

B2B Process Specification

Network Billing

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Document Control

Version	Date	Author	Summary of Change
0.1	12 June 2001	Helena Lau	Initial Draft
0.2	20 July 2001	Helena Lau	<ul style="list-style-type: none"> Removed reference to invoicing frequency. Inserted comments from Integral, Powercor, EA, and United Energy. Incorporate paper from EA re. Bill format. Insert references to the NSW default network agreement, SA coordination agreement, and the Victorian UOS agreement.
0.21	3 August 2001	Helena Lau	<ul style="list-style-type: none"> Incorporate paper from EA re. Bill format. Define additional service charge types (3.2.3).
0.3	31 August 2001	Peter Firth Gillian Robinson Helena Lau	<ul style="list-style-type: none"> Update file layouts; new references to "record type" Remove references to standard charge codes. Incorporate TXUN, UE, and Energex comments.
0.4	2 October 2001	Helena Lau	<ul style="list-style-type: none"> Minor wording/field size changes. New assumptions added. New invoice record type created (removed invoice details from headers/footers). New rules for adjustments. Additional new fields to enable different treatments of GST (invoice or line detail). Feedback from EA, UE, Integral, Origin, Powercor, TXUN, TXUR.
0.41	5 October 2001	Helena Lau	<ul style="list-style-type: none"> Changes to version 0.4 raised by Origin, Powercor, UE, TXU, and CitiPower.
0.5 (draft) 1.0 (approved)	10 October 2001	Helena Lau	<ul style="list-style-type: none"> Changes based on subgroup meeting held on 9 October.
1.1	16 Nov 2001	Bibhakar Saran	<ul style="list-style-type: none"> Fixed changes due to inconsistencies discovered during the schema development and review
	28 Nov 2001	Helena Lau	<ul style="list-style-type: none"> Clarify attribute <i>Invoice Number</i> (can comprise of <i>invoice reference</i> if LNSP is sending daily transaction files and cannot forecast the invoice number).
	10 December 2001		<ul style="list-style-type: none"> Change <i>Invoice Number</i> field length from 12 characters to 20 characters.
1.2	8 May	Steed Leonard	<ul style="list-style-type: none"> Updated to include new business rules presented 29 April at National B2B working group.
2.0	Comment Only	Steed Leonard	<ul style="list-style-type: none"> Document updated to reflect comments of NSW working group meeting on May 17, 2002. AGL, EA, and IE present. Incorporated additional comments provided by Jacquelyn Dixon (EA) subsequent to working group teleconference. <p>Circulated for comment on Thursday, 30 May 2002.</p>
	13 June 2002.	Steed Leonard	<ul style="list-style-type: none"> Updated Document Information and Circulation List to include respondents to previous version. Updated various sections from multiple market participants. <p>Note: Version 2.0 (released May 30) also subsequently circulated for comment to National B2BWG on Thursday, 3 June May 2002 for comment.</p> <p>Released again for final comment on Thursday, 20 June 2002 in preparation for Jurisdictional voting.</p>
2.1	26 June 2002	Steed Leonard	Incorporated final comments from EA and MIG. Final version for NSW Jurisdictional approval.

B2B Process Specification

Network Billing

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2.2	23 September 2002	Steed Leonard	<p>Wording refinements as discussed in B2B working group meetings held on 23/9, 17/9, 9/9, 20/8, 12/8 and 9/7.</p> <ul style="list-style-type: none"> Updated technical information and associated business rules for GST presentment. Updated time splits to become TOD codes and added additional values. Updated technical information for dispute notifications. Updated rules associated with technical transmission standards. Update technical information and associated business for invoicing interest charges. Updated business rules for adjustment note processing.
2.3	15 October 2002	Sarah Perry	<ul style="list-style-type: none"> As agreed in B2B working group 3/10 remove GSLs from the standard. Return GST indicator to version 2.1 rules – Y/N indicates whether GST is calculated at invoice or line item level. Change adjustment indicator in the interest charge record back to mandatory. Change principal amount on interest charge record to 15.2 to align with invoice amount payable. In bullet 5 of NSW Disputes specific rules change “closed” to “resolved”
	17 Oct & 1st Nov	John Phillips Jacquelyn Dixon	<ul style="list-style-type: none"> General rewording to remove ambiguity Addition of 2 Transaction Exchanges Re added Outstanding Matters section Amended 2.3.2 Issuing Adjustment Notes (and relevant record formats) to reflect the decommissioning of the Adjustment Indicator “R” (as per option 5.1 of B2B Issues paper ref no NB_NSW_151002) Removed the charging of interest by LNSPs from 2.3.7 b3 – Invoices are either remitted or disputed in full Moved positioning of NSW Specific Rules Section and incorporated Payment Specific Rules with Remittance Specific Rules Expanded Sample Transaction Formats Reworded and re-ordered the B2B Technical Transmission Standards
	4th Nov 2002	Steed Leonard	<ul style="list-style-type: none"> Added additional assumptions incorporating comments received on Adjustment Issues paper (27-29) Updated assumption 10 and included associated sample transaction ratifying outcome on GST presentment. Removed Circulation list from this document (circulated to be managed via relevant B2B management process, for example smart-groups) Noted cross-reference to external Technical Transmissions document.
	13th Nov 2002	Steed Leonard	<ul style="list-style-type: none"> Added additional business rules regarding adjustment processing and GST handing. Added exclusion of duplicate invoices from financial fields of the invoice footer. Merged NSW specific business rules with subject specific business rules.
	19th Nov 2002 21st Nov 2002	Steed Leonard	<ul style="list-style-type: none"> Clarified comments raised by Country Energy. Updated definition of duplicate charge line for an invoice. Amended time of day codes to uniquely identify Network Access charges. Clarified business rules regarding overdue interest charge for non-disputed lines on partially disputed invoice. Amended the time of day references as agreed by Origin, Energy Australia, and Country Energy.
			<ul style="list-style-type: none"> Reinstated references the R” indicator in the technical section of the document.

B2B Process Specification

Network Billing

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2.4	8/May/03	Steve Wise	<ul style="list-style-type: none"> Added ACT requirements. Added cross reference to service order Product Codes (3.3.4) Updated formatting and fixed typographical errors.
2.5	13 Oct 2003	Steve Wise	<ul style="list-style-type: none"> Clarified presentation of NUOS charges per B2B WG change request 31.
2.6 Draft	28 Nov 2003	NSW Workstream	<ul style="list-style-type: none"> Added example of presentation of block tariff charges (2.3.5.12). Clarified alignment of start and end reads with meter reads (2.3.5.19). Clarified commencement of payment period (2.3.5.21) Clarified the sequence of cancel and re-bill (2.3.6) Removed specific thresholds regarding disputes (2.3.8). Clarify the right to dispute for non-receipt of metering data (2.3.8). Change the <i>Retailer's Service Order Reference</i> field from Optional to Required (3.3.4). Added a series of examples of transaction patterns as an appendix. Numbered all paragraphs.
v2-6	4 Mar 2004	NSW Workstream	<p>Version approved at National B2BWG meeting held Monday 1Mar04. Effective date to be determined by NSW B2B Steering Committee at its meeting on 2April04. Effective date is 20 June 2004.</p> <p>Effective date not set for proposed change of the <i>Retailer's Service Order Reference</i> field from Optional to Required (3.3.4). This change has been removed from this version pending the effective date decision.</p>
2.7	10 June 2015	NSW Trade & Investment, Division of Resources and Energy	Amended table 3.9.3 to change description of Time of Day code "NCKWD" to reflect its new intended use as a Metering Service Charge billing code.
2.8	20 November 2017	NSW Dept. of Industry	Removed redundant provisions.
2.9	13 June 2024	NSW Department of Climate Change, Energy, the Environment and Water	Amended table 5.7.3 to change description of Time of Day code "NCMAXPEAK" to 'Energy Critical Peak Maximum', and code 'NCMAXOP' to 'Energy Critical Peak Minimum' to reflect the new intended use as storage tariff billing codes.

