# **Retail Market Guide NI 34**

# **DUoS**, Transaction and PSO Billing

# 31/08/2016

Current Status:	Baseline
Issue Date:	31/08/2016
Version:	3.0

## **Table of Contents**

1.	Introduction	3
1.1	Scope	3
1.2	History of Changes	
1.3	Document References	
2.	Procedure Description	
2.1	DUoS Billing	
	2.1.1 Process Flow Diagram	5
	2.1.2 Process Description	6
2.2	Transaction Billing	14
	2.2.1 Process Description	14
2.3	PSO Billing	
	2.3.1 Process Description	15

### 1. Introduction

#### 1.1 Scope

This document is the Market Guide for Distribution Use of System (DUoS) Billing in Northern Ireland.

The procedure describes the processes for determining the DUoS Tariff to be applied at a Meter Point and for calculating and adjusting consumption and capacity to be billed. It should be read in conjunction with the Statement of Charges for Use of NIE Networks Limited Electricity Distribution System, henceforth termed the 'Statement of DUoS Charges' and the Distribution Use of System Agreement, henceforth 'DUoS Agreement'. Where there is a discrepancy between this document and the Statement of DUoS Charges or DUoS Agreement then the Statement of DUoS Charges or DUoS Agreement, as appropriate, will take precedence.

- DUoS Billing
  - Determination of the DUoS Tariff
  - o Billing
- Transaction Billing
- PSO Billing

Excluded are:

- Calculation of Taxes
- Invoicing
- Payment
- Disputes
- Transmission Use of System Billing

## 1.2 History of Changes

Version	Source of Change	Description of Change
0.1	Change	Initial Draft
0.2	P Merkens	Updated for MCRs 1014, 1030 and 1073 and re-drafted for NIE Analyst Review
0.91	P Merkens	Updated following NIE Review and for CRID 155 and issued for SIG Workshop
0.92	P Merkens	Updated following SIG Workshop
0.93	P Merkens	Change of terminology: DUoS group to DUoS tariff
0.94	A Ferguson	Final Draft Issued for Supplier Review prior to SIG Approval
1.0	A Ferguson	Baseline SIG Approval
2.0	A Ferguson	Baseline CDA Board approved
		Updated for DR1110/CRID163
		<ul> <li>Updated for interval Duos billing charging period change notified at SIG</li> </ul>
2.1	A Ferguson	Updated to reflect MP NI 39 Glossary of Terms
	A Ferguson	Section 2.1.2 step 11 last paragraph removed as it was only originally included for ES consideration
3.0	NIE Networks	Updated to incorporate change of name from NIE to NIE Networks
		Updated for DR1138_CRID183

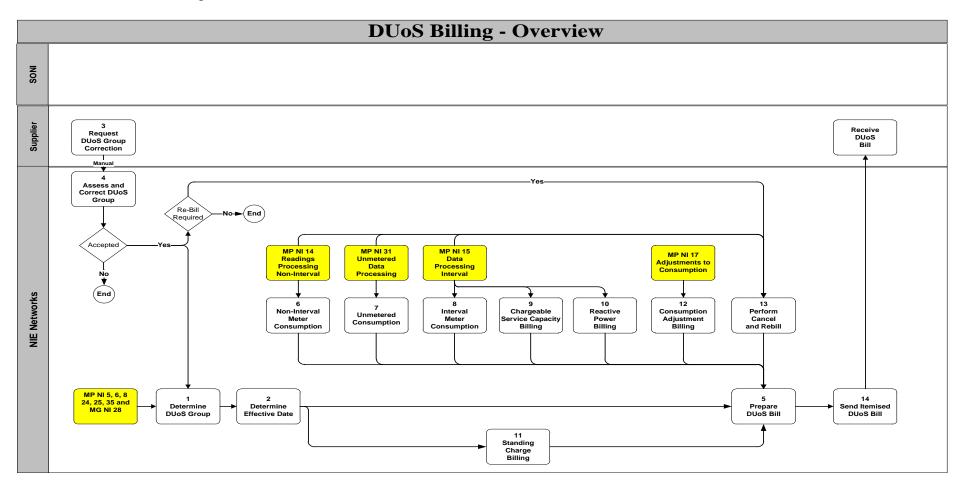
#### 1.3 Document References

Document Reference	Document Name
MP NI 14	Readings Processing Non-Interval
MP NI 15	Data Processing - Interval
MP NI 17	Consumption Adjustments
MG NI 30	Change to Unmetered Inventory
MP NI 31	Unmetered Data Processing
MG NI 41	Fieldwork Types, Charges and Delivery Time Targets
	Statement of Charges for Use of NIE Networks Limited Electricity Distribution System
	Distribution Use of System Agreement

