
NI Market Message Implementation Guide - Data Processing

<i>Document Information</i>	
Business Area:	NIE
Status:	Baseline
Author/s:	
Version Number:	2.4

NI Market Message Implementation Guide – Data Processing

<i>Document Updates</i>			
Name	Date	Reason	Version
NIE ES Project	03/12/2009	Initial Draft	0.1
NIE ES Project	05/01/2010	Updated for message 321	0.2
NIE ES Project	07/01/2010	Fixes Applied for messages 210, 300, 300S, 303R, 305 and 342, 300W	0.3
NIE ES Project	12/01/2010	Applied changes following Internal QA	0.4
NIE ES Project	14/01/2010	Further updates applied	0.5
P Merkens	19/05/2011	Updated for MCRs 1012, 1023 and CRID 152	0.6
P Merkens	07/06/2011	Updated for DR 1072 and NIE review ready for SIG workshop	0.91
P Merkens		Updated following SIG Workshops	0.92
P Merkens		Updated for MCR 1079	0.93
J-E Smith		Final Draft for Supplier Review prior to SIG Approval	0.94
A Ferguson		Updated for MCR 1090, correction to read reason code on message 300, and clarification on population of Value (net active) field on 341, 342	0.95

NI Market Message Implementation Guide – Data Processing

A Ferguson	25/08/2011	Baseline Approval	2.1
A Ferguson	20/01/2012	Baseline CDA Board Approved Updated for DR1110/CRID163 Updated for DR 1100/CRID159	2.2
J-E Smith	08/03/2012	Baseline CDA Board Approved Updated for DR1116/CRID166	2.3
J-E Smith	21/11/2013	Baseline CDA Board Approved	2.4

Table of Contents

1	INTRODUCTION	5
1.1	PURPOSE OF THE MESSAGE IMPLEMENTATION GUIDE	5
1.2	VALIDATION.....	6
1.3	MESSAGE VERSION	7
1.4	NOTES	7
1.5	IMPLEMENTATION OF MARKET CHANGE REQUESTS	7
1.6	OUTSTANDING ISSUES.....	7
2	DATA PROCESSING MESSAGE GROUP.....	8
2.1	SCOPE AND BUSINESS CONTEXT	8
2.2	MESSAGE USAGE SUMMARY	8
2.3	MESSAGE DIRECTORY – SUPPLIER TO NIE.....	10
2.3.1	Message 208: Replacement Reading.....	10
2.3.2	Message 210: Supplier Provided Reading.....	15
2.4	MESSAGE DIRECTORY – NIE/DATA COLLECTOR TO SUPPLIER.....	20
2.4.1	Message 300: Validated Non-Interval Readings (Scheduled).....	20
2.4.2	Message 300S: Valid Non-Interval Readings (Special).....	25
2.4.3	Message 300W: Withdrawn Non-Interval Readings.....	30
2.4.4	Message 303R: Customer Read Rejection.....	35
2.4.5	Message 305: Non Settlement Estimates	39
2.4.6	Message 308: Non-Interval Load Factor Reading Exception.....	43
2.4.7	Message 321: Read Cycle Notification.....	44
2.4.8	Message 341: Interval Meter Daily Data	46
2.4.9	Message 342: Interval Meter Daily Data (Export).....	50

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 NIE; and
- The interpretation of messages received from NIE.

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
- Unmetered
- Market Gateway Activity

This document is the **Data Processing** Market Message Implementation Guide.

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 NIE:
 - A table containing a description of how each segment and field will be populated.

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.

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.

1.2 Validation

The document provides notes on how NIE 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 XML 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 by NIE.

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 NIE
- A description of the error.

General market process validations that are not specific to individual market message fields are excluded

NI Market Message Implementation Guide – Data Processing

1.3 Message Version

This Message Guide refers to and is consistent with the Market Messages and Data Codes.

1.4 Notes

In this document, the 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 208 where ‘MPRN Level Information –Level 2’ is stated it is the data items and segments that comprise ‘MPRN Level Information’ that are level two items (e.g. MPRN field, Market Participant Business Reference field, Meter ID segment). Accordingly, within this document, MPRN Level Information segment is show as a Level 1 segment.
- Message Header is a Level 1 segment is a child of Header Level Information.

1.5 Implementation of Market Change Requests

The changes that have been incorporated into this document as a result of approved Market Change Requests are as follows.

- MCR 1012 – Removal of use of message 303R for implausible reads
- MCR 1023 – Estimated Readings for Change of Legal Entity
- CRID 152 Read Reason 27 and Read Type ED, EF
- CRID 153 – Removal of Data Aggregation Estimated Readings at D+4
- MCR 1090 – Updated Codes for 300 series market messages
- DR1110/CRID163 Updates to ES market message Implementation Guides and Retail Market Procedures
- DR1100/CRID159 CoS 210 Market Messages
- DR1116/CRID166 – Updates for Enduring Solution NI Market Documentation

1.6 Outstanding Issues

None

2 DATA PROCESSING MESSAGE GROUP

2.1 Scope and Business Context

The purpose of the Data Processing messages is to enable a Supplier to provide meter readings to or request meter readings from NIE and to enable NIE to provide validated readings to the Supplier.

Data Processing messages are used in the following business contexts:

- The processing of Interval readings where message 341 and 342 is received.
- The processing of scheduled Non-Interval readings where messages 300 and 305 received.
- The notification of the read cycle where message 321 is received.
- The processing of special reads where message 300S is received in response to a valid Meters Works message 252 requesting a special read.
- The processing of customer reads where message 210 may be sent by a Supplier and messages 303R or 300 may be received.

In addition meter readings can also be sent to NIE using messages 010 (Change of Supplier) and 016 (Change of Legal Entity). These are described in the Registration and Customer Data sections respectively. Change of Supplier reading messages 310 and 320 and their associated withdrawal messages are also described in the Registration section.

Meter readings may also be withdrawn for a variety of reasons. Message 300W is used to communicate withdrawn readings to Suppliers.

In addition meter readings are also sent by NIE as a result of Meter Works. These messages, 306, 307 and 332, and their associated withdrawal messages are described in the Meter Works sections.

2.2 Message Usage Summary

The following table provides a trigger list for each message detailing when it is used.

NI Market Message Implementation Guide – Data Processing

Message	Title	Sender	Recipient	Trigger	Predecessor
208	Replacement Reading	Supplier	NIE	Supplier decides to dispute a Change of Supplier reading by providing a replacement	310 or 320
210	Supplier Provided Reading	Supplier	NIE	Supplier has elected to provide a customer reading for a Change of Supplier or other purpose	
300	Validated Non-Interval Readings	NIE	Supplier	A scheduled reading is collected and processed. A customer reading is obtained and processed.	Scheduled Read, 016 or 210
300S	Validated Non-Interval Readings (Special)	NIE	Supplier	A special reading is obtained and processed.	252
300W	Withdrawn Non-Interval Reading	NIE	Supplier	A scheduled, customer or special reading or estimate is withdrawn by NIE	300, 300S, 305
303R	Customer Read Rejection	NIE	Supplier	NIE rejects a Customer Read	010, 016 or 210
305	Non Settlement Estimates	NIE	Supplier	A 'no read' condition is returned by the Data Collector for a scheduled reading event	None
308	Non-Interval Load Factor Reading Exception	NIE	Supplier	A load factor has been calculated from readings to be consistently different to that currently recorded	Any Non-Interval reading
321	Read Cycle Notification	Data Collector	Supplier	Data Collector makes a change to the read schedule for a Meter Point	None
341	Interval Meter Daily Readings (Import)	NIE	Supplier	NIE collect and validate import Interval meter readings	None
342	Interval Meter Daily Readings (Export)	NIE	Supplier and Generator	NIE collect and validate export Interval meter readings	None

2.3 Message Directory – Supplier to NIE

2.3.1 Message 208: Replacement Reading

Purpose and Description of Message

Message 208 is sent by a New or Old Supplier to NIE in order to dispute a Change of Supplier reading.

It contains a nominated replacement reading that, if agreed by both Suppliers, will be used to replace the Change of Supplier reading. The readings should be dated at, and will be applied as at, a Read Date equal to the original Change of Supplier date.