Table of Contents

1	Scope and General	9
1.1	Application	9
1.2	Transaction Exchanges.....	9
2	Scope.....	11
3	Business Information.....	11
3.1	Alias Names / Terminology / Definition.....	11
3.2	Assumptions.....	13
3.3	Network Billing B2B Rules.....	18
3.3.1	Issuing Adjustment Notes	18
3.3.2	Calculation of GST	18
3.3.3	Rules for Numeric field.....	19
3.3.4	Network Invoicing Specific Rules	19
3.3.5	Network Adjustment Invoicing Specific Rules	22
3.3.6	Remittance Advice and Payment Specific Rules	22
3.3.7	Disputes Specific Rules.....	23
3.3.8	Overdue Invoices Specific Rules.....	25
3.3.9	Rules for Duplicate Invoice transmission	26
3.4	MSATS relationships	26
3.5	Relationship Other B2B Standards.....	26
4	Technical Information.....	27
4.1	Transaction flows.....	27
4.2	Field definitions.....	28
5	Network Invoices Sent to Retailer.....	29
5.1.1	Network Invoice File Header	29
5.1.2	Invoice Summary Record Type.....	29
5.1.3	NUOS Charge Record Type.....	30
5.1.4	Event Charge Record Type	33
5.1.5	Interest Charge Record Type.....	35
5.1.6	Network Invoice File Footer	37
5.2	Remittance to LNSP	38
5.2.2	Remittance File Header.....	38
5.2.3	Remittance Details	38
5.2.4	Remittance File Footer	38
5.3	Network Charge dispute notification sent to LNSP.	40
5.3.2	Dispute File Header	40
5.3.3	Dispute Record Detail	40
5.3.4	Dispute File Footer	41
5.4	Dispute Status Change Advice	41
5.4.2	Dispute Status Change Advice File Header	41

B2B Process Specification

Network Billing

5.4.3	Dispute Status Change Advice Detail Record	41
5.4.4	Dispute Status Change Advice File Footer	42
5.5	Outstanding Invoice Advice	42
5.5.2	Outstanding Invoice Advice File Header	42
5.5.3	Outstanding Invoice Advice Detail Record	42
5.5.4	Outstanding Invoice Advice File Footer	43
5.6	Credit Balance Invoice Advice	43
5.6.2	Credit Balance Invoice Advice File Header	43
5.6.3	Credit Balance Invoice Advice Detail Record	44
5.6.4	Credit Balances Advice File Footer	44
5.7	Predefined Codes	45
5.7.1	Record Type Codes	45
5.7.2	Units of Measure	45
5.7.3	Time of Day codes	46
5.7.4	Dispute Reason Codes	51
5.7.5	Dispute Status Codes	51
5.8	Performance Considerations	52
5.9	Acknowledgment Notifications	52
6	Sample Format of Network Billing Transaction Files	53
6.1	Sample Transaction Flow	53
6.1.1	Network Invoice File sent to Generic FRMP - with GST disclosed at line level	53
6.1.2	Dispute Notification sent to LNSP - based on Aug 02 Bill Period Invoice File	53
6.1.3	Payment by Generic FRMP to LNSP for Aug 02 Bill Period	53
6.1.4	Remittance Advice sent to LNSP - based on Aug 02 Bill Period Invoice File	53
6.1.5	Payment by Generic FRMP to LNSP for Sept 02 Bill Period	53
6.1.6	Remittance Advice sent to LNSP - based on Sept 02 Bill Period Invoice File	53
6.1.7	Network Invoice File - with multiple time of day codes.	53
6.2	Permitted Adjustments Scenarios	54
6.2.2	Combined Cancellation and Recalculation transaction (with headers for ease of viewing)	54
6.2.3	Common Invoice Number for Original Invoicing and Cancellation invoice (with headers for ease of viewing).	54
6.2.4	Separate invoice Numbers for all transactions (with headers for ease of viewing)	55
7	Transaction Pattern Examples	56
7.1.1	Example 1	56
7.1.2	Example 2	56
7.1.3	Example 3	57
7.1.4	Example 4	58
7.1.5	Example 5	59
7.1.6	Example 6	59
7.1.7	Example 7	60
7.1.8	Example 8	61

Table of Figures

Figure 1: Transaction Exchanges	10
Figure 2: Transaction Pattern Example 1	56
Figure 3: Transaction Pattern Example 2	56
Figure 4: Transaction Pattern Example 3	57
Figure 5: Transaction Pattern Example 4	58
Figure 6: Transaction Pattern Example 5	59
Figure 7: Transaction Pattern Example 6	59
Figure 8: Transaction Pattern Example 7	60
Figure 9: Transaction Pattern Example 8	61

1 Scope and General

1.1 Application

1.1.1.1 This process applies to the billing of network charges, and associated transactions, by an Electricity Distributor to an Electricity Retailer. The network charges include regulated charges, and charges for non-regulated (or excluded services) and regulated services.

1.1.1.2 This specification describes the automation of the network billing process, its transactions and the associated business rules.

1.2 Transaction Exchanges

1.2.1.1 The generic exchanges between a Retailer and Distributor are outlined below. The frequency and manner of invoicing may vary between parties and will be subject to commercial agreements.

