
Co-Ordinated Retail Market Message Guide

ROI Implementation - DUoS and Transaction Payments

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1 INTRODUCTION

1.1 Purpose of the Message Implementation Guide

This document is a Message Implementation Guide to assist Suppliers in:

- The construction of market messages to be sent to DSO and MRSO; and
- The interpretation of messages received from DSO and MRSO.

The Message Implementation Guides are organized into separate Message Groups documents based around key business processes. These are:

- Registration, including Change of Supplier
- Customer Data and Agreements
- Data Processing
- Data Aggregation
- DUoS and Transaction Payments
- Meter Works
- SSA
- Unmetered
- Market Gateway Activity

This document is the **DUOS and Transaction Payments** Implementation Guide.

The same type of data is often provided in several messages and, irrespective of the message type, this data is subject to common rules for population. An example is the Meter Point Address.

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A separate document exists to describe the population rules for these types of data, providing:

- An overview of the structure of the segment
- Instructions relating to how to populate each segment and field.

This document is the Common Data Segments Implementation Guide.

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1.2 Message Groups

Each Message Group section contains:

- An introduction outlining the scope and business context for the message group
- A Message Usage Summary with a description of when each message is used
- A list of Related Business Documents that govern the process
- A message directory with a section for each separate message which includes:
 - A description of each message and when it should be used
 - An overview diagram of the structure of the message.
 - For messages sent by Suppliers:
 - A table containing composition instructions on how to populate each segment and field
 - A table describing how the message will be validated
 - A description of the responses that can be expected
 - For messages sent by ESB Networks:
 - A table containing a description of how each segment and field will be populated.

1.3 Technical Overview

Messages are exchanged in XML format between the Market Gateway operated by ESB Networks and the Market Participant Communication Component (MPCC) software.

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1.4 Message Version

This Message Guide refers to and is consistent with the Discussion Request (DR 176) which is based on Market Design version 8 and the 131 market message from MCR0171. NI specific validations are not included in this.

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1.5 Scope

The scope of this document covers all Distribution Use of System (DUoS) and Transaction Payment messages sent between Market Registered Suppliers and DSO. These messages allow Suppliers to notify DSO of disputes in invoices for DUoS and Transaction charges.

The message numbers included as in scope are as follows:

- 507 Designated DUoS (or Transaction) payment dispute
- 507C DUoS (or Transaction) payment control message

These messages are generated in response to the DUoS and Transaction invoice and supporting Detail.

- DUoS charges are invoiced to Suppliers twice a month
- Transaction charges are invoiced to Suppliers once a month.
- The 507 message will be used to communicate designated disputes only i.e. where a dispute is raised on an invoice item and payment is sought to be withheld on that invoice item until the dispute is resolved.
- The 507C message is used to confirm the number and gross amount of all the designated disputes raised across all invoice items on a given DUoS or Transaction Invoice.
- The 507 and 507C messages are used when making payments on DUoS and Transaction invoices only i.e. the messages are not used when making payment on a PSO invoice

There is a separate set of explanatory notes regarding these rules. It will be included as an appendix to the MIG documentation as the following:

- DUoS, Transaction and PSO Payment Process.

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1.6 Validation

This document provides notes on how ESB Networks will validate the messages received. The purpose of these notes is to aid the Supplier in the population of each message and is intended to avoid instances where messages are rejected due to the incorrect population of a message field. The validation described is therefore limited to field specific validations.

Syntax validation is excluded from the validation notes. This is performed by using standard XML Schema validation against the ieXML schema provided that defines the data structures of all market messages in scope. Syntax validation includes:

- Checks that the structure of the message is correct
- Checks that all mandatory fields are provided. Mandatory fields are, however, indicated in the instructions for populations.
- Checks that any data code is selected from the list of data codes issued in the ROI Market Design.

In cases where the segment on a message fails on any of these reasons, a negative acknowledgement is sent back as a market message to the message sender containing the following information:

- The Transaction Reference Number supplied on the inbound message
- A copy of the message contents as received by ESB Networks
- A description of the error.

General market process validations that are not specific to individual market message fields are excluded. These are described in the appropriate Market Procedure Documents (MPD) referenced in each section.

If there is any inconsistency between an MPD and the Message Implementation Guide then the MPD will take precedence.

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1.7 Notes

In this document, references to segment and field levels should be interpreted as follows:

- The level number indicated against the segment refers to the level of the data items and segments within that segment. Therefore, for example, in message 010 where 'MPRN Level Information -Level 2' is stated it is the data items and segments that comprise 'MPRN Level Information' that are level 2 items (e.g. MPRN field, Market Participant Business Reference field, Meter Point Address segment). Accordingly, within this document, MPRN Level Information segment is shown as a Level 1 segment.
- Message Header is a Level 1 segment and is a child of Header Level Information.