Message 208 is used in the following Market Processes:

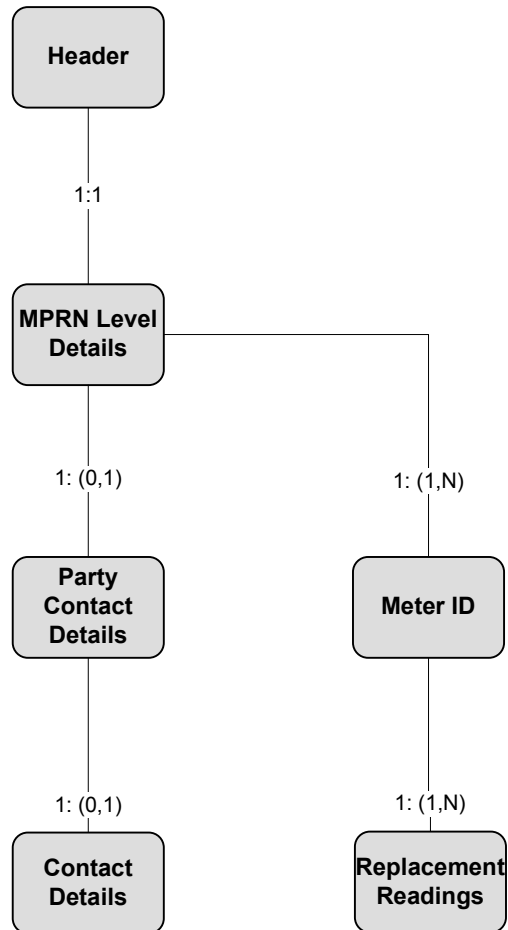
Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To dispute a Change of Supplier reading.

Message 208 should only be sent when:

- Message 310 or 320 has been received
- The replacement reading has been agreed with the other Supplier involved.

Data Hierarchy Diagram

208 Message



NI Market Message Implementation Guide – Data Processing

Composition Instructions

Suppliers should follow the instructions below in populating the Replacement Reading message.

Segment and Field Level Identifier – 208 Message				Rpt	Optionality	Description and Purpose
1 Message Header				1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information				1	Mandatory	
2	FLD	MPRN		1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference		1	Mandatory	A reference to the Market Participant Business Reference provided in the Message Header sent by the Supplier to NIE. It enables the Supplier to uniquely identify the original message to which this is the response.
2	FLD	Read Date		1	Mandatory	The Read Date is the date to which the reading will be applied. It should be the date of the reading being replaced as communicated on message 310 or 320.
2	FLD	Read Reason		1	Mandatory	A code that indicates the reason that the reading is provided. The Read Reason should be set to: <ul style="list-style-type: none"> • 26 - Change of Supplier
2	FLD	Supplier ID		1	Mandatory	The Supplier ID should be set to the ID of the Supplier providing the replacement reading.
2	SEG	Party Contact Details		1	Optional	The Party Contact Details if and as provided by the Supplier. See Common Data Segments for detailed notes on structure and population
2	SEG	Meter ID		1..N	Mandatory	
3	FLD	Meter Category		1	Optional	Not Used.
3	FLD	Serial Number		1	Mandatory	The physical or badge number found on the meter.
3	SEG	Replacement Reading		1..N	Mandatory	Where customer readings are to be provided then a reading should be provided for each register together with sufficient information to identify the appropriate register. In normal circumstances only one of Meter Register Sequence, Timeslot or Register Type is required.
4	FLD	Meter Register Sequence		1	Optional	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 208 Message			Rpt	Optionality	Description and Purpose
4	FLD	Timeslot	1	Optional	A code that indicates the period for which data is recorded. This must be provided in Northern Ireland. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Reading Value	1	Mandatory	This should be the replacement reading the Supplier requests to be used for meter register identified by the Serial Number and Meter Register Sequence, Timeslot and Register Type data provided and which will be treated as effective on the Read Date.
4	FLD	Read Type	1	Mandatory	This should be set to: <ul style="list-style-type: none"> RC - Replacement Reading
4	FLD	Register Type	1	Optional	Register Type is a code to indicate the purpose of the register. Refer to the Data Codes published by NIE for a complete list of codes.

Validation

NIE will undertake the following validation.

Segment and Field Level Identifier – 208 Message			Validation
1	Message Header		Not validated by NIE.
1	MPRN Level Information		
2	FLD	MPRN	The MPRN must either be currently registered to the Supplier or have been registered to the Supplier as the immediate previous Supplier.
2	FLD	Market Participant Business Reference	Not validated by NIE.
2	FLD	Read Date	NIE will check that the Read Date relates to the date of a Change of Supplier reading
2	FLD	Read Reason	The Read Reason should be set to: <ul style="list-style-type: none"> 26 - Change of Supplier Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Supplier ID	The Supplier ID should be the ID of the Supplier providing the replacement reading.
2	SEG	Party Contact Details	Not validated by NIE.
2	SEG	Meter ID	
3	FLD	Meter Category	Not validated by NIE.

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 208 Message			Validation
3	FLD	Serial Number	NIE will match the Serial Number to the Serial Number(s) recorded for the Meter Point by NIE and if a unique match cannot be found the readings will be rejected.
3	SEG	Replacement Reading	NIE will expect a reading for every register installed at the Meter Point and will reject the readings if this is not the case.
4	FLD	Meter Register Sequence	If provided, NIE will match the Meter Register Sequence to the Meter Register Sequence (s) recorded for the Meter Point by NIE. If a unique match cannot be found the readings will be rejected.
4	FLD	Timeslot	NIE will match the Timeslot to the Timeslot (s) recorded for the Meter Point and Meter Serial Number matched above. If a unique match cannot be found the readings will be rejected. The message will be invalid if Timeslot is not provided.
4	FLD	Reading Value	Provided the readings are not rejected, NIE will validate the readings according to the rules specified in MP NI 14
4	FLD	Read Type	Not validated by NIE.
4	FLD	Register Type	If provided and NIE cannot otherwise match readings to a register, NIE will match the Register Type to the Register Type (s) recorded for the Meter Point and Meter Serial Number matched above. If a unique match cannot be found the readings will be rejected.

2.3.2 Message 210: Supplier Provided Reading

Purpose and Description of Message

Message 210 can be sent by a Supplier to NIE for a variety of reasons:

- By a New Supplier to provide a Change of Supplier Reading
- By an existing Supplier to fulfil a scheduled meter read order
- By an existing Supplier to correct a DUoS billing over-estimate.

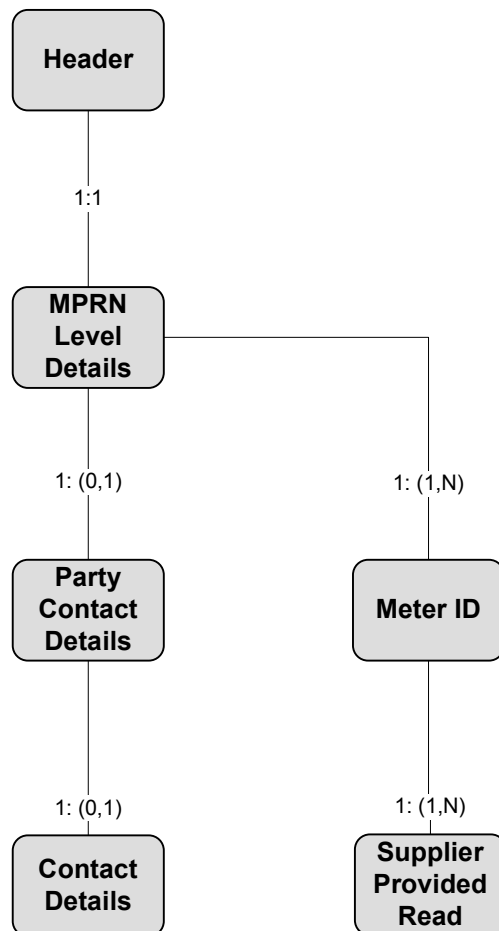
Message 210 is used in the following Market Processes:

Process Number and Title	Use of Message
MP NI 1 Change of Supplier – Non Interval Credit	To provide a Change of Supplier reading.
MP NI 14 Readings Processing – Non Interval	To provide a customer reading where a scheduled meter read order is open. To correct a DUoS billing over-estimate
MP NI 37 Change of Supplier - Keypad	To provide a Change of Supplier reading.

Message 210 should not be used for an Unmetered, Interval or SToD Meter Point.

Data Hierarchy Diagram

210 Message



NI Market Message Implementation Guide – Data Processing

Composition Instructions

Supplier should follow the instructions below in populating the Supplier Provided Reading message.