## 2. Procedure Description

2.1 DUoS Billing

#### 2.1.1 Process Flow Diagram



### 2.1.2 Process Description

Step	Role	Action	Interface
1	NIE Networks	<ul> <li>A DUoS Tariff is determined for a New Connection as a result of executing the following processes:</li> <li>MP NI 5 New Non-Interval Metered Connection</li> <li>MP NI 6 New Interval Metered Connection.</li> <li>MG NI 28 New Technical MPRN</li> </ul>	
		<ul> <li>A DUoS Tariff may be changed as a result of executing the following processes :</li> <li>MP NI 1 Change of Supplier</li> <li>MP NI 8 Changes to Connection Characteristics</li> <li>MP NI 11 Changes to Meter Configuration</li> <li>MP NI 24 Changes to Customer Details</li> <li>MP NI 25 Change of Legal Entity</li> <li>MP NI 35 Change of Metering Non Interval to Interval</li> <li>MP NI 37 Change of Supplier - Keypad</li> </ul> The DUoS Tariff to be applied is dependent on a number of criteria. These include: <ul> <li>DUoS Group</li> <li>MIC</li> </ul>	
		<ul> <li>Connection Voltage</li> <li>Substation Distance</li> <li>Meter Configuration</li> </ul> A change of DUoS Group can result from a change of Usage Type.	
2	NIE Networks	When a change of DUoS Tariff occurs then the new DUoS Tariff will be billed from an effective date determined as follows:	
		For an Interval Meter Point:	
		<ul> <li>From the effective date of any associated change of metering or of other Meter Point Characteristics; or if there is no such change</li> </ul>	
		<ul> <li>From the Change of Usage required date if the change was not associated with a change</li> </ul>	

Step	Role	Action	Interface
		of metering or of other Meter Point Characteristics.	
		For a Non-Interval Meter Point:	
		<ul> <li>From the effective date of any associated change of metering configuration; or if there is no such change</li> </ul>	
		<ul> <li>From the Change of Usage required date where there is accepted reading provided with the Change of Usage; or if there is no such reading</li> </ul>	
		<ul> <li>From the day following latest actual reading following the last DUoS Bill; or if there is no such reading</li> </ul>	
		<ul> <li>From the day following the date of the last DUoS Bill.</li> </ul>	
		Retrospective changes to DUoS Tariff arising from a Change of Usage or MIC will not be permitted unless a DUoS Tariff allocation error is being corrected.	
3	Supplier	A Supplier may manually request a change of DUoS Tariff when the DUoS Tariff has been allocated incorrectly according to the determination rules.	Manual to NIE Networks
4	NIE Networks	If the DUoS Tariff is incorrect according to the determination rules and billing has occurred using the incorrect DUoS Tariff NIE Networks will cancel the billing to the incorrect DUoS Tariff, withdraw the readings, correct the DUoS Tariff, replace the readings and bill to the correct DUoS Tariff.	
5	NIE Networks	Each month NIE Networks will prepare a DUoS Bill for each Supplier.	
		The DUoS Bill will contain charges for Meter Points as follows:	
		<ul> <li>All Non-Interval Meter Points that were registered to the Supplier and met one or more of the following conditions during the month:</li> </ul>	
		The Read Cycle week and day falls within the month	
		The Meter Point was disconnected and/or terminated     Metering was removed from Nep Interval read schedules (e.g. it was converted to an	
		<ul> <li>Metering was removed from Non-Interval read schedules (e.g. it was converted to an Interval meter)</li> </ul>	
		<ul> <li>The registration of the Meter Point to the Supplier was ended (e.g. by a Change of Supplier Loss)</li> </ul>	