1.2.1.1.1 Distributor transmits network invoice data to Retailer.

1.2.1.1.2 Retailer acknowledges receipt of network invoice/s.

1.2.1.1.3 Retailer transmits disputed network invoice data to Distributor.

1.2.1.1.4 Distributor acknowledges receipt of disputed charges.

1.2.1.1.5 Retailer and Distributor investigate dispute(s). [This is a non-electronic B2B process].

1.2.1.1.6 Retailer provides Distributor with Payment.

1.2.1.1.7 Retailer provides Distributor with itemised remittance details for payment allocation.

1.2.1.1.8 Distributor acknowledges receipt of remittance details.

1.2.1.1.9 Distributor resolves a dispute and issues a Dispute Status Change Advice

1.2.1.1.10 Retailer acknowledges receipt of Dispute Status Change Advice.

1.2.1.1.11 Unactioned invoices are prompted by the Distributor via an Outstanding Invoice Advice

1.2.1.1.12 Retailer acknowledges receipt of Outstanding Invoice Advice.

1.2.1.1.13 Distributor requests direction of credit application via Credit Balances Advice

1.2.1.1.14 Retailer acknowledges receipt of Credit Balances Advice.

1.2.1.1.15 If applicable, recipient sends negative technical acknowledgment to originator

1.2.1.1.16 If applicable, originator resends corrected data file to recipient

1.2.1.2 These interactions are illustrated below:

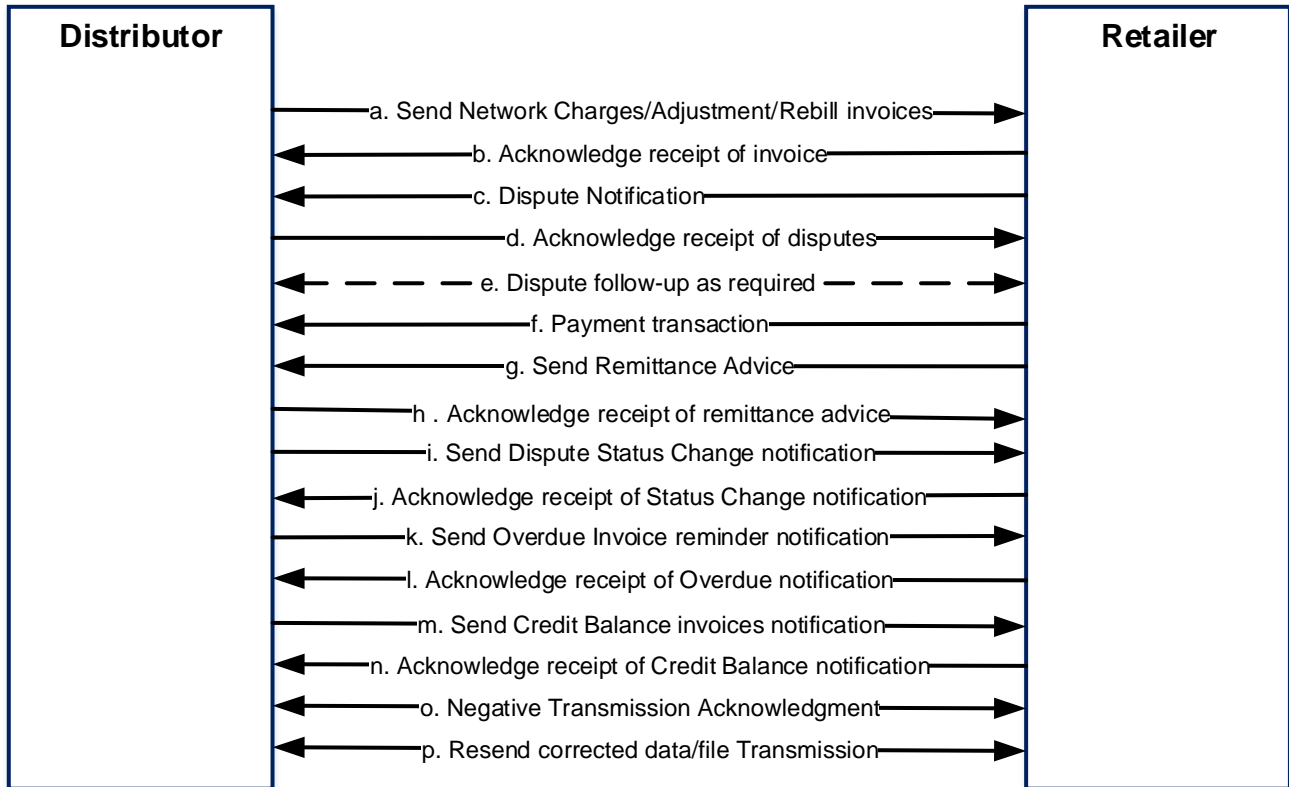


Figure 1: Transaction Exchanges

2 Scope

2.1.1.1 This document addresses the electricity network billing process and transactions only. In addition, it focuses on transaction exchanges between the Retailer and the Distributor only. It does not include internal processes (for example, validation of network invoice data by the Retailer).

2.1.1.2 This specification excludes Distributor's directly billing an end use customer.

3 Business Information

3.1 Alias Names / Terminology / Definition

Consistent Term	Equivalents/ Definitions
Charge Period.	<ul style="list-style-type: none"> Period to which a single rate or tariff charge (the pricing regime) applies to a NUoS record. Multiple 'Charge Periods' can exist for a particular Billing Period (for example, if a tariff has changed, a rate has changed, etc.) The Start Date of the first Charge Period and the End Date of the last Charge Period must match the Start & End Date for the relevant Billing Period.
LNSP	Distributor, Network, Distribution Businesses, Local Network Service Provider (LNSP), DSNP
Event Charges	<p>Used to collectively refer to any Network Charge that is not related to NUoS or Interest charges, such as:</p> <ul style="list-style-type: none"> Connection and Service Work charges Watchman/ Security Lighting Excluded Service Charges Other fees and charges as gazetted by the Distributor.
Guaranteed Service Levels (GSLs)	<p>Referred to as Guaranteed Customer Service Standards (GCSSs) in NSW. Referred to as Performance Standards in the ACT.</p> <p>These regulate the standards of service the LNSP provide to customers. Failure to comply may lead to a financial credit to the relevant parties (retailers and end- use customers).</p>

Consistent Term	Equivalents/ Definitions
Interest Charges	Interest charges are charges that levied by the Distributor for overdue amounts, as permitted by UoS Agreements.
Invoice	<p>A series of network charges payable by the Retailer (Financially Responsible Market Participant) to the Distributor (LNSP) for a specified NMI.</p> <p>These charges are for access to its distribution network and other network services.</p> <p>Also known as a Network Bill.</p>
Network Charges	<p>Used to collectively refer to items such as:</p> <ul style="list-style-type: none"> • NUoS charges • Event charges • Interest charges
NMI	National Metering Identifier used within the Electricity Industry to uniquely identify a connection point (supply point).
NUoS charges	<p>Network Use of System charges are a component of items levied by the Distributor for access to the distributor network.</p> <p>Depending on the tariff and distributor, price components include energy consumption, demand (reserve, contract or actual), and standing/access charges for a specified period.</p>
Supply Point	The point at which a supply of electricity taken by an end-use customer leaves a supply facility owned or operated by the LNSP.
UoS Agreements	<p>Refers to the agreements between Distributors and Retailers governing the scope and requirements for the supply of service by the Distributor, and requirements on the Retailer to receive those services. This includes:</p> <ul style="list-style-type: none"> • Use of System Agreement (Victoria); • Coordination Agreement (South Australia); • Default Network Agreement (NSW); and • Any other such document for electricity and gas in all jurisdictions.

3.2 Assumptions

Assumption	Reason
1. Update of Network Tariffs is out of scope of this B2B protocol.	Network tariffs (prices) are not updated frequently (once / twice a year), therefore the volume is not high. In addition, changes to network tariffs are published by each jurisdiction's Regulator.
2. Update to Standing Data is out of scope of this B2B protocol.	Notification of changes to standing data made by the Distributor, including assignment of a new Network Tariff code is to be made via MSATS exchanges. Distributors will ensure MSATS is populated with the correct tariff code for the NMI, before invoicing occurs.
3. Credit Support is out of scope of this B2B protocol.	The UoSAs in all jurisdictions have a clause related to provision of credit support by the Retailer. The extent of credit support provided (if at all) would be negotiated directly between a Distributor and a Retailer. This type of arrangement cannot be "standardised" and is outside normal network billing processes.
4. Non-NUoS charging will be charged via this B2B protocol.	This protocol will cater for all Network Charges, including non-NUoS charges levied by the Distributor, as the underlying process for event based charges will be the same as that required for NUoS.
5. Codes for record "types" are standardised.	The table in section 5.7.1 outlines, "record types" to identify the type of record. For example NUoS charge, event charge, interest charge etc.
6. The file naming convention to be followed.	Adherence to the file naming convention reduces risk of duplicate file processing by participants. The technical protocols for file naming are specified in the approved B2B Technical Transmission Standards document.
7. E-mail gateway is effective and effective means of B2B exchange	This standard assumes that the E-mail gateway meets standard security requirements. It also assumes Retailers and Distributors will allow e-mail to be received with attachments and support potentially large files.
8. Acknowledgments will be made for each transaction	The recipient immediately upon receipt will verify all exchanges. The exchange will not be considered complete until the confirmation is received. The technical protocols for acknowledgment are specified in the approved B2B Technical Transmission Standards document.