Segment and Field Level Identifier – 210 Message				Rpt	Optionality	Description and Purpose
1 Message Header				1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information				1	Mandatory	
2	FLD	MPRN		1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference		1	Mandatory	A reference to the Market Participant Business Reference provided in the Message Header sent by the Supplier to NIE. It enables the Supplier to uniquely identify the original message to which this is the response.
2	FLD	Read Date		1	Mandatory	The Read Date is the date to which the reading will be applied. The date on which the reading was obtained from the meter should be provided.
2	FLD	Read Reason		1	Mandatory	A code that indicates the reason that the reading is provided. The Read Reason should be set to one of the following: <ul style="list-style-type: none"> • 26 - Change of Supplier • 27 – Change of Legal Entity • 95 - If the reading is provided for any other purpose, including to correct a DUoS estimate
2	FLD	Supplier ID		1	Mandatory	The code identifying the Supplier providing the reading.
2	SEG	Party Contact Details		1	Optional	The Party Contact Details if and as provided by the Supplier. See Common Data Segments for detailed notes on structure and population
2	SEG	Meter ID		1..N	Mandatory	
3	FLD	Meter Category		1	Optional	Not Used.
3	FLD	Serial Number		1	Mandatory	The physical or badge number found on the meter.
3	SEG	Supplier Provided Read		1..N	Mandatory	
4	FLD	Meter Register Sequence		1	Optional	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.
4	FLD	Timeslot		1	Optional	A code that indicates the period for which data is recorded. This must be provided in Northern Ireland.

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 210 Message			Rpt	Optionality	Description and Purpose
					Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Reading Value	1	Mandatory	This should be the reading recorded on the Read Date on the register identified by the Serial Number, Meter Register Sequence and Timeslot data provided.
4	FLD	Read Type	1	Mandatory	This should be set to <ul style="list-style-type: none"> SC - Supplier Provided Customer Reading
4	FLD	Register Type	1	Optional	Register Type is a code to indicate the purpose of the register. Refer to the Data Codes published by NIE for a complete list of codes.

Validation

NIE will also undertake the following validation.

Segment and Field Level Identifier			Validation
1	Message Header		Not validated by NIE.
1	MPRN Level Information		
2	FLD	MPRN	<p>The MPRN must either be currently registered to the Supplier or, if the Read Reason denotes Change of Supplier, be subject to a registration request from the Supplier that has not yet been confirmed as complete.</p> <p>The MPRN must not identify an Unmetered Meter Point or an Interval Meter Point or one that is subject to a STOD UoS Tariff.</p>
2	FLD	Market Participant Business Reference	Not validated by NIE.
2	FLD	Read Date	<p>If the Read Reason denotes a Change of Supplier, then the Read Date must be:</p> <ul style="list-style-type: none"> For residential customers, not more than twelve days prior to or more than fifteen days later than the date of registration receipt by NIE For commercial customers, not more than two days prior to or more than fifteen days later than registration receipt by NIE <p>The Read Date must not be prior to the date of the last DUoS Bill or the latest billed reading and cannot be a future date in any circumstances.</p>

NI Market Message Implementation Guide – Data Processing

2	FLD	Read Reason	Read Reason is used to determine how the other validations are performed. If it is not one of the allowed values the readings will be rejected. If value 26 is used by a Supplier for a keypad metered customer, the readings will be rejected if CoS has completed more than two days ago.
2	FLD	Supplier ID	If the Read Reason denotes Change of Supplier, then the Supplier must have a registration request in progress that has not been completed. Otherwise, the Supplier ID should be the Supplier that is registered at the Meter Point.
2	SEG	Party Contact Details	Not validated by NIE.
2	SEG	Meter ID	
3	FLD	Meter Category	Not validated by NIE.
3	FLD	Serial Number	NIE will match the Serial Number to the Serial Number(s) recorded for the Meter Point by NIE and if a unique match cannot be found the readings will be rejected.
3	SEG	Supplier Provided Read	NIE will expect a reading for every register installed at the Meter Point and will reject the readings if this is not the case.
4	FLD	Meter Register Sequence	If provided, NIE will match the Meter Register Sequence to the Meter Register Sequence (s) recorded for the Meter Point by NIE. If a unique match cannot be found the readings will be rejected.
4	FLD	Timeslot	NIE will match the Timeslot to the Timeslot (s) recorded for the Meter Point and Meter Serial Number matched above. If a unique match cannot be found the readings will be rejected. The message will be invalid if Timeslot is not provided.
4	FLD	Reading Value	Provided the readings are not rejected, NIE will validate the readings according to the rules specified in MP NI 14.
4	FLD	Read Type	Not validated by NIE.
4	FLD	Register Type	If provided and NIE cannot otherwise match readings to a register, NIE will match the Register Type to the Register Type (s) recorded for the Meter Point and Meter Serial Number matched above. If a unique match cannot be found the readings will be rejected.

If the above meter details or read date validation is not successful then NIE will reject the reading using message 303R. If the validation is successful then NIE will process the reading and communicate the results using message 300 or, for a Change of Supplier, 310 and 320.

2.4 Message Directory – NIE/Data Collector to Supplier

2.4.1 Message 300: Validated Non-Interval Readings (Scheduled)

Purpose and Description of Message

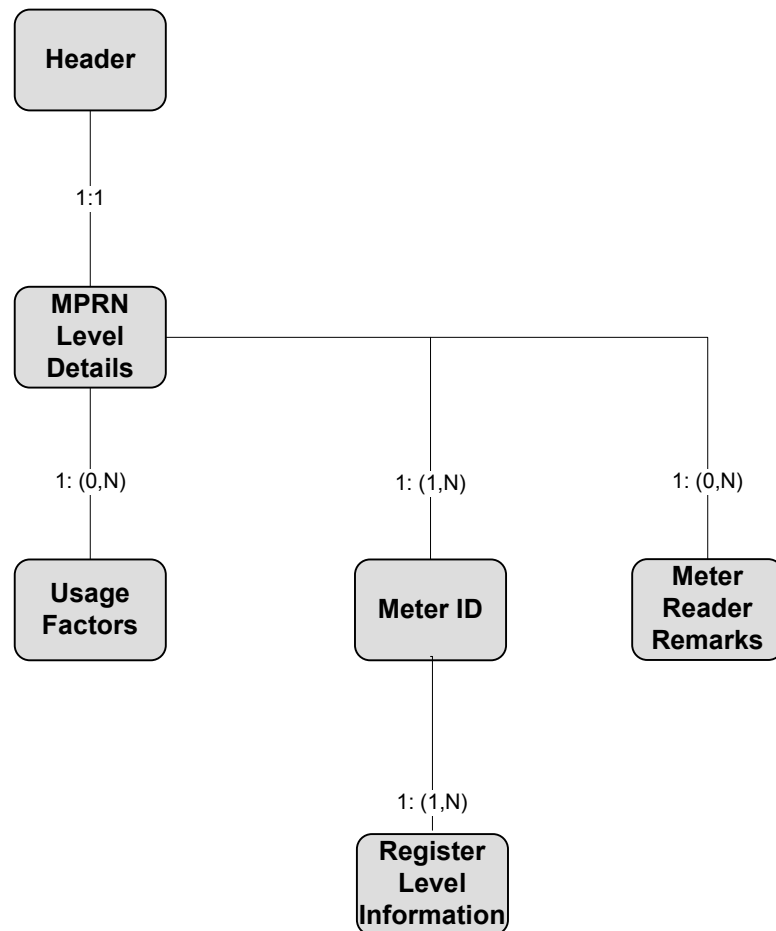
Message 300 is sent by NIE to a Supplier to advise of processed scheduled and customer meter readings.

Message 300 is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To advise processed scheduled and customer meter readings to the Supplier
MP NI 25 Change of Legal Entity	To confirm a Change of Legal Entity reading or estimate.