Step	Role	Action	Interface
		<ul> <li>All Unmetered Meter Points that were registered to the Supplier at any point during the month</li> <li>All Interval Meter Points that were registered to the Supplier at any point during the month</li> <li>Any Meter Point for which a cancel and/or re-bill occurred in respect of a previously billed period</li> <li>Any Meter Points for which consumption adjustments have been made.</li> </ul> No consumption or standing charge is billed in respect of periods when the Meter Point is de-energised.	
6	NIE Networks	<ul> <li>Non-Interval Meter Points</li> <li>The billing period will be the period between a billing period start date and a billing period end date, determined as follows:</li> <li>The billing period start date is the later of: <ul> <li>The day following the end of the previous billing period; and</li> <li>The date of initial connection of the Meter Point; and.</li> <li>The date that the Meter Point becomes a Non-Interval Meter Point on the reading schedule; and</li> <li>The start of the Suppliers earliest Registration to the Meter Point that is later than both of the above dates.</li> </ul> </li> <li>The billing period end date is the earlier of: <ul> <li>Either the date on which a valid reading was obtained as a result of scheduled meter reading<sup>1</sup> or, where no valid reading was obtained, the scheduled read cycle date for which a reading was estimated; and</li> <li>The date that the Meter Point ceases to be a Non-Interval Meter Point on the reading schedule; and</li> <li>The end of the Suppliers latest Registration, following the billing period start date, to the Meter Point.</li> </ul> </li> </ul>	
		<ul> <li>contiguous period when the Meter Point is energised defined by the following set of common characteristics that apply throughout the consumption period:</li> <li>A single period of Registration to the Supplier; and</li> </ul>	

<sup>1</sup> Typically this will be the date on which the site was visited and a reading obtained, or, if no reading was obtained, the date within the billing window on which a valid customer or Supplier provided reading was received by NIE Networks.

Step	Role	Action	Interface
		<ul> <li>A specific Meter Configuration; and</li> <li>A specific DUoS Tariff Code.</li> </ul>	
		Consumption will be separately calculated and billed for each meter point register that is active within each consumption period within the billing period.	
		Consumption for DUoS billing will be calculated for each meter register and consumption period as described in <i>MP NI 14 Readings Processing Non-Interval</i> .	
		The first actual reading received within a billing window will be used for billing regardless of type. Where the following types of readings are received on the same day the order of precedence is meter works readings followed by scheduled readings followed by Customer provided (via IVR and Website) readings.	
		Where actual readings are not available or valid, the estimated consumption for DUoS billing will be calculated according to the method referred to in <i>MP NI 14 Readings Processing Non-Interval</i> .	
		Estimated consumption is not billed from the first observation on vacancy when the site is subject to the Long Term Vacant process or from the day after a valid 210 MM read has been received in the quarter preceding the first vacant observation.	
7	NIE Networks	Unmetered Meter Points	
	Networks	The billing period is a calendar month.	
		<ul> <li>DUoS Billing will occur on a monthly basis incorporating:</li> <li>Consumption charges for the billing period as appropriate to the metering installed</li> <li>Adjustments, cancellations and re-bills in respect of previous billing periods.</li> </ul>	
		Consumption to be billed to a Supplier within a billing period for an unmetered Technical MPRN is calculated as sum of the expected consumption for the Meter Point for each day within the billing period on which the Meter Point was registered to the Supplier.	
		Consumption is calculated as described in MP NI 31 Unmetered Data Processing.	

Step	Role	Action	Interface
8	NIE Networks	Interval Meter Points The billing period is a calendar month. DUoS Billing will occur on a monthly basis incorporating:	
		<ul> <li>Consumption, capacity, reactive power and standing charges for the billing period as appropriate to the metering installed</li> <li>Adjustments, cancellations and re-bills in respect of previous billing periods.</li> <li>Charges for other services not part of the DUoS Tariff</li> </ul>	
		<ul> <li>Consumption for Interval Meter Points a given charging time-band is the sum of the Interval kWh data obtained for the meter:</li> <li>For all calendar days in the period within the billing period that the Supplier was Registered; and</li> <li>For Interval periods within the charging time-band (note that charging time-bands are expressed in local time.)</li> </ul>	
		Where Interval data obtained is measured in kW then the kWh value will be determined from this (e.g. for a 30 minute interval, kWh = kW / 2).	
9	NIE Networks	Chargeable Service Capacity Chargeable service capacity applies to Interval metering and is measured in kVA. Annual Setting	
		Chargeable service capacity is reviewed annually (in October) and will normally be set to the highest value arising from readings within the charging time-band in the previous twelve months. For connections with MIC < 1MW, unless a buy-out has been effective, the chargeable service capacity will be set to the MIC within the first five years following an MIC agreement if the MIC is greater than the highest value recorded in the previous year.	
		The chargeable service capacity for the next twelve months will be advised to the Supplier using the Meter Point Characteristics market message.	301 to Supplier