Assumption	Reason
9. Negative Technical Acknowledgments	<p>Once a file has been confirmed as received by the Retailer/ Distributor, the protocols specified in the approved B2B Technical Transmission Standards document allow for instances where the file must be resent with a new version number to correct technical non-compliance to this standard. For example, Distributor has not billed GST correctly.</p> <p>This will not require a dispute notification transaction. It is an indication that the file contents have not been successfully received. Therefore, when a negative technical acknowledgment is issued for a file:</p> <ul style="list-style-type: none"> • Invoices have not been received therefore are neither outstanding nor disputed; • Disputed notifications have not been issued; • Remittance advice has not been sent.
10. The manner in which the GST invoice will be sent to the Retailer will be standardized to one approach.	The GST amount payable will be represented in the electronic transmissions at the charge level only.
11. GST is not chargeable on Guaranteed Service Levels	<p>Guaranteed Service Level (GSL) payments are considered a penalty for non-performance of a service by a Distributor. GST does not apply to fines and penalties.</p> <p>Note: NSW Jurisdictional business rules specify that GSL credits will be excluded from this process. Therefore, this assumption is outside the scope of this specification.</p>
12. One electronic invoice per NMI per billing period.	<p>An invoice will relate to only one NMI for a specified period.</p> <p>Each invoice will be assigned with a unique invoice number and must be transmitted with an invoice summary record and the relevant supporting charge record.</p> <p>A NMI may attract charges across multiple invoices.</p>

Assumption	Reason
13. Different charge types on separate invoices	<p>All consumption based NUoS charges (includes Network Access Charges, Consumption, Demand) for a period are to have a separate invoice number to event based charges (special read fees, disconnection/reconnection charges) and interest charges.</p> <p>This approach is required to support Retailers potentially delegating reconciliation of NUoS and non-NUoS invoices to different units.</p>
14. Invoice line items have a “Line Identifier”. E.g., line number.	Each charge line within the invoice will have a “Line Identifier” to enable effective dispute notification.
15. Charge records relate to more than one Time Of Day for rate changes.	Each Time of Day charge must be represented as an individual charge line within an invoice, however Time of Day values may be repeated to cater for network rate changes, but the dates must specify the applicable charge periods within the billing period.
16. Paper Invoices	The “invoicing” transactions as specified within this document are sufficient to replace paper based invoicing, and are compliant with Australian regulations such as the ATO guidelines governing GST.
17. Frequency of invoicing	Frequency of invoicing will not be mandated by this specification. This will be determined by bilateral agreement or as prescribed within Use of System/ Market Operation Rules.
18. Billing Period for Type 1-4 Metered NMI’s.	<p>Remotely read metered sites will be invoiced with a billing period that will align to the calendar month.</p> <p>For NMIs that transfer or connect/disconnect during the month, the distributor’s published charging methodology will be used to prorate demand charges if applicable.</p>
19. Dispute Notification per charge level.	<p>Disputes are to be raised at charge line level. Each charge line item disputed by the Retailer will be returned as a dispute transaction with the reason code.</p> <p>Whilst one invoice may have several dispute reasons returned, all disputes notifications for an invoice must be transmitted at the same time. Updates to the status of a dispute will also be raised at charge line level.</p> <p>Owing to the view that there should be a low volume of dispute notifications, a manual exchange outside of the B2B electronic transactions may also follow a dispute notification as part of the dispute investigation process.</p>

Assumption	Reason
20. One Reason per Dispute	<p>Each dispute transaction raised will have a dispute reason code per invoice line item to assist in the initial investigation of the dispute.</p> <p>Retailers may perform all validation checks on the charge (instead of identifying one “disputed item”). The dispute reason hierarchy will be used to determine the highest order dispute reason code. See section 5.7.4 for valid dispute codes.</p> <p>The dispute comments field may be used to provide supporting details or any compounding disputes, i.e. where more than one item is in error, to prevent re-billed amounts being subsequently disputed.</p>
21. Part Payment	<p>Where an invoice is part paid due to a dispute being lodged, the Distributor will ensure that the payment amount is allocated against the non-disputed line items for the invoice in preference to disputed amounts.</p> <p>Note: NSW Jurisdictional business rules specify that part payment of an invoice will not occur, unless bilaterally agreed.</p>
22. Payment Terms omitted from this document	<p>Payment terms and methods will not be mandated by this specification. This shall be determined by bilateral agreement or as prescribed within Use of System/ Market Operation Rules.</p> <p>It is assumed that all payments will be electronic (EFT or Austraclear).</p>
23. Remittance Method	<p>Remittance advice transactions will specify the distribution of an electronic payment to an invoice(s).</p> <p>In cases, where multiple invoices are paid, the Retailer will use the remittance transaction to nominate how specific electronic payments are to be distributed across multiple invoices (NMIs).</p> <p>The electronic payment must contain a cross-reference to the applicable remittance advice file.</p>
24. Accounts Payable	<p>The ATO has confirmed that Retailers can summarise invoices for entry into their Account Payable systems and electronic payment transactions, provided that the remittance advice is cross-referenced to the payment transaction.</p>

Assumption	Reason
25. Distributor Interest charges	<p>Use of System/ Market Operation Rules will govern the terms, triggers, and method for calculating interest charges between parties.</p> <p>UOS agreements indicate that Distributors will charge no interest on invoices for which a dispute is lodged at least three business days before the invoice due date.</p> <p>Where the Distributor charges interest, this will be itemised per NMI using the “Interest charge” record type. Interest may be invoiced with event based charges, but are not to be included on NUoS charge amounts invoices.</p>
26. Retailer Interest benefits	<p>Use of System/ Market Operation Rules will govern the terms, triggers, and method for calculating interest charges between parties.</p>
27. Cancellation and recalculation invoices may re-use invoice numbers.	<p>Distributors may correct erroneous invoices by cancelling (credit note) and rebilling (new tax invoice) line items using a common invoice number. That is, generation of a combined credit note/ tax invoice.</p> <p>Alternatively, Distributors may re-use the invoice number of the original invoice transaction when issuing cancellations.</p> <p>However, the preferred future process design is credit notes and tax invoices will be assigned unique invoice numbers and combined credit notes/ tax invoices will not be permitted.</p>
28. All invoices will be included in remittance files.	<p>Retailers will reference all invoices in remittance files, including credit notes requiring a negative payment to "close out" cancelled invoice balances.</p> <p>When taking up credits, the original invoice payment and reversing negative payment must be included in the same remittance file, issued at same time, and always refer to the same NMI.</p>
29. Transportation of Network files will follow the approved B2B Technical Transmission Standards	<p>Each jurisdiction shall follow the approved B2B Technical Transmission Standards document.</p>

3.3 Network Billing B2B Rules

3.3.1 Issuing Adjustment Notes

3.3.1.1 The *Adjustment Indicator* attribute is used to show if a network charge is a cancelled, re-billed or is new transaction – denoted as “C”, “R” or “N” respectively.

3.3.1.2 When a cancellation occurs, each charge line will be identified as a cancelled transaction using the Adjustment Indicator value of “C”. The original charge line must be reversed in full, the Old Invoice Number must reference the original incorrect invoice number and the adjustment reason must also be populated.

3.3.1.3 If the charge is also re-billed, indicating a new charge for a previous transaction charged incorrectly, the Adjustment Indicator value will contain the value of “R” or “N”. The Old Invoice Number must also be populated, and the Invoice Number must be populated.

3.3.1.4 If a charge is a new transaction, the adjustment Indicator will contain a mandatory value of “N”, the Invoice Number attribute must be populated with a unique number and the Old Invoice Number must not be populated.

3.3.1.5 Population of the adjustment indicator and the Old Invoice Number will enable recipients to reference back credits/ adjustment notes to their original invoices as per ATO guidelines.

3.3.2 Calculation of GST

3.3.2.1 GST can be calculated at either the transaction line level or the invoice total level.

3.3.2.2 For those that can calculate GST at the transaction line level, *GST amount* attributes are included in each record type (NUoS, Excluded Service, and interest). If a charge is exempt from GST, this attribute will hold a zero value. In this instance, the *GST Indicator* must be equal to ‘Y’.