Data Hierarchy Diagram

300 Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 300 Message			Rpt	Optionality	Description and Purpose
1 Message Header			1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information			1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference	1	Optional	A reference to the Market Participant Business Reference provided in the Message Header sent by the Supplier to NIE. It enables the Supplier to uniquely identify the original message to which this is the response. It will only be populated in response to message 016 or 210.
2	FLD	Networks Reference Number	1	Mandatory	A reference allocated by NIE to the readings
2	FLD	Load Profile	1	Mandatory	A code denoting the standard load profile that determines, when coupled with Timeslot, the derived profile that is applied to consumption usage for settlement purposes. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	DUoS Group	1	Mandatory	This field will contain the code for the DUoS Tariff applied by NIE to the Meter Point. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Meter Point Status	1	Mandatory	The connection status of the Meter Point. This will be one of the following: <ul style="list-style-type: none"> • D - Meter Point was De-Energised • E - Meter Point was Energised
2	FLD	Read Date	1	Mandatory	The date on which the readings provided in the message were read from the meter or the date to which any estimate applies. The time of the readings is assumed to be the end of the day.
2	SEG	Usage Factors	0..N	Optional	For each Timeslot there will be two usages; the first being the actual usage and the second the estimate usage, each with their own separate Effective From Date.
3	FLD	Timeslot	1	Mandatory	A code that indicates the period for which usage is settled. Refer to the Data Codes published by NIE for a complete list of codes.
3	FLD	Effective From Date	1	Mandatory	If the date of the read is D this field will contain D+1 for the Estimated Usage Factor. For the actual usage factor it should contain either the

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300 Message			Rpt	Optionality	Description and Purpose
					previous read date or the day following the previous read date depending on the type of the previous read.
3	FLD	Actual Usage Factor	1	Optional	This will contain the total AUF for consumption calculated for the period between the previous read date and the read date for registers with the indicated timeslot.
3	FLD	Estimated Usage Factor	1	Optional	This will contain the total EUF for consumption registers with the indicated timeslot.
2	SEG	Meter ID	1..N	Mandatory	
3	FLD	Meter Category	1	Optional	Not Used.
3	FLD	Serial Number	1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register Level Information	1..N	Mandatory	This is the segment that stores information relating to the registers displayed on a meter.
4	FLD	Meter Register Sequence	1	Mandatory	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.
4	FLD	Timeslot	1	Mandatory	A code that indicates the period for which data is recorded. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Unit of Measurement	1	Mandatory	Unit of measurement is a code that indicates the value that is measured e.g. KWh. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Meter Multiplier	1	Mandatory	Meter Multiplier is a factor to be applied to an advance or reading at a register in order to derive a true value.
4	FLD	Reading Value	1	Mandatory	Reading Value is the reading for this register.
4	FLD	Read Reason	1	Mandatory	A code that indicates the reason that a reading was collected or generated. This should be set to: <ul style="list-style-type: none"> • 01 - Scheduled Read • 10 - Ad hoc, non-chargeable check read • 27 - Change of Legal Entity
4	FLD	Read Type	1	Mandatory	A code that indicates whether the reading is: <ul style="list-style-type: none"> • A - Actual • E - Estimated – No Access • ED - Estimated – Reading dated before last DUoS bill • EF - Estimate – Implausible / No Read Available • CU - Customer Reading

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300 Message			Rpt	Optionality	Description and Purpose
					<ul style="list-style-type: none"> • SC - Supplier Provided Customer Reading
4	FLD	Previous Read Date	1	Mandatory	The date from which consumption is calculated. This will be the previous actual read date or, where there has been a subsequent billing estimate, the date of the billing estimate. This is provided for kWh registers only.
4	FLD	Consumption	1	Optional	The consumption in kWh calculated from the Previous Read Date. This is provided for kWh registers only.
4	FLD	Read Status	1	Mandatory	This will be set to one of the following: <ul style="list-style-type: none"> • RV - Reading Valid • RREL - Reading - Manually released • REST - Reading estimated • RENS – Reading estimated, not used for settlement
4	FLD	Register Type	1	Mandatory	Register Type is a code to indicate the purpose of the register. Refer to the Data Codes published by NIE for a complete list of codes.
2	SEG	Meter Reader Remarks	0..N	Optional	This segment stores information captured by the meter reader describing any issues encountered while attempting to obtain a meter reading.
3	FLD	Meter Reader Remark Code	1	Mandatory	Meter Reader Remark Code indicates the nature of the issue encountered while attempting to obtain a meter reading. Refer to the Data Codes published by NIE for a complete list of codes.
3	FLD	Meter Reader Remark Text	1	Optional	Meter Reader Remark Text provides extra information relating to the issue. Refer to the Data Codes published by NIE for a complete list of codes.

2.4.2 Message 300S: Valid Non-Interval Readings (Special)

Purpose and Description of Message

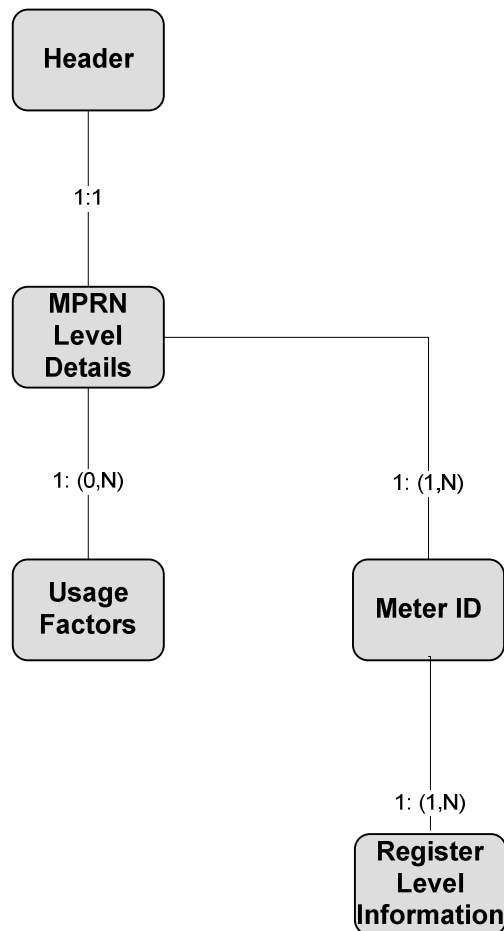
Message 300S is sent by NIE to a Supplier to advise of processed special meter readings.

Message 300S is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To advise a special reading obtained as a result of Change of Supplier reading dispute.
MP NI 18 Special Read Requests	To advise a special reading.

Data Hierarchy Diagram

300S Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 300S Message			Rpt	Optionality	Description and Purpose
1 Message Header			1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information			1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference	1	Optional	A reference to the Market Participant Business Reference provided in the Message Header sent by the Supplier to NIE. It enables the Supplier to uniquely identify the original message to which this is the response.
2	FLD	Networks Reference Number	1	Mandatory	A reference allocated by NIE to the readings
2	FLD	Load Profile	1	Mandatory	A code denoting the standard load profile that determines, when coupled with Timeslot, the derived profile that is applied to consumption usage for settlement purposes. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	DUoS Group	1	Mandatory	This field will contain the code for the DUoS Tariff applied by NIE to the Meter Point. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Meter Point Status	1	Mandatory	The connection status of the Meter Point. This will be one of the following: <ul style="list-style-type: none"> • D - Meter Point was De-Energised • E - Meter Point was Energised
2	FLD	Read Date	1	Mandatory	The date on which the readings provided in the message were read from the meter or the date to which any estimate applies. The time of the readings is assumed to be the end of the day.
2	SEG	Usage Factors	0..N	Optional	For each Timeslot there will be two usages; the first being the actual usage and the second the estimate usage, each with their own separate Effective From Date.
3	FLD	Timeslot	1	Mandatory	A code that indicates the period for which usage is settled. Refer to the Data Codes published by NIE for a complete list of codes.
3	FLD	Effective From Date	1	Mandatory	If the date of the read is D this field will contain D+1 for the Estimated Usage Factor. For the actual usage factor it should contain either the previous read date or the day following the previous read date depending on