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1.8 Market Message introduction

The grouping of messages in this guide relates to Distribution Use of System (DUoS) and Transaction payment messages sent by Market Registered Suppliers to DSO. These messages allow Suppliers to raise designated disputes against Invoice items outlined in DUoS / Transaction Invoices and to confirm the number and gross amount of designated disputes raised on a given DUoS or Transaction Invoice.

The messages covered are the following:

- 507 Designated DUoS (or Transaction) Payment Dispute
- 507C DUoS (or Transaction) Payment Control Message

The following table provides a trigger list for each message described in this document, detailing when it is used.

Message	Title	Sender	Recipient	Trigger	Predecessor	MPD Ref.
507	Designated DUoS (or Transaction) payment dispute	Supplier	DSO	Supplier raises designated dispute on invoice item included in a DUoS / Transaction Invoice.	None	MPD34
507C	DUoS (or Transaction) payment control message	Supplier	DSO	Supplier confirms to DSO the number and gross amount of designated disputes raised against all invoice items on a particular DUoS / Transaction invoice.	507 or none.	MPD34

2 MARKET MESSAGES

2.1 507 Designated DUoS Payment Dispute

Purpose / Description of message/Validation

The 507 Designated DUoS Payment Dispute message is sent by the Supplier to the ESB Networks business to notify them of a designated dispute for an invoice item against an MPRN on the DUoS or Transaction Invoices provided. DSO will undertake the validation of the message at segment and field level.

The information to be provided on the message includes the following:

- The details of the MPRN being disputed
- The details of the original invoice on which the dispute is being raised
- The details of the Invoice item number that is being disputed
- The reason for the dispute.

On receipt of a 507 message DSO carry out the following message level validations:

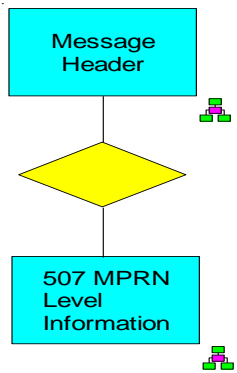
- That the message type code is valid
- That the version of the message is currently supported
- That the recipient ID matches the ID held by the receiving system
- That all Segments and fields defined as Mandatory are present
- That the Supplier is registered to the MPRN.

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Suppliers must send a 507 message for each Invoice item that they wish to dispute on the DUoS or Transaction Invoice.

N.B If Suppliers wish to re-send a given 507 message they must firstly contact Networks to notify them of this.

Data hierarchy diagram



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Message Structure/Validation

This section describes the structure of the 507 message. The purpose of the message segments and data items is explained and any rules for composition outlined. DSO will undertake the validation of the message at segment and field level.

Segment and Field Level Identifier – 507 Message			Rpt	Optionality	Description / Purpose and composition instructions	Validation
1 Message Header			1	Mandatory	<i>Refer to common data segments document</i>	
1 Meter Point Details			1	Mandatory		
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which charges are being disputed. All elements of MPRN must be provided.	Message will fail validation if a valid MPRN is not provided
2	FLD	Market Participant Business Reference	1	Optional	A Supplier created Business reference used to identify and track the progress of business requests sent to DSO / MRSO. Where appropriate, for disputes raised on Transaction Invoices, this reference is intended to relate to the original Market Participant Business Reference provided by Supplier on the Service request message.	No individual validation of this field
2	FLD	Invoice Number	1	Mandatory	This is the unique number originally provided on the DUoS / Transaction Invoice. This item should reflect the invoice number for the invoice on which the item being disputed appears.	Message will fail validation where a valid Invoice number is not provided
2	FLD	Invoice Item Number	1	Mandatory	This uniquely references the particular item being disputed on the DUoS / Transaction Invoice.	Message will fail validation where a valid Invoice Item Number is not provided.

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Segment and Field Level Identifier – 507 Message			Rpt	Optionalit y	Description / Purpose and composition instructions	Validation
2	FLD	Dispute Reason	1	Mandatory	<p>This is the reason that the Invoice item is being disputed. The following are examples of valid Dispute reasons for this message:</p> <p>SNR Supplier not Registered to MPRN</p> <p>IBP Incorrect Billing Period</p> <p>IID Invalid / Incomplete Data</p> <p>ARE Arithmetic Error</p> <p>IMD Incorrect Interval Meter Reading Data</p>	Message will fail validation if this item does not match one of the valid codes detailed above.

2.2 507C DUoS Payment Control Message

Purpose / Description of message/Validation

The 507C DUoS Payment Control Message is sent by the Market registered Supplier to the ESB Networks business to confirm the number and gross amount of designated disputes raised on a given DUoS or Transaction Invoice.