3.3.2.3 For those participants that choose to calculate GST at the invoice level, the *GST amount* attribute at charge line level will also hold a zero value. To show that GST is not calculated at this line level (as opposed to being GST exempt), the attribute *GST Indicator* must be used and contain a value of “N”.

3.3.2.4 Use of the GST Indicator field is mandatory.

3.3.2.5 LNSP shall use the GST indicator of "Y" in all cases.

3.3.3 Rules for Numeric field

3.3.3.1 For all numeric fields the following rules apply:

2.3.4.1.1 No numeric fields will have leading zeroes.

2.3.4.1.2 Signed fields are identified as Numeric (s9.2) for example and indicate if the field can contain a -ve or +ve value with a number of nine significant digits and two decimal places. It is assumed that if there is no sign at the front it is a +ve value. For a -ve amount the -ve value must always be assigned at the start of the value. Examples below:

55.5	+ve value
9999.55	+ve value
-20.5	- ve value
-576.45	- ve value

2.3.4.1.3 Unsigned fields are identified as Numeric (10) or Numeric (9.5) for example, and will contain significant digits and the number of decimal places if specified. Examples are:

- 250
- 3
- 25.555

3.3.4 Network Invoicing Specific Rules

3.3.4.1 The electronic invoice will replace paper-based invoicing, unless a technical failure has occurred. Retailers may print electronic data files should a paper invoice be required.

3.3.4.2 An invoice contains the charges for only one NMI for a specified bill period.

3.3.4.3 All network invoices will be given an invoice number to uniquely identify the invoice for effective B2B communication.

3.3.4.4 LNSPs will adopt a common approach for generating the Line Identifier, being, a numeric value assigned to each line within an invoice starting at one and incrementing by one. This will mean the transaction number will only be unique relative to an invoice.

3.3.4.5 The LNSP will raise only one overdue interest penalty charge per invoice for each period in preference to one charge per overdue line item.

3.3.4.6 Guaranteed service level credits are excluded from the NSW network billing process.

- 3.3.4.7 The agreed method for billing NUoS charges is to raise one tax invoice per billing period per NMI. Note: an invoice may contain multiple line items such as peak/off peak energy charges and demand charges during that period.
- 3.3.4.8 In addition to the NUoS charge invoice for the NMI, an additional invoice will be raised for “event” and “interest” charges for a specified bill period, where applicable. These will be transmitted with a separate “Invoice Summary” record, but ideally be contained with the same Network Invoice Header as the NUoS invoice.
- 3.3.4.9 If a dispute is raised against any item for the invoice and the dispute results in a re-invoicing of charges for the billing period, the reversal will be for the full amount of the original invoice (regardless of balance outstanding/ disputed status) and will reference the original invoice number.
- 3.3.4.10 The NUoS charges will be calculated using meter reads as prescribed by the Metrology procedures and the Metering B2B protocols.
- 3.3.4.11 All consumption-based charges for a bill period will be invoiced together and transmitted using one invoice number for the billing period. Consumption-based charges may include Network Access, Standing Charges, DUoS, TUoS, Capacity, demand and regular metering fees. Each component will be specified with sufficient charge detail to enable the invoice to be recalculated by the recipient, so that quantity * price = amount charged.
- 3.3.4.12 Time of Day codes shall be repeated to cater for network rate changes within the specified billing period; however, the *Billing start date* and *Billing end date* will specify the charge period to which the charge relates, and these charge periods are mutually exclusive. *Time of Day* codes shall be repeated to cater for block tariff charges. In this case, the *Step Number* value must increment by one for each step, within the same *Time of Day* block. This means the combination of *Step Number* and *Time of Day* values is unique. The *Step Number* value must align with the published *Time of Day* code increment numbers. The example below shows the required approach.

Invoice transaction example	
Step Number	Time of Day
1	PEAK
2	PEAK
3	PEAK

Invoice transaction example	
Step Number	Time of Day
4	PEAK
1	NCPEAK
1	SHOULDER
2	SHOULDER
1	OFFPEAK1

- 3.3.4.13 With the exception of block tariffs (described above), *Time of Day* code shall not be repeated within a Network Invoice for NUoS charges where only one charge period exists for the billing period. Any variations to this standard must be agreed bilaterally between LNSP and Retailer prior to invoicing.
- 3.3.4.14 “Event based” (for example special read fees, disconnection/reconnection charges, excluded services, etc.) and “Interest” charges will be invoiced separately to “NUoS” charges that may have been generated during that same period, and will reference the related NMI and be issued with a unit of measure of “DAY”, “MONTH” or “EACH”.
- 3.3.4.15 The LNSP will deliver the network invoice transactions using the technical protocols specified in the approved B2B Technical Transmission Standards document.
- 3.3.4.16 The Retailer will acknowledge receipt of network invoice transactions as per the B2B Technical Transmission Standards
- 3.3.4.17 *Network Tariff Code* codes shall be repeated to cater for network tariff changes (tariff or rate) within the specified billing period. The *Billing Period Start Date* and *Billing Period End Date* will specify the charge period to which the tariff or rate change relates. These charge periods are mutually exclusive. The *Network Tariff Code* code shall not be repeated within Network Invoice for NUoS charges where only one charge period exists for the billing period.

Example

<i>Network Tariff Code</i>	<i>Billing Period Start Date</i>	<i>Billing Period End Date</i>	<i>Rate</i>	<i>Quantity</i>	<i>Charge Amount</i>
TI2W	1-Nov-02	31-Dec-02	1.00	10.00	10.00
TI2W	1-Jan-03	6-Feb-03	1.10	5.00	5.50

3.3.4.18 Where an interest rate change occurs during a billing period, the *Interest Period Start Date* and *Interest Period End Date* will specify the charge period to which each interest rate applies. These charge periods are mutually exclusive.

3.3.4.19 Subject to the specific rules detailed in section 5.1.3, the billing period *start* and *end* dates for a network invoice must align with meter read dates.

3.3.4.20 Where a tariff change occurs within a billing period, the tariff changes must be presented on a single invoice for the *billing* period (not as separate invoices). A Network cannot send two invoices to cover a meter read period, i.e. when a rate change occurs between meter reads, each pro-rated period must be billed in the same unique invoice.

3.3.4.21 When calculating the Due Date for payment, the Network must not include the date of production and sending of the invoice transaction.

3.3.5 Network Adjustment Invoicing Specific Rules

3.3.5.1 Cancellation invoices may be issued using the invoice number of the original erroneous invoice. In order to prevent the invoice being rejected as a DUPL, the cancelled invoice must be named an "Adjustment Note" and the adjustment indicator of "C" used for the detailed transactions.

3.3.5.2 Rebilling invoices may be issued using the invoice number of the cancellation invoice only where they are presented as a combined credit note and recalculation on the one invoice.

3.3.5.3 In order to support Retailer reconciliation, the cancellation must be sequenced before the recalculated transactions. Where the cancellation and re-billing occur in separate invoices, the cancellation invoice must be sent before the new invoice.

3.3.6 Remittance Advice and Payment Specific Rules

3.3.6.1 Retailers shall specify the entire invoice amount on their remittance advice, unless a legitimate reason for a dispute exists, in which case a dispute notification is transmitted until the dispute is resolved.

3.3.6.2 If a dispute notification is received in the specified timeframes, no payment will be required for any charge lines on the invoice in dispute, unless advised by the LNSP that the dispute has been cancelled.

3.3.6.3 Where an overpayment has occurred, the LNSP shall not be required to calculate an interest benefit to the Retailer.