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300S Message			Rpt	Optionality	Description and Purpose
					the type of the previous read.
3	FLD	Actual Usage Factor	1	Optional	This will contain the total AUF for consumption calculated for the period between the previous read date and the read date for registers with the indicated timeslot.
3	FLD	Estimated Usage Factor	1	Optional	This will contain the total EUF for consumption registers with the indicated timeslot.
2	SEG	Meter ID	1..N	Mandatory	
3	FLD	Meter Category	1	Optional	Not Used.
3	FLD	Serial Number	1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register Level Information	1..N	Mandatory	This is the segment that stores information relating to the registers displayed on a meter.
4	FLD	Meter Register Sequence	1	Mandatory	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.
4	FLD	Timeslot	1	Mandatory	A code that indicates the period for which data is recorded. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Unit of Measurement	1	Mandatory	Unit of measurement is a code that indicates the value that is measured e.g. KWh. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Meter Multiplier	1	Mandatory	Meter Multiplier is a factor to be applied to an advance or reading at a register in order to derive a true value.
4	FLD	Reading Value	1	Mandatory	Reading Value is the reading for this register.
4	FLD	Read Reason	1	Mandatory	A code that indicates the reason that a reading was collected or generated. This should be set to: <ul style="list-style-type: none"> • 02 - Special Read that is chargeable • 09 - Special Read that is non-chargeable
4	FLD	Read Type	1	Mandatory	A code that indicates whether the reading is: <ul style="list-style-type: none"> • A - Actual • E – Estimated – No Access • EF – Estimate – Implausible / No Read Available
4	FLD	Previous Read Date	1	Mandatory	The date from which consumption is calculated. This will be the previous actual read date or, where there has been a subsequent billing estimate, the date of the billing estimate. This is provided for kWh registers only.
4	FLD	Consumption	1	Optional	The consumption in kWh calculated from the Previous Read Date. This is

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300S Message			Rpt	Optionality	Description and Purpose
					provided for kWh registers only.
4	FLD	Read Status	1	Mandatory	<p>This will be set to one of the following:</p> <ul style="list-style-type: none"> • RV - Reading Valid • RREL - Reading - Manually released • REST - Reading estimated • RENS - Reading estimated - not be used for settlement. Used where estimates are generated for all registers.
4	FLD	Register Type	1	Mandatory	<p>Register Type is a code to indicate the purpose of the register.</p> <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>

2.4.3 Message 300W: Withdrawn Non-Interval Readings

Purpose and Description of Message

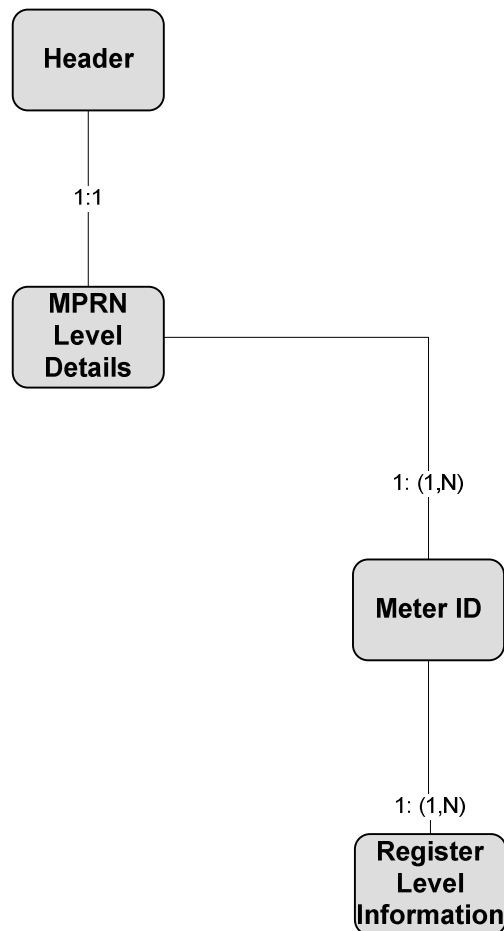
Message 300W is sent by NIE to a Supplier to advise withdrawn scheduled, special and customer meter readings and withdrawn estimates.

Message 300W is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To advise withdrawn meter readings or estimates to the Supplier

Data Hierarchy Diagram

300W Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 300W Message			Rpt	Optionality	Description and Purpose
1	Message Header		1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1	MPRN Level Information		1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference	1	Optional	A reference to the Market Participant Business Reference provided in the Message Header sent by the Supplier to NIE. This enables the Supplier to uniquely identify the original message leading to the reading that is now being withdrawn.
2	FLD	Networks Reference Number	1	Mandatory	A reference allocated by NIE to the readings
2	FLD	Load Profile	1	Mandatory	A code denoting the standard load profile that determines, when coupled with Timeslot, the derived profile that is applied to consumption usage for settlement purposes. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	DUoS Group	1	Mandatory	This field will contain the code for the DUoS Tariff applied by NIE to the Meter Point. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Meter Point Status	1	Mandatory	The connection status of the Meter Point. This will be one of the following: <ul style="list-style-type: none"> • D - Meter Point was De-Energised • E - Meter Point was Energised
2	FLD	Read Date	1	Mandatory	The date on which the readings provided in the message were read from the meter or the date to which any estimate applies. The time of the readings is assumed to be the end of the day.
2	FLD	Withdrawal Reason	1	Mandatory	A code to indicate the reason that the reading was withdrawn. This will be set to one of the following values: <ul style="list-style-type: none"> ▪ A1- Erroneous Change of Supplier ▪ A2 - Disputed CoS Meter Reading - a Change of Supplier reading or any other reading is disputed and is withdrawn as a result of the dispute ▪ A3 - Change of Supplier Cancellation - the reading was billed or attributed to the wrong Supplier because of a Change of Supplier cancellation

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300W Message				Rpt	Optionality	Description and Purpose
						<ul style="list-style-type: none"> ▪ A4 - Change of Supplier - the reading was billed or attributed to the wrong Supplier other than as a result of a Change of Supplier cancellation. These readings can be readings other than those used for the Change of Supplier itself. ▪ B1 - Incorrect MPRN - the reading was applied to the wrong MPRN ▪ C1 - Incorrect Estimation - an estimate is incorrect and is withdrawn as a result of a process other than a dispute from a Supplier ▪ C2 - Incorrect Meter Reading - a reading is incorrect and is withdrawn as a result of a process other than a dispute from a Supplier ▪ D1 - Incorrect Rate - a reading has been billed using an incorrect UoS Tariff ▪ D2 - Incorrect Billing Period - a reading has been billed to an incorrect period ▪ D3 - Incorrect Meter - the reading was applied to the wrong meter or meter register
2	SEG	Meter ID		1..N	Mandatory	
3	FLD	Meter Category		1	Optional	Not Used.
3	FLD	Serial Number		1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register Level Information		1..N	Mandatory	This is the segment that stores information relating to the registers displayed on a meter.
4	FLD	Meter Register Sequence		1	Mandatory	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.
4	FLD	Timeslot		1	Mandatory	<p>A code that indicates the period for which data is recorded.</p> <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>
4	FLD	Unit of Measurement		1	Mandatory	<p>Unit of measurement is a code that indicates the value that is measured e.g. KWh.</p> <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>
4	FLD	Meter Multiplier		1	Mandatory	Meter Multiplier is a factor to be applied to an advance or reading at a register in order to derive a true value.
4	FLD	Reading Value		1	Mandatory	Reading Value is the reading for this register.

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 300W Message			Rpt	Optionality	Description and Purpose
4	FLD	Read Reason	1	Mandatory	<p>A code that indicates the reason that a reading was collected or generated. This should be set to:</p> <ul style="list-style-type: none"> • 01 - Scheduled Read • 14 – Estimate • 27 – Change of Legal Entity
4	FLD	Read Type	1	Mandatory	<p>A code that indicates whether the reading is:</p> <ul style="list-style-type: none"> • A - Actual • E – Estimated – No Access • ED – Estimated – Reading dated before last DUoS bill • EF – Estimate – Implausible / No Read Available • EP – Estimate (Block Planned) • EU – Estimate (Block Unplanned) • CU - Customer Reading • SC - Supplier Provided Customer Reading
4	FLD	Previous Read Date	1	Mandatory	The date from which consumption is calculated. This will be the previous actual read date or, where there has been a subsequent billing estimate, the date of the billing estimate. This is provided for kWh registers only.
4	FLD	Consumption	1	Optional	The consumption in kWh calculated from the Previous Read Date. This is provided for kWh registers only.
4	FLD	Read Status	1	Mandatory	<p>This will be set to:</p> <ul style="list-style-type: none"> • RWI - Reading withdrawn
4	FLD	Register Type	1	Mandatory	<p>Register Type is a code to indicate the purpose of the register.</p> <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>

