
Attr.	Country Code	The code of a country.	e.g. UK (United Kingdom)	3207	0	1
Attr.	Country Name	The name of the country.		3228	0	1
Attr.	Country Sub-Division Code	The code of a subdivision of a country.		3229	0	1
Attr.	Country Sub-Division Name	The name of a subdivision of a country.		3228	0	1
Entity	Contact	A person or a department that acts as a point of contact with another person or department in a trading relationship.				
Attr.	ID	The ID.		3413	0	1
Attr.	Person Name	The name.		3412	0	1
Attr.	Department Name	The name of the department to which this contact belongs within an organization.		3412	0	1

Cross-Industry Acknowledgement						
Type	Name	Definition	Example	TDED	Min	Max
Attr.	Type Code	The code specifying the type.	e.g. IC (Information Contact)	3139	0	1
Assoc.	Telephone	Telephone communication information.			0	Unbounded
Assoc.	Fax	Fax communication information.			0	unbounded
Assoc.	Email	The email URI communication information.			0	1
Entity	Communication	The exchange of thoughts, messages, or information between persons and/or organizations.				
Attr.	Number	The characters that make up the complete number.		3148	0	1
Attr.	URIID	The unique Uniform Resource Identifier (URI) for communication.		1004	0	1
Entity	Acknowledgement	A document exchanged between parties for an acknowledgement of the receipt and processing of information.				
Attr.	Multiple References Indicator	The indicator specifying whether or not there are multiple references.			0	1
Attr.	ID	The ID.		1004	0	1
Attr.	Type Code	The code specifying a type.	e.g. 294, 312, 23	1001	0	1
Attr.	Name	The name.		1000	0	1
Attr.	Issue Date Time	The date time for the issuance.		2380	0	1
Attr.	Document Status Code	The code specifying a document status.	e.g. 8 (Rejected)	1373	0	1
Attr.	Document Status Text	A document status.			0	Unbounded
Attr.	Process Status Code	The code specifying a process status		4405	0	1
Attr.	Process Status Text	A process status.			0	Unbounded
Attr.	Acknowledgement (Purpose) Status Code	The code specifying an Acknowledgement purpose status.	e.g. 9 (Original)	1225	0	1
Attr.	Item ID	The ID of an item.			0	1
Attr.	Reason Information	Reason information	e.g. Buyers Tax Number	4440	0	Unbounded
Attr.	Channel Code	The code specifying a (communication) channel.	e.g, AH (WWW)	3155	0	1
Assoc.	Referenced Document	A document referenced.			0	Unbounded
Entity	Referenced Document	Written, printed or electronic matter that is referenced.				
Attr.	Issue Date Time	The date time for the issuance.		2380	0	1
Attr.	Document Status Code	The code specifying the document status of the referenced document.		1373	0	1
Attr.	Document Status Text	A document status of the referenced document.			0	Unbounded
Attr.	Process Status Code	The code specifying the process status of the referenced document.		4405	0	1
Attr.	Process Status Text	The process status of the referenced document.			0	Unbounded

Cross-Industry Acknowledgement						
Type	Name	Definition	Example	TDED	Min	Max
Attr.	Copy Indicator	The indication of whether or not the document is a copy.		4368	0	1
Attr.	Line ID	The ID of a line.		1156	0	1
Attr.	Type Code	The code specifying the type.	e.g. 380 (Commercial Invoice)	1001	0	1
Attr.	Issuer Assigned ID	The issuer assigned ID.		1154	0	1
Attr.	Global ID	The global ID.		1154	0	1
Attr.	Version ID	The ID for a version.		1056	0	1
Attr.	Name	The name.		1000	0	1
Attr.	Reference Type Code	The code specifying the reference type.	e.g. IV, AAG, POR	1153	0	1
Attr.	Language Code	The code of the language used.	e.g. DE (German)	3453	0	1
Attr.	Description	A description.			0	Unbounded
Attr.	Receipt Date Time	The date time for the reception of this referenced document (from the perspective of the recipient).		2380	0	1
Attr.	Attachment Binary Object	A binary object that is attached or otherwise appended to this referenced document.			0	Unbounded
Attr.	Total Issue Count Numeric	The total issue count for this specified referenced document (e.g. total errors, warnings, process statuses).	e.g. 24		0	1
Assoc.	Issuer	The party that issues this document.			0	1
Assoc.	Recipient	A party that receives this document.			0	Unbounded
Assoc.	Sender	The party that sends this document.			0	1
Assoc.	Included Note	A note included in this referenced document.			0	Unbounded
Assoc.	Issue details (<i>document status details</i>)	Information on issues such as error(s), warning(s) or process status(es).			0	Unbounded
Entity	Issue (<i>document/process status details</i>)	The information relevant to an issue, condition (e.g. an error, warning or process status) related to a document.				
Attr.	Reference Date Time	The reference date time.		2380	0	1
Attr.	Document Status Code	The code specifying the document status (condition) for this document.	e.g. 8 (Rejected)	1373	0	1
Attr.	Document Status Text	A document status.	e.g. Rejected	4440	0	Unbounded
Attr.	Process Status Code	The code specifying a status, related to a process.	e.g. 97 (Pending)	4405	0	1
Attr.	Process Status Text	A process status.	e.g. Pending		0	Unbounded
Attr.	Reason Code	The code specifying a reason.	e.g. A008/LEG	9321	0	1
Attr.	Reason Text	A reason.	e.g. Chassis no. Incorrect// Legal Info missing	4440	0	Unbounded
Attr.	Reason information Code	A code specifying information for the reason.	e.g. DE-9281/BT-42		0	1
Attr.	Reason information Text	Information for the reason.	e.g. Chassis No./ Buyer Tax Number	4440	0	Unbounded

Cross-Industry Acknowledgement						
Type	Name	Definition	Example	TDED	Min	Max
Attr.	Reason Classification Code	A code specifying a classification of the reason.	e.g. AV/ BV		0	1
Attr.	Reason Classification Text	A reason classification.	e.g. Applic. Fatal Error/ Business Rule Violation Fatal		0	Unbounded
Attr.	Requested Action Code	The code specifying a requested action.	e.g. CD/PIN		0	1
Attr.	Requested Action Text	A requested action.	e.g. Correct data/ Provide info needed		0	Unbounded
Attr.	Invalid Information Text	Information which was invalid.	e.g. 00000000000/ 99999999999	4440	0	1
Attr.	Valid Information Text	Valid information.	e.g. CN7878322311/ DE898239892	4440	0	1
Assoc.	Included Note*	A note included for this issue (<i>document/process status details</i>).	e.g. to specify an Xpath, attribute name, line ID etc		0	Unbounded

* Examples of a note for a reported issue.

Specifying an attribute name:

- Content Code: e.g. “XXX” (proprietary code)
- Content Text: “Trade Payment Terms Type Code”
- Subject Code: e.g. ACF (The text refers to information about an additional...)

Specifying a location in the message:

- Content Code: e.g. “YYY” (proprietary code)
- Content Text: “rsm:Order/rsm:ExchangedDocument/ram:TypeCode/”
- Subject Code: e.g. AGW (Description of a location)

Specifying a line ID within the message:

- Content Code: e.g. “ZZZ” (proprietary code)
- Content Text: “23”
- Subject Code: e.g. LIN (Line Item)