Step	Role	Action	Interface
		Monthly Billing	
		<ul> <li>In any month the chargeable service capacity will be set to the greater of:</li> <li>The chargeable service capacity determined from the annual review; or</li> <li>The chargeable service capacity set in the previous month; or</li> <li>The highest capacity recorded as a result of readings within the charging time-band in the calendar month.</li> </ul>	
		Where kVA is not directly measured it will be determined through triangulation from kW and kVAr.	
		Where for 30-minute Interval meters kW is not directly measured it will be determined from kWh as follows: kW = kWh * 2.	
		Where for 30-minute Interval meters kVAr is not directly measured it will be determined from kVArh as follows: kVAr = kVArh * 2.	
		Where a chargeable service capacity for a specified DUoS Tariff does not apply to a full month or a Supplier is not registered for a full month the charge will be pro-rated according to the number of applicable registered days for the DUoS Tariff in the month.	
10	NIE	Reactive Power	
	Networks	Reactive power excess applies to Interval metering and charges will be based on the total kVArh and kWh in the charging time-band for the period that the Supplier is registered.	
		Where kVArh is not directly measured it will be determined from kVAr as follows: kVArh = kVAr / 2.	
11	NIE	Standing Charges	
	Networks	Standing charges are billed for each billing period for all types of connection and will apply for periods	

Step	Role	Action	Interface
		<ul> <li>when the connection is energised.</li> <li>Where energisation, de-energisation or a change of DUoS Tariff has occurred during the billing period the standing charge will be pro-rated according to the number of energised days in the billing period at each applicable DUoS Tariff.</li> <li>Where a Supplier is not registered for full billing period the standing charge will be pro-rated according to the number of applicable registered days in the billing period.</li> </ul>	
12	NIE Networks	<ul> <li>Consumption Adjustments</li> <li>Consumption adjustments will be applied within the DUoS Bill when: <ul> <li>Consumption is not accurately reflected within meter readings. Refer to MP NI 17 Consumption Adjustments.</li> <li>Meter readings are correct but billing is in error and cancel and re-bill is not practical</li> </ul> </li> <li>Consumption adjustment charges will be itemised separately for each Meter Point on the next itemised monthly DUoS Bill.</li> </ul>	
13	NIE Networks	<ul> <li>Cancel and Re-Bill</li> <li>NIE Networks will operate a Cancel and Re-Bill procedure in the following circumstances: <ul> <li>A consumption reading is received that is dated later than but has a value that is less than a previously billed actual or estimated reading. The previously billed actual reading or estimate will be withdrawn.</li> <li>A consumption reading is received that is dated prior to but has a value that is greater than a subsequently billed actual or estimated reading. The subsequently billed actual reading or estimate will be withdrawn.</li> <li>A reading (or estimate) is withdrawn because either the reading (or estimate) is incorrect or the reading has been incorrectly billed.</li> <li>The incorrect Supplier has been billed, e.g. due to the late processing or the late cancellation of a Change of Supplier</li> <li>An incorrect chargeable service capacity has been billed</li> </ul> </li> </ul>	

Step	Role	Action	Interface
		<ul> <li>A reactive power excess charge has been incorrectly billed</li> <li>A meter change or change of energisation status has occurred in a period for which a bill has been issued. Subsequently billed readings or estimates will be withdrawn.</li> <li>A site has become subject to Long Term Vacant process</li> <li>The incorrect DUoS Tariff has been billed</li> <li>When estimates are withdrawn and replaced in the circumstances set out in <i>MP NI 14 Readings Processing – Non Interval</i> section 2.3:         <ul> <li>All previously billed estimates since the last actual reading or settlement relevant estimate will be cancelled</li> <li>Rebilling values are based on interpolations based on the AUF and the last actual reading or settlement relevant estimate.</li> <li>Cancelled and re-billed charges will be itemised separately for each Meter Point on the next itemised DUoS Bill.</li> </ul> </li> </ul>	
14	NIE Networks	<ul> <li>The statement of the itemised DUoS Bill will be provided in electronic form to the Supplier.</li> <li>The following DUoS outputs are produced: <ul> <li>An invoice showing the invoice number, date and the total of the charge amount before VAT, the VAT and the total invoice amount</li> <li>A summary file showing the number of detailed records and the charges for each charge type and time of use per DUoS Tariff</li> <li>A detailed file containing backing records of the charges for each charge type and time of use per MPRN.</li> </ul> </li> <li>When a rate change for a DUoS Tariff occurs the new rate will be billed only to consumption estimated as occurring after the date of the rate change.</li> <li>The itemised DUoS Bill will cross reference the invoice to which it relates.</li> </ul>	DUoS Bill to Supplier