2.4.4 Message 303R: Customer Read Rejection

Purpose and Description of Message

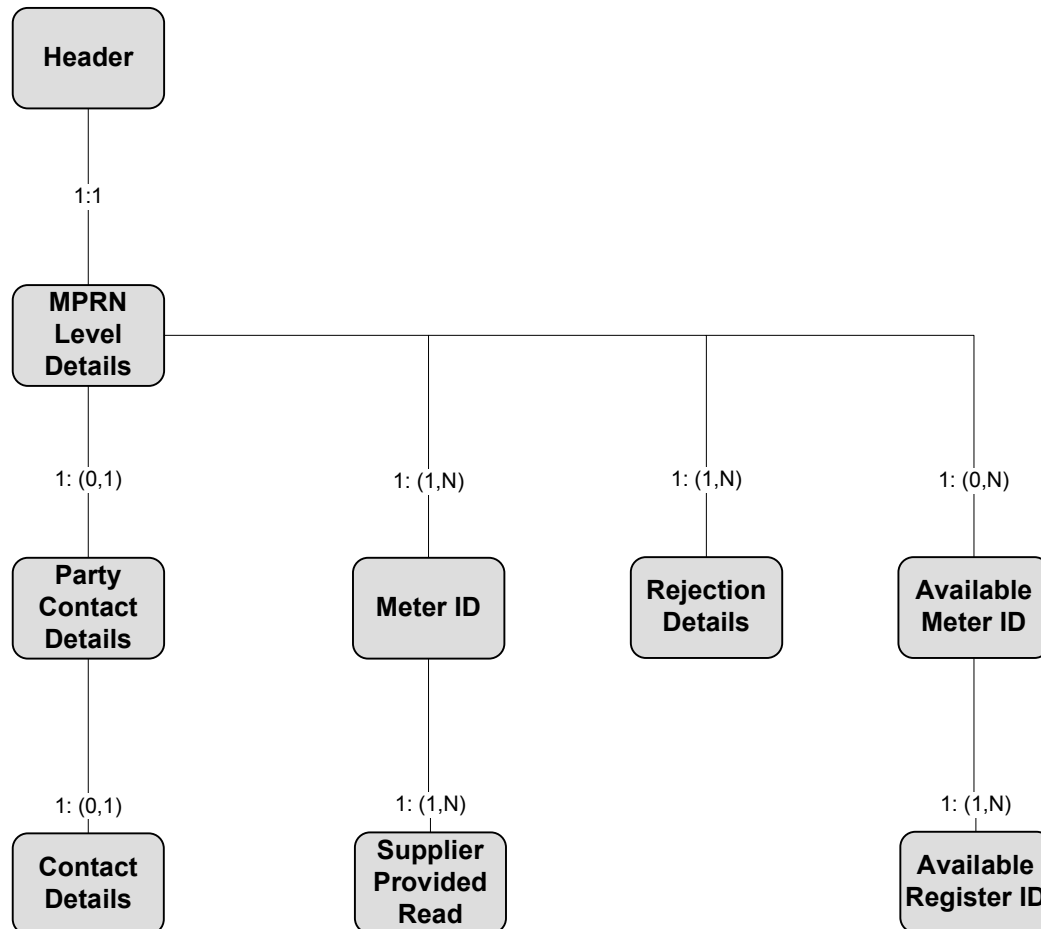
Message 303R is sent by NIE to a Supplier to advise that a customer reading has been rejected.

Message 303R is used in the following Market Processes:

Process Number and Title	Use of Message
MP NI 1 Change of Supplier – Non Interval Credit	To advise the Supplier when a Supplier provided Change of Supplier reading is rejected.
MP NI 14 Readings Processing – Non Interval	To advise the Supplier when a Supplier provided read has been rejected
MP NI 25 Change of Legal Entity	To advise the Supplier when a Supplier provided Change of Legal Entity reading is rejected.
MP NI 37 Change of Supplier - Keypad	To advise the Supplier when a Supplier provided Change of Supplier reading is rejected.

Data Hierarchy Diagram

303R Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 303R Message			Rpt	Optionality	Description and Purpose
1	Message Header		1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1	MPRN Level Information		1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which the readings are rejected.
2	FLD	Supplier ID	1	Mandatory	The Supplier Id provided by the Supplier.
2	FLD	Market Participant Business Reference	1	Mandatory	A reference to the Transaction Reference provided in the Message Header of the 010, 016 or 210 message sent by the Supplier. It enables the Supplier to uniquely identify the original message to which this is the response.
2	FLD	Read Date	1	Mandatory	The Read Date provided by the Supplier.
2	FLD	Read Reason	1	Mandatory	The Read Reason provided by the Supplier.
2	SEG	Party Contact Details	1	Optional	The Party Contact Details if and as provided by NIE. See Common Data Segments for detailed notes on structure and population.
2	SEG	Meter ID	1..N	Mandatory	
3	FLD	Meter Category	1	Optional	Not Used.
3	FLD	Serial Number	1	Optional	The Serial Number as and if provided by the Supplier.
3	SEG	Supplier Provided Read	1..N	Mandatory	
4	FLD	Meter Register Sequence	1	Optional	The Meter Register Sequence if and as provided by the Supplier.
4	FLD	Timeslot	1	Optional	The Timeslot if and as provided by the Supplier.
4	FLD	Reading Value	1	Mandatory	The Reading provided by the Supplier.
4	FLD	Read Type	1	Mandatory	The Read Type provided by the Supplier.
4	FLD	Register Type	1	Optional	The Register Type if and as provided by the Supplier.
2	SEG	Rejection Details	1..N	Mandatory	
3	FLD	Reject Reason	1	Mandatory	A code to identify why data was rejected: <ul style="list-style-type: none"> • IMP - Invalid MPRN • IMT - Invalid meter ID • IRP - Invalid Register Type • IRS - Invalid register sequence • ITI - Invalid timeslot • IID – Invalid/Incomplete Data (<i>e.g. no Register Sequence Number</i>) • SNR - Supplier is not registered to MPRN and does not have a pending registration • TIM - Outside Timescale (<i>The Read Date has not passed the date</i>

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 303R Message				Rpt	Optionality	Description and Purpose
						<i>validations specified for messages 010, 016 or 210)</i> Refer to the Data Codes published by NIE for a complete list of codes.
2	SEG	Available Meter ID		1..N	Optional	This segment will be provided if the readings were rejected due to invalid or absent meter or register data.
3	FLD	Meter Category		1	Optional	Not Used.
3	FLD	Serial Number		1	Mandatory	The physical or badge number found on the meter.
3	SEG	Available Register ID		1..N	Mandatory	
4	FLD	Meter Register Sequence		1	Mandatory	Meter Register Sequence is an identifier to distinguish between different meter registers on a physical meter or set of meters.
4	FLD	Timeslot		1	Mandatory	A code that indicates the period for which data is recorded. Refer to the Data Codes published by NIE for a complete list of codes.
4	FLD	Register Type		1	Mandatory	Register Type is a code to indicate the purpose of the register. Refer to the Data Codes published by NIE for a complete list of codes.

2.4.5 Message 305: Non Settlement Estimates

Purpose and Description of Message

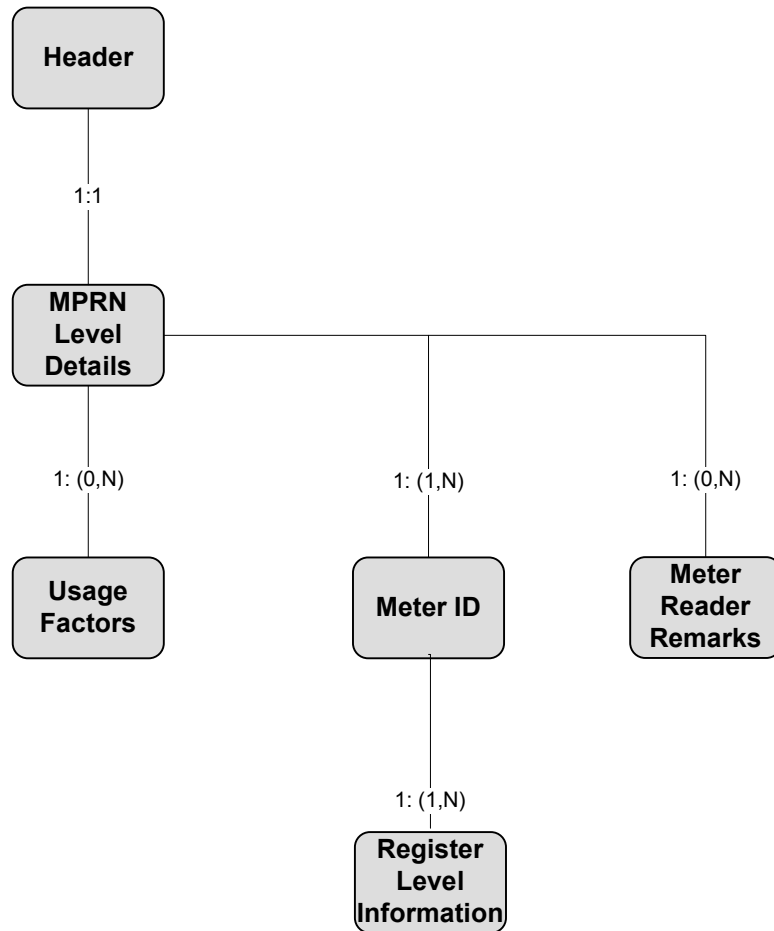
Message 305 is sent by NIE to a Supplier to advise that an estimate has been created for use in DUoS Billing due to a no-read or implausible read situation.