- 3.3.6.4 Part payment of an invoice will not occur. All invoices will be paid, remitted or disputed in full.
- 3.3.6.5 Payments shall be made via electronic means only (i.e. via Austraclear or EFT).
- 3.3.6.6 The Retailer when paying a charge will reference the NMI and the invoice number/s on Retailer remittance advice.
- 3.3.6.7 If an invoice is paid twice, the overpaid amount will be allocated via a remittance advice from the Retailer. LNSPs will not apply duplicate payments until such advice is received.
- 3.3.6.8 A Retailer may choose to both pay and dispute an invoice. If the dispute results in a reversal of the paid invoice the credit will be allocated via a remittance advice from the Retailer. . The LNSP will not apply credits until such advice is received.
- 3.3.6.9 If the LNSP reverses a paid invoice (for example correcting a paid invoice), the credit will be allocated via a remittance advice from the Retailer. The LNSP will not apply credits until such advice is received.
- 3.3.6.10 When taking up credits, the original invoice payment and reversing negative payment must be included in the same remittance file, issued at same time and always refer to the same NMI. Retailers may use the "comments" field to indicate a remittance relates to credit application rather than an EFT payment.
- 3.3.6.11 The Retailer will deliver the remittance advice transactions using the technical protocols specified in the approved B2B Technical Transmission Standards document.
- 3.3.6.12 The LNSP will acknowledge receipt of remittance advice transactions as per the B2B Technical Transmission Standards.
- 3.3.6.13 When processing Network Invoice transaction, Retailers should allow a 1 day tolerance for NUOS charge Billing Period Start and End dates (to allow for date mismatches). This tolerance should also be applied to any charges derived from these Billing Period Start and End dates.
- 3.3.7 Disputes Specific Rules
 - 3.3.7.1 The Retailer shall issue only one dispute code per charge line item, this being the highest order dispute reason. That is, if a charge line has both the quantity (“QNTY”) and per unit rate charged (“RATE”), then only one dispute shall be raised using a code of “QNTY” See section 5.7.4- Dispute Reason Codes.

- 3.3.7.2 All charge lines for an invoice will be treated as in dispute when a dispute notification is open for any charge line for that invoice number. The LNSP will not charge an overdue interest penalty for the charge lines that have not been included in the dispute notification.
- 3.3.7.3 The LNSP will endeavour to respond to Network Billing disputes that result in unpaid invoices before invoicing for the NMI's next billing period commences.
- 3.3.7.4 A Retailer may wish to cancel a dispute if lodged in error. This is a manual exchange outside of the B2B electronic transactions.
- 3.3.7.5 When all disputes lodged against the invoice have been resolved, the Retailer is required to pay the invoice in full. Interest on outstanding amounts will be payable according to the rules of the Use of System Agreements.
- 3.3.7.6 The Retailer when disputing a charge will reference the NMI and the invoice number/s on the Retailer dispute notification.
- 3.3.7.7 The dispute process covers the reconciliation of data between Network and Retailer. It does not include disputes between the Retailer and the end-use customer, as these are handled by other means (for example service orders).
- 3.3.7.8 On an operational basis, differences arising from rounding will not result in a dispute notification, unless the rounding is erroneous. Due to the cost of handling disputes, Retailers should limit the raising of disputes to situations involving significant amounts or continuing errors.
- 3.3.7.9 Any continuing pattern of errors may result in an escalated dispute, which can occur outside of the electronic B2B dispute process.
- 3.3.7.10 Each charge line that is disputed will result in a dispute record being raised. For example, if the "peak" charge line is disputed, there will be one dispute record; if both "peak" charge line and "off-peak" charge line is disputed then there will be two records for the one invoice.
- 3.3.7.11 Only one dispute code will be provided per charge line item, this being the highest order dispute reason. See section 5.7.4- Dispute Reason Codes.
- 3.3.7.12 All charges for an invoice are to be disputed at the same time. For example, the "peak" charge line cannot be disputed on day 1 and the "network access" charge line disputed on day 2.

- 3.3.7.13 The Retailer may put their source values into the comments field for the disputed record to assist the LNSP to assist in their investigation.
- 3.3.7.14 The Retailer will deliver the dispute advice transactions using the technical protocols specified in the approved B2B Technical Transmission Standards document.
- 3.3.7.15 The LNSP will deliver the dispute status change transactions and credit balance invoice transactions using the technical protocols specified in the approved B2B Technical Transmission Standards document.
- 3.3.7.16 The LNSP will acknowledge receipt of dispute transactions as per the B2B Technical Transmission Standards.
- 3.3.7.17 The Retailer will acknowledge receipt of dispute status change transactions and credit balance invoice transactions as per the B2B Technical Transmission Standards.
- 3.3.7.18 Where the Network is the Responsible Person for a site, the Retailer can dispute the network invoice on the grounds that the MDP has not provided the meter data (actual or substituted only) to them. A dispute reason code of QNTY plus an explanation (in the Dispute Status Change Comments field) must be used.
- Note: Forward estimates are not meter data for the purpose of this provision.
- 3.3.7.19 Where the Retailer is the Responsible Person for a site, the Retailer cannot dispute the network invoice on the grounds that the MDP has not provided the meter data to them.
- 3.3.8 Overdue Invoices Specific Rules**
- 3.3.8.1 The LNSP will advise the Retailer of an overdue invoice, when the due date has been exceeded and payment has not been received.
- 3.3.8.2 If an interest charge for overdue amounts is payable, an invoice per NMI is required.
- 3.3.8.3 A monthly aged debt statement, listing overdue invoices may be required. This is a manual exchange outside of the B2B electronic transactions.
- 3.3.8.4 The LNSP will deliver the overdue invoice advice transactions using the technical protocols specified in the approved B2B Technical Transmission Standards document.

3.3.8.5 The Retailer will acknowledge receipt of overdue invoice advice transactions as per the B2B Technical Transmission Standards

3.3.9 Rules for Duplicate Invoice transmission

3.3.9.1 If the Retailer requests the LNSP to produce a duplicate invoice or adjustment note, the LNSP will ensure the GST Tax invoice status indicates the transaction is a "Copy Invoice".

3.3.9.2 Resending an erroneous transaction that failed technical validation will not be treated as a duplicate invoice. These shall be issued by incrementing the version number of the previously issued file.

3.3.9.3 Amounts relating to duplicate or "Copy Invoices" shall be excluded from the Total GST Exclusive Amount, Total GST Payable and Total Payable field of the invoice footer. The Charge record count and Invoice record count fields shall include duplicate invoices within the control totals. This should assist retailers identifying the actual amount payable.

3.4 MSATS relationships

3.4.1.1 This process does not have any direct interaction with MSATS. It is possible that the Retailer may refer to NMI Standing Data (for example, to check the applicable network tariff code). However, this is an internal Retailer process and therefore outside the scope of this document.

3.5 Relationship Other B2B Standards

3.5.1.1 Where the LNSP carries out work and that work has a network-billing impact, it is anticipated that this standard will also be applied to communicate the Network Billing outcome. For instance, in the case of a customer-originated billing dispute, the Retailer may raise a request for a meter re-read to the LNSP/Meter Data Provider via the Service Order B2B protocol that may trigger rebilling of the Network invoice for that period.

3.5.1.2 Similarly, LNSPs may invoice for new connection/ establishment fees payable by the Retailer via the Network billing process, in addition to sending the confirmation of work carried out as prescribed by the New Connection B2B protocols.