This message contains the following information:

- The DUoS or Transaction invoice to which the dispute(s) relate
- A total of the individual disputes records sent per the DUoS or Transaction invoice (Total number of separate 507 disputes). This total will be zero where no associated 507 message is raised.
- Total gross amount disputed. This total will be zero where no associated 507 message is raised.

This message should be sent in the following circumstances:

- As a final message when making payment on either a DUoS or Transaction invoice.
- Irrespective of whether any associated 507 messages for individual disputes have been raised.

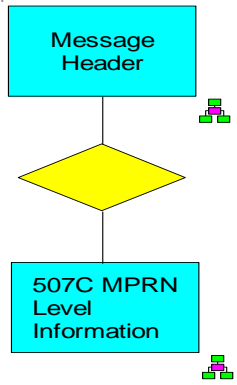
N.B If Suppliers wish to amend any dispute(s) with a given DUoS / Transaction Invoice they must firstly contact Networks manually to notify them of this and then resend only the relevant 507 messages to which they wish to make amendments followed by the amended 507C.

On receipt of the 507C message DSO carry out the following message level validations:

- That the message type code is valid
- That the version of the message is currently supported
- That the recipient ID matches the ID held by the receiving system
- That all Segments and fields defined as Mandatory are present

Data hierarchy diagram

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Message Structure/ Validation

DSO will undertake the validation of the message at segment and field level.

This section describes the structure of the 507C message. The purpose of the message segments and data items is explained and any rules for composition outlined. DSO will undertake the validation of the message at segment and field level

Segment and Field Level Identifier – 507C			Rpt	Optionality	Description / Purpose and composition instructions	Validation
1 Message Header			1	Mandatory	<i>Refer to common data segments document</i>	
1 Meter Point Details			1	Mandatory		
2	FLD	Market Participant Business Reference	1	Optional	A Supplier created Business reference used to identify and track the progress of business requests sent to DSO / MRSO. This item should be left blank on the 507C message as the message does not refer back to an individual Service request.	No validation of this field.
2	FLD	Invoice Number	1	Mandatory	This is the unique number originally provided on the DUoS / Transaction Invoice. This item should reflect the invoice number for the invoice on which the item being disputed appears.	Message will fail validation if a valid Invoice Number is not provided
2	FLD	Amount Disputed Total	1	Mandatory	This is the total gross amount (i.e. Inclusive of VAT) being disputed for a given DUoS / Transaction Invoice. This value is zero where there are no	Message will fail validation if this item is not provided and does not match the sum of the gross amounts of the invoice items for which individual 507 dispute messages relevant to the invoice were sent.

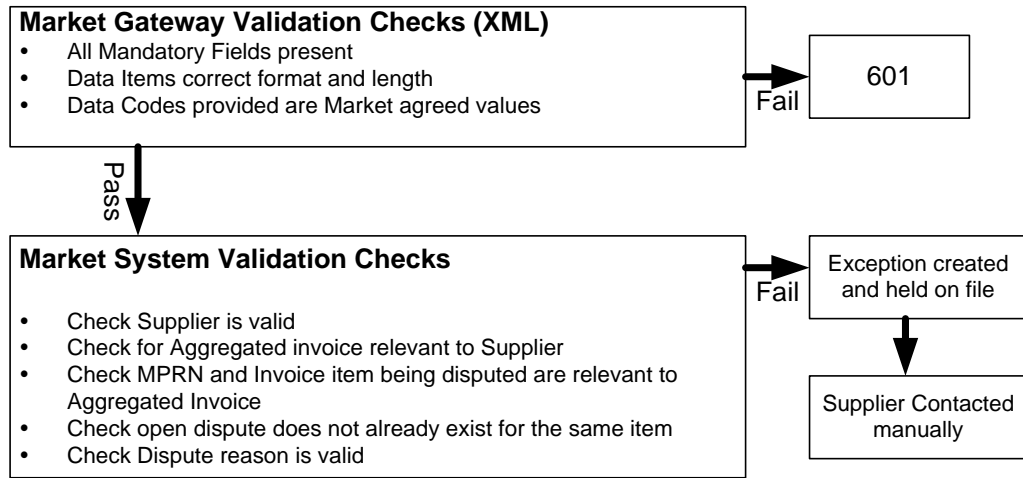
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Segment and Field Level Identifier – 507C			Rpt	Optionalit y	Description / Purpose and composition instructions	Validation
					associated designated disputes on the invoice.	
2	FLD	Number of Dispute Records	1	Mandatory	This value must equate to the total number of separate 507 dispute records that have been sent for a given Invoice Number. This value is zero where there are no associated designated disputes on the invoice.	Message will fail validation if this item is not provided. This item is validated against the actual number of 507 messages received for a given DUoS / Transaction Invoice.

3 APPENDIX 1

3.1 [Appendix 1A – 507 Validation sequence diagram](#)

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3.2 Appendix 1B – 507C Validation sequence diagram