Message 305 is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To advise the Supplier that an estimate has been created for use in DUoS Billing due to a no-read situation

Data Hierarchy Diagram

305 Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 305 Message			Rpt	Optionality	Description and Purpose
1	Message Header		1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1	MPRN Level Information		1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which the Change of Supplier readings are sent.
2	FLD	Market Participant Business Reference	1	Optional	Not Used.
2	FLD	Networks Reference Number	1	Mandatory	A reference allocated by NIE to the readings. This will be the Read Id.
2	FLD	DUoS Group	1	Mandatory	This field will contain the code for the DUoS Tariff applied by NIE to the Meter Point. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Meter Point Status	1	Mandatory	The connection status of the Meter Point. This will be one of the following: <ul style="list-style-type: none"> • D - Meter Point was De-Energised • E - Meter Point was Energised
2	FLD	Read Date	1	Mandatory	The date of the estimates provided in the message. The estimates will be dated at the scheduled read date.
2	FLD	No Read Code	1	Mandatory	A code to describe why no read was obtained on a site visit or why no site visit was made. Refer to the Data Codes published by NIE for a complete list of codes.
2	FLD	Debit Re-Estimate Flag	1	Optional	This field will be set to “Y” when all of the conditions below are true: <ul style="list-style-type: none"> • The AUF calculated for a timeslot from a set of meter readings exceeds twice the value of the previous EUF for the timeslot; and • Two or more consecutive quarterly bills have been estimated; and • No actual readings or settlement relevant estimates or have been billed in the last six months By default, this field will be set to “N”.
2	SEG	Meter ID	1..N	Mandatory	
3	FLD	Meter Category	1	Optional	Not Used.
3	FLD	Serial Number	1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register Level Information	1..N	Mandatory	This is the segment that stores information relating to the registers displayed on a meter.
4	FLD	Meter Register Sequence	1	Mandatory	Meter Register Sequence is an identifier to distinguish between different

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 305 Message			Rpt	Optionality	Description and Purpose	
					meter registers on a physical meter or set of meters.	
4	FLD	Timeslot	1	Mandatory	A code that indicates the period for which data is recorded. Refer to the Data Codes published by NIE for a complete list of codes.	
4	FLD	Unit of Measurement	1	Mandatory	Unit of measurement is a code that indicates the value that is measured e.g. KWh. Refer to the Data Codes published by NIE for a complete list of codes.	
4	FLD	Meter Multiplier	1	Mandatory	Meter Multiplier is a factor to be applied to an advance or reading at a register in order to derive a true value.	
4	FLD	Reading Value	1	Mandatory	Reading Value is the reading for this register.	
4	FLD	Read Reason	1	Mandatory	A code that indicates the reason that a reading generated. This should be set to: <ul style="list-style-type: none">• 01 - Scheduled Read• 14 – Reading Estimated	
4	FLD	Read Type	1	Mandatory	A code that indicates whether the reading is: <ul style="list-style-type: none">• E – Estimated – No Access• EF – Estimate – Implausible / No Read Available• EP – Estimate – (Block Planned)• EU – Estimate – (Block Unplanned)	
4	FLD	Previous Read Date	1	Mandatory	The date from which consumption is calculated. This will be the previous actual read date or, where there has been a subsequent billing estimate, the date of the billing estimate. This is provided for kWh registers only.	
4	FLD	Consumption	1	Optional	The consumption in kWh calculated from the Previous Read Date. This is provided for kWh registers only.	
4	FLD	Register Type	1	Mandatory	Register Type is a code to indicate the purpose of the register. Refer to the Data Codes published by NIE for a complete list of codes.	
2	SEG	Meter Reader Remarks		0..N	Optional	This segment stores information captured by the meter reader describing any issues encountered while attempting to obtain a meter reading.
3	FLD	Meter Reader Remark Code		1	Mandatory	Meter Reader Remark Code indicates the nature of the issue encountered while attempting to obtain a meter reading. Refer to the Data Codes published by NIE for a complete list of codes.
3	FLD	Meter Reader Remark Text		1	Optional	Meter Reader Remark Text provides extra information relating to the issue.

NI Market Message Implementation Guide – Data Processing

Segment and Field Level Identifier – 305 Message			Rpt	Optionality	Description and Purpose
					Refer to the Data Codes published by NIE for a complete list of codes.

2.4.6 Message 308: Non-Interval Load Factor Reading Exception

Purpose and Description of Message

Message 308 will not be used by NIE.

2.4.7 Message 321: Read Cycle Notification

Purpose and Description of Message

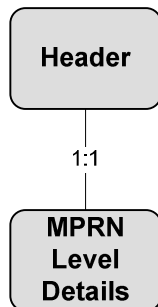
Message 321 is sent by the Data Collector to a Supplier to advise a change to the read schedule for an Non-Interval Meter Point.

Message 321 is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 14 Readings Processing – Non Interval	To advise the Supplier of a change to the read schedule for an Non-Interval Meter Point

Data Hierarchy Diagram

321 Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 321 Message			Rpt	Optionality	Description and Purpose
1 Message Header			1	Mandatory	See Common Data Segments for detailed notes on structure and population.
1 MPRN Level Information			1	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which read schedule is provided
2	FLD	Read Frequency Code	1	Mandatory	A code that indicates the frequency with which a meter reading is scheduled to be taken by NIE Data Collector. The value will typically be:: Q - Quarterly
2	FLD	Read Cycle	1	Mandatory	The read cycle that a meter is due to be read. The read cycle comprises a week identifier and a day identifier.

2.4.8 Message 341: Interval Meter Daily Data

Purpose and Description of Message

Message 341 is sent by NIE in the following circumstances:

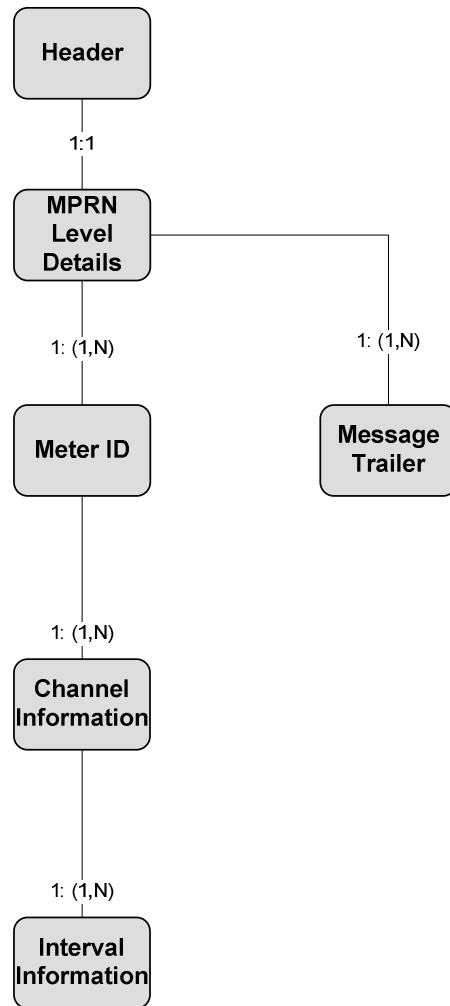
- To a Supplier to advise processed Interval meter readings data for Import Channels

Message 341 is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 15 Data Processing - Interval	To advise the Supplier and NIE of processed interval meter import data