4 Technical Information

4.1 Transaction flows

4.1.1.1 Refer to section 1.2 of this document for the illustrated transaction flows.

Ref	Transaction	From	To	Content	Timing
A	Send Network Invoice & invoice details	LNSP	Retailer	Refer 5	Varies from daily, weekly or monthly
B	Acknowledge receipt of invoice data	Retailer	LNSP		Immediate as per B2B Technical Transmission Standards document
C	Send disputed network invoice details	Retailer	LNSP	Refer 5.3	Varies from daily to monthly (depends on payment terms and frequency of invoicing).
D	Acknowledge receipt of disputed charges	LNSP	Retailer		Immediate as per B2B Technical Transmission Standards document
E	Resolve disputes	Both parties		N/A – not auto B2B	As required
F	Generate electronic payment	Retailer	LNSP	EFT/ Austraclear	With remittance advice.
G	Send remittance details	Retailer	LNSP	Refer 5.2	Varies from daily to monthly (depends on payment terms and frequency of invoicing).
H	Acknowledge receipt of remittance details	LNSP	Retailer		Immediate as per B2B Technical Transmission Standards document
I	Send Dispute Status Change advice	LNSP	Retailer	Refer 5.4	Daily as dispute status is updated.
J	Acknowledge receipt of Dispute Status Change	Retailer	LNSP		Immediate as per B2B Technical Transmission Standards document
K	Send Outstanding Invoice Advice	LNSP	Retailer	Refer 5.5	Daily as invoices become overdue.
L	Acknowledge receipt of Outstanding Invoice Advice	Retailer	LNSP		Immediate as per B2B Technical Transmission Standards document
M	Send Credit Balance Invoice advice	LNSP	Retailer	Refer 5.6	Monthly
N	Acknowledge receipt of Credit Balance Invoice Advice	Retailer	LNSP		Immediate as per B2B Technical Transmission Standards document

Ref	Transaction	From	To	Content	Timing
O	Negative Technical Acknowledgment		Either party	Technical Transmission Standards	By 5pm (local time) next working day via e-mail
P	Resend Network Invoice & invoice details		Either party	Technical Transmission Standards	As soon as possible on receipt of recipient e-mail

4.1.1.2 Note: For each record type shown below, fields that uniquely identify a line are represented by “*”.

4.2 Field definitions

4.2.1.1 When transmitting text in a "CHAR" defined field, the text shall match the defined field length. This may require leading zeros for some record type fields. The text will not be qualified.

4.2.1.2 When transmitting text in a "VCHAR" defined field, the text shall be no more than the defined field length. The text will not be qualified.

4.2.1.3 When transmitting text in a "NUMBER" defined field, the text shall not contain dollar signs. The text may contain periods where required and may be "signed" if noted.

4.2.1.4 When transmitting text in a "DATE" or “CCYYMMDD” defined field, the text shall not contain spaces, dashes or slashes and formatted using CCYYMMDD. For example 20- September-2001 is represented as "20010920".

4.2.1.5 Commas are not permitted as valid characters in any data field – whatever the data type.

5 Network Invoices Sent to Retailer

5.1.1 Network Invoice File Header

Field	Description	Attributes	Comments
<i>Record Type</i> *	'010' Network Charge Header record	CHAR(3)	Mandatory
<i>LNSP Code</i>	The AEMO market code identifying the LNSP	VCHAR(10)	Mandatory
<i>Retailer Code</i>	The AEMO market code identifying the Retailer	VCHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS	CHAR(14)	Mandatory

5.1.2 Invoice Summary Record Type

Field	Description	Attributes	Comments
<i>Record Type</i>	'020', Invoice Summary record	CHAR (3)	Mandatory
<i>Invoice Number</i> *	Unique Invoice Number	VCHAR(20)	Mandatory
<i>NMI</i>	National Metering Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Invoice Date</i>	Date invoice issued	CCYYMMDD	Mandatory
<i>Due Date for payment</i>	Date payment of invoice is required	CCYYMMDD	Mandatory
<i>LNSP Name</i>	Sending and receiving parties Australian Business Number and Name, as per GST requirements.	VCHAR(50)	Mandatory GST fields
<i>LNSP ABN#</i>		VCHAR(14)	
<i>Retailer Name</i>		VCHAR(50)	
<i>Retailer ABN#</i>		VCHAR(14)	
<i>GST Tax InvoiceStatus</i>	Mandatory GST field, required to indicate status of invoice, literally: "Tax Invoice", "Adjustment Note", "Copy Invoice"	VCHAR(15)	Mandatory Refer to section 3.3.1
<i>GST ExclusiveAmount</i>	Sum of all line items in this invoice, exclusive of any GST calculated for the invoice	NUMERIC (s15.2)	Mandatory

B2B Process Specification
Network Billing

Field	Description	Attributes	Comments
<i>GST Payable</i>	Total GST for all GST Chargeable line items in this invoice. If GST is calculated at the transaction level, this field should be the sum of GST individually calculated for all GST Chargeable line items, else the sum of all GST Chargeable line items for this invoice * GST rate.	NUMERIC (s15.2)	Mandatory
<i>Amount Payable</i>	Total value of all line items in this invoice, inclusive of any GST Payable calculated for the invoice	NUMERIC (s15.2)	Mandatory
<i>GST Indicator</i>	Indicate "Y" if GST is calculated at the invoice line items level. Indicate "N" if GST is calculated at total invoice level. This shall be set to "Y" in all cases.	CHAR(1)	Mandatory. Refer to section 3.3.2

5.1.3 NUOS Charge Record Type

Field	Description	Attributes	Comments
<i>Record Type</i>	'100', NUOS record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this charge record relates to.	VCHAR(20)	Mandatory
<i>Line Identifier *</i>	The sequence number assigned to each charge to enable a line to be uniquely identified within an invoice.	VCHAR(17)	Mandatory
<i>Old InvoiceNumber</i>	A reference to a previous invoice for a reversal transaction. Mandatory if a reversing invoice line items.	VCHAR(20)	Optional Refer section 3.3.1
<i>Transaction Date</i>	Date the related invoice line was created in the Source system	CCYYMMDD	Mandatory
<i>AdjustmentIndicator</i>	"C" denotes cancelled transaction; "R" denotes a rebilled transaction; "N" denotes new or rebilled invoice line items.	CHAR(1)	Mandatory Refer section 3.3.1
<i>Adjustment Reason</i>	For cancelled transactions, the reason for the adjustment has occurred, as required for GST Adjustment Notes	VCHAR(60)	Optional Refer section 3.3.1
<i>NMI</i>	National Metering Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory

B2B Process Specification
Network Billing

Field	Description	Attributes	Comments
<i>Network TariffCode</i>	The code for the Network's tariff assigned within MSATS (as gazetted by the Regulator).	VCHAR(10)	Mandatory
<i>Step Number</i>	Where a LNSP has a multi-step (or block) tariff, a referenced to the step number shall be used. For LNSPs without multi-block tariffs, this shall default to a literal value '1'.	NUMERIC (3)	Mandatory
<i>Billing Period StartDate</i>	<p>Start Date for the billing or charge period. This either the commencement of the billing period or a sub-period within the billing period (where there has been a tariff change or time of day code change during the billing period). The sub-period is termed a 'charge period'.</p> <p>The Billing Period Start Date must be the meter read date where it is the commencement of the billing period.</p> <p>The Billing Period Start Date is the date of the tariff change where it is the commencement of a charge period.</p>	CCYYMMDD	Mandatory
<i>Billing Period EndDate</i>	<p>End Date for the billing or charge period. This is either the end of the billing period or a sub-period within the billing period (where there has been a tariff change during the billing period). The sub- period is termed a 'charge period'.</p> <p>The Billing Period End Date is the day before the Billing Period Start Date for the next billing or charge period.</p>	CCYYMMDD	Mandatory
<i>Time of Day</i>	Time of Day format for data, for example PEAK, OFFPEAK.	VCHAR(10)	Mandatory. Refer section 5.7.3
<i>Reading type</i>	<p>Actual, partial substitute, estimate quantity using codes as prescribed by Metrology procedures.</p> <p>Note Default value is "A"</p>	CHAR(1)	Mandatory
<i>Line Description</i>	Line description containing details of charge. This description may relate to the Network tariff (as gazetted by the Regulator). Description may include code plus indicate a time period or charge type such as standing charges, demand, capacity etc.	VCHAR(60)	Mandatory
<i>Quantity</i>	Quantity of electricity or gas consumed.	NUMERIC (s9.5)	Mandatory
<i>Unit of Measure</i>	KWh, KVA etc. Refer to table at 3.9.2 for details.	VCHAR(5)	Mandatory