### 2.2 Transaction Billing

#### 2.2.1 Process Description

Step	Role	Action	Interface
1	NIE Networks	<ul> <li>Fieldwork and non Fieldwork charges are billed and invoiced on a monthly basis.</li> <li>Separate invoices are produced for Fieldwork charges and for non Fieldwork charges.</li> <li>Fieldwork charges will be included for all chargeable Fieldwork performed during the month. Refer to MG NI 41 Fieldwork Types, Charges and Delivery Time Targets for details on chargeable Fieldwork.</li> <li>Non Fieldwork charges will include summary level charges levied for use of Keypad Transaction Services in the month.</li> </ul>	
		<ul> <li>The statement of the itemised transactional charge will be provided in electronic form to the Supplier.</li> <li>The following transactional charge outputs are produced: <ul> <li>An invoice showing the total of the charge amount before VAT, the VAT and the total invoice amount</li> <li>A detailed file containing the breakdown of the transaction charges applied at MPRN level including the transaction type and the reference provided by the Supplier.</li> </ul> </li> </ul>	Transaction Charges to Supplier

## 2.3 **PSO Billing**

## 2.3.1 Process Description

Step	Role	Action	Interface
	NIE Networks	PSO Levy Report NIE Networks will produce a monthly report of aggregated consumption for the purposes of PSO and this is used as the basis of PSO invoicing.	
		<ul> <li>This report is also provided to SONI for the purposes of billing SSS Levy.</li> <li>The report will be produced on the following schedule and will contain data used in data aggregation for all Settlement Days within a calendar month for the following aggregation runs: <ul> <li>D+4 Initial aggregation</li> <li>M+4 Resettlement aggregation</li> <li>M+13 Resettlement aggregation</li> <li>Ad-hoc Resettlement aggregation</li> </ul> </li> </ul>	Report to SONI
		<ul> <li>The report will provide a total consumption, as reported in Initial, M+4 ,M+13 or ad-hoc data aggregation for the month, aggregated for the calendar month and analysed by:</li> <li>Supplier ID</li> <li>Connection Voltage</li> <li>DUoS Tariff</li> </ul>	
		The report will include Half Hourly Interval import, Non-Interval import and unmetered expected consumption for all Meter Points having Registrations against a Supplier in the calendar month. No reduction is made in respect of export contracted at non-participating Generators. The consumption volumes will be calculated on the same basis as used for the aggregated data provided to the SMO (excluding export) but will use the latest data available at the time the aggregation is run (or the time aggregated data was provided to SMO). DLAFs will, however, not be applied.	

Step	Role	Action	Interface
	NIE Networks	<ul> <li>PSO Invoice</li> <li>On a monthly basis, a PSO invoice will be created and sent to each Supplier.</li> <li>The invoice for each Supplier will show: <ul> <li>D+4 PSO charge based on aggregated D+4 Units (kWh) for each DUoS Tariff multiplied by the applicable D+4 PSO unit price</li> <li>Adjustments arising from the difference between the M+4 PSO charge, based on aggregated M+4 Units (kWh) for each DUoS Tariff multiplied by the applicable drarges for the period</li> <li>Adjustments arising from the difference between the M+13 PSO charge, based on aggregated M+13 Units (kWh) for each DUoS Tariff multiplied by the applicable M+13 PSO unit price, and the previously billed charges for the period</li> <li>Adjustments arising from the difference between PSO charges determined from ad-hoc aggregations,</li> </ul> </li> </ul>	PSO Invoice to Supplier
		<ul> <li>based on aggregated Units (kWh) for each DUoS Tariff multiplied by the applicable PSO unit price, and the previously billed charges for the period</li> <li>Single line manual adjustment (if required)</li> <li>Outstanding payments</li> </ul>	