Data Hierarchy Diagram

341 Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 341 Message				Rpt	Optionality	Description and Purpose
1 Message Header				1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information				1:N	Mandatory	
2	FLD	MPRN		1	Mandatory	The unique identifying reference number for the Meter Point for which Interval reading data is provided.
2	FLD	Read Date		1	Mandatory	The date on which the import recorded in the message occurred.
2	FLD	Transformer Loss Factor (Applied)		1	Optional	Not Used.
2	FLD	Alert Flag		1	Mandatory	<p>A code that indicates the validity of the channel data</p> <ul style="list-style-type: none"> • VV - all values are valid • VI - values are invalid. Typically this will be due to non-zero values on a de-energised site <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>
2	FLD	Reading Replacement Version Number		1	Mandatory	The Version Number increments every time there is a replacement reading (actual or estimate).
2	SEG	Meter ID		1	Mandatory	
3	FLD	Meter Category		1	Optional	Not Used.
3	FLD	Serial Number		1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register/Channel Information		1:N	Mandatory	<p>This segment provides the information pertaining to the registers or channels on meters that have been fitted at the meter point.</p> <p>Most import sites will have two channels reported</p>
4	FLD	Metering Interval		1	Mandatory	<p>The length in minutes of a period when consumption is recorded on an Interval meter. This will be set to:</p> <ul style="list-style-type: none"> • 30 - denoting a half hour interval
4	FLD	Register Type		1	Mandatory	<p>A code that indicates the type of value recorded for the channel.</p> <ul style="list-style-type: none"> • 60 - denoting import kWh • 61 - denoting reactive lag <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>
4	FLD	Unit of Measurement		1	Mandatory	<p>A code that indicates the value that is measured.</p> <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>

NI Market Message Implementation Guide – Data Processing

4		SEG	Interval Information		1:N	Mandatory	Except for days on which the clocks change, there will normally be 48 intervals.
5		FLD	Interval Value		1	Mandatory	The value of a reading or estimate (refer to Interval Status) in the form passed to NIE measured in the units identified by Unit of Measurement including the application of multipliers and transformer loss factors where appropriate.
5		FLD	Interval Period Timestamp		1	Mandatory	The start time of an interval period when data is recorded on a Interval meter, expressed in local (Northern Ireland) time.
5		FLD	Interval Status		1	Mandatory	A code that indicates the status of the value for the interval. It can take the following values: <ul style="list-style-type: none">• VEST - indicates that the value is estimated by the data collector• VCHG - indicates a value that has been manually changed• VVAK - indicates an actual value is collected or totalised from metering outstation(s) Refer to the Data Codes published by NIE for a complete list of codes.
5		FLD	Value (Net Active)		1	Optional	For AGUs only, the net of the Interval Demand Value for Import kWh and the Interval Demand Value for Export kWh. Where Import is less than export, this field will contain 0
1 Message Trailer					1	Mandatory	
2	FLD	MPRN Count			1	Mandatory	A count of the number of MPRN level segments included in the message.
2	FLD	Channel Count			1	Mandatory	A count of the number of Channel level Details segments included in the message.

2.4.9 Message 342: Interval Meter Daily Data (Export)

Message 342 is sent by NIE in the following circumstances:

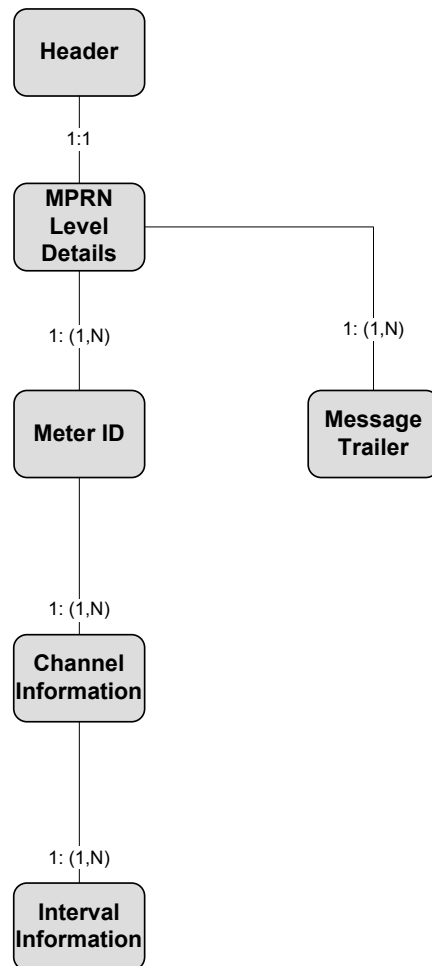
- To a Supplier to advise processed Interval meter readings data for Export Channels
- To the Generator to advise processed Interval meter readings data for Export Channels

Message 342 is used in the following Market Process:

Process Number and Title	Use of Message
MP NI 15 Data Processing - Interval	To advise the Supplier of processed interval meter export data

Data Hierarchy Diagram

342 Message



NI Market Message Implementation Guide – Data Processing

Message Structure and Interpretation

Segment and Field Level Identifier – 342 Message			Rpt	Optionality	Description and Purpose
1 Message Header			1	Mandatory	<i>See Common Data Segments for detailed notes on structure and population.</i>
1 MPRN Level Information			1:N	Mandatory	
2	FLD	MPRN	1	Mandatory	The unique identifying reference number for the Meter Point for which Interval reading data is provided.
2	FLD	Read Date	1	Mandatory	The date on which the export recorded in the message occurred.
2	FLD	Transformer Loss Factor (Applied)	1	Optional	Not Used.
2	FLD	Generator MPID	1	Optional	The participant identification code of a Generator, provided only where data is provided for an export site.
2	FLD	Generation Unit Id	1	Optional	The unique identifier referencing the generation unit linked to this MPRN, provided only where data is provided for an export site.
2	FLD	Alert Flag	1	Mandatory	<p>A code that indicates the validity of the channel data</p> <ul style="list-style-type: none"> • VV - all values are valid • VI - values are invalid. Typically this will be due to non-zero values on a de-energised site <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>
2	FLD	Reading Replacement Version Number	1	Mandatory	The Version Number increments every time there is a replacement reading (actual or estimate).
2	SEG	Meter ID	1	Mandatory	
3	FLD	Meter Category	1	Optional	Not Used.
3	FLD	Serial Number	1	Mandatory	The physical or badge number found on the meter.
3	SEG	Register/Channel Information	1:N	Mandatory	<p>This segment provides the information pertaining to the registers or channels on meters that have been fitted at the meter point.</p> <p>Most export sites will have three channels reported.</p>
4	FLD	Metering Interval	1	Mandatory	<p>The length in minutes of a period when consumption is recorded on an Interval meter. This will be set to:</p> <ul style="list-style-type: none"> • 30 - denoting a half hour interval
4	FLD	Register Type	1	Mandatory	<p>A code that indicates the type of value recorded for the channel.</p> <ul style="list-style-type: none"> • 62 - denoting export kWh • 63 - denoting reactive lag <p>Refer to the Data Codes published by NIE for a complete list of codes.</p>

NI Market Message Implementation Guide – Data Processing

4	FLD	Unit of Measurement	1	Mandatory	A code that indicates the value that is measured. Refer to the Data Codes published by NIE for a complete list of codes.
4	SEG	Interval Information	1:N	Mandatory	Except for days on which the clocks change, there will normally be 48 intervals.
5	FLD	Interval Value	1	Mandatory	The value of a reading or estimate (refer to Interval Status) in the form passed to NIE measured in the units identified by Unit of Measurement including the application of multipliers and transformer loss factors where appropriate.
5	FLD	Interval Period Timestamp	1	Mandatory	The start time of an interval period when data is recorded on an Interval meter, expressed in local (Northern Ireland) time.
5	FLD	Interval Status	1	Mandatory	A code that indicates the status of the value for the interval. It can take the following values: <ul style="list-style-type: none"> • VEST - indicates that the value is estimated by the data collector • VCHG - indicates a value that has been manually changed • VVAK - indicates an actual value is collected or totalised from metering outstation(s) Refer to the Data Codes published by NIE for a complete list of codes.
5	FLD	Value (Net Active)	1	Optional	Not populated
1	Message Trailer		1	Mandatory	
2	FLD	MPRN Count	1	Mandatory	A count of the number of MPRN level segments included in the message.
2	FLD	Channel Count	1	Mandatory	A count of the number of Channel level Details segments included in the message.