B2B Process Specification

Network Billing

Field	Description	Attributes	Comments
<i>Rate</i>	The rate applied to the charge, exclusive of GST.	NUMERIC (s9.5)	Mandatory
<i>Charge Amount(GST Exclusive)</i>	Calculated NUOS charge, excluding GST.	NUMERIC (s15.2)	Mandatory
<i>GST Amount</i>	GST applicable to calculated network charge. If the transaction is GST-exempt or GST is calculated at invoice level, value will be zero.	NUMERIC (s15.2)	Mandatory
<i>GST Indicator</i>	Indicate "Y" if GST is calculated at invoice line item level. Indicate "N" if GST is calculated at total invoice level. This shall be set to "Y" in all cases.	CHAR(1)	Mandatory. Refer to section 3.3.2

B2B Process Specification
Network Billing

5.1.4 Event Charge Record Type

Field	Description	Attributes	Comments
<i>Record Type</i>	'200', Event Based Charge record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this charge record relates to.	VCHAR(20)	Mandatory
<i>Line Identifier *</i>	The sequence number assigned to each charge to enable a line to be uniquely identified within an invoice.	VCHAR(17)	Mandatory
<i>Old InvoiceNumber</i>	A reference to a previous invoice for a reversal transaction.	VCHAR(20)	Optional Refer section 3.3.1
<i>Transaction Date</i>	Date the related invoice line was created in the Source system	CCYYMMDD	Mandatory
<i>AdjustmentIndicator</i>	"C" denotes cancelled transaction; "R" denotes a rebilled transaction; "N" denotes a new or rebilled transactions	CHAR(1)	Mandatory Refer section 3.3.1
<i>Adjustment Reason</i>	For cancelled transactions, the reason for the adjustment has occurred, as required for GST Adjustment Notes	VCHAR(60)	Optional Refer section 3.3.1
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Network ServiceOrder Reference</i>	Network Service Order Id	VCHAR(15)	Optional
<i>Retailer's ServiceOrder Reference</i>	Retailer Service Order Id	VCHAR(15)	Optional
<i>Network Rate Code</i>	Based on each LNSP's Product codes, to indicate type of service. These codes must match the <i>ProductCodes</i> used in the <u>ServiceOrderResponse</u> for the services being billed.	VCHAR(10)	Mandatory
<i>Line Description</i>	Line description containing details of charge	VCHAR(60)	Mandatory
<i>Charge Date</i>	The date the charge event occurred.	CCYYMMDD	Mandatory
<i>Quantity</i>	Number of charges (if multiple events within period)	NUMERIC (s5)	Mandatory
<i>Unit of Measure</i>	Refer to table at 5.7.2 for details. Typically EACH.	VCHAR(5)	Mandatory

B2B Process Specification
 Network Billing

Field	Description	Attributes	Comments
<i>Rate</i>	The per unit rate of the charge, exclusive of GST	NUMERIC (s9.5)	Mandatory
<i>Charge Amount(GST Exclusive)</i>	Calculated exclude service, interest, service order charge, excluding GST.	NUMERIC (s15.2)	Mandatory
<i>GST Amount</i>	GST applicable to calculated charge. If the transaction is GST-exempt or GST is calculated at invoice level, value will be zero.	NUMERIC (s15.2)	Mandatory
<i>GST Indicator</i>	Indicate "Y" if GST is calculated at invoice line item level. Indicate "N" if GST is calculated at total invoice level. This shall be set to "Y" in all cases.	CHAR(1)	Mandatory. Refer to section 3.3.2

5.1.5 Interest Charge Record Type

Field	Description	Attributes	Comments
<i>Record Type</i>	'900', Interest Charge record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this charge record relates to.	VCHAR(20)	Mandatory
<i>Line Identifier *</i>	The sequence number assigned to each charge to enable a line to be uniquely identified within an invoice.	VCHAR(17)	Mandatory
<i>Old InvoiceNumber</i>	A reference to a previous invoice for a reversal transaction.	VCHAR(20)	Optional Refer section 3.3.1
<i>Transaction Date</i>	Date the related invoice line was created in the Source system	CCYYMMDD	Mandatory
<i>AdjustmentIndicator</i>	"C" denotes cancelled transaction; "R" denotes a rebilled transaction; "N" denotes a new or rebilled transactions	CHAR(1)	Mandatory Refer section 3.3.1
<i>Adjustment Reason</i>	For cancelled transactions, the reason for the adjustment has occurred, as required for GST Adjustment Notes	VCHAR(60)	Optional Refer section 3.3.1
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Overdue invoiceNumber</i>	A reference to the invoice that incurred the interest charges.	VCHAR(20)	Mandatory
<i>Overdue InvoiceDue Date</i>	Date which original payment was due	CCYYMMDD	Mandatory
<i>Principal Amount</i>	Amount on which interest is calculated.	NUMERIC (s15.2)	Mandatory
<i>Interest Period Start Date</i>	Start Date for the interest charge. This may be the commencement of the billing period, or a sub-period within the billing period (where there has been an interest rate change during the billing period). The sub-period is termed a 'charge period'. The Interest Period Start Date is the date of the interest rate change where it is the commencement of a charge period.	CCYYMM DD	Mandatory

B2B Process Specification
Network Billing

Field	Description	Attributes	Comments
<i>Interest Period End Date</i>	<p>End Date for the interest charge.</p> <p>This may be the end of the billing period, or a sub-period within the billing period (where there has been an interest rate change during the billing period).</p> <p>The sub-period is termed a 'charge period'.</p> <p>The Interest Period End Date is the day before the Interest Period Start Date for the next billing or charge period.</p>	CCYYMM DD	Mandatory
<i>Interest Charge (GST Exclusive)</i>	Amount of interest charge.	NUMERIC (s9.2)	Mandatory
<i>GST Amount</i>	Currently, GST is not applied to interest charges so this field will always be zero.	NUMERIC (s9.2)	Mandatory
<i>GST Indicator</i>	<p>Indicate "Y" if GST is calculated at invoice line item level. Indicate "N" if GST is calculated at total invoice level.</p> <p>This shall be set to "Y" in all cases.</p>	CHAR(1)	Mandatory. Refer to section 3.3.2

5.1.6 Network Invoice File Footer

Field	Description	Attributes	Comments
<i>Record Type *</i>	“011” Network Charges Footer record.	CHAR(3)	Mandatory
<i>Charge record count</i>	Total number of charge detail record types (count of “100, 200 & 900” records).	NUMERIC (10)	Mandatory
<i>Invoice record count</i>	Total number of invoice summary record types (count of “020” records).	NUMERIC (10)	Mandatory
<i>Total GST Exclusive Amount</i>	Total amount of invoices (before GST) from “020” records, excluding Copy invoices.	NUMERIC (s15.2)	Mandatory
<i>Total GST Payable</i>	Total amount of GST from “020” records, excluding Copy invoices.	NUMERIC (s15.2)	Mandatory
<i>Total Payable</i>	Total amount of invoices (including GST) from “020” records, excluding Copy invoices.	NUMERIC (s15.2)	Mandatory

5.2 Remittance to LNSP

5.2.1.1 This transaction is sent from the Retailer to the LNSP to indicate specific invoices approved for payment.

5.2.2 Remittance File Header

Field	Description	Attributes	Comments
<i>Record Type *</i>	'800' Dispute File Header record.	CHAR(3)	Mandatory
<i>LNSP</i>	The AEMO market code identifying the LNSP.	CHAR(10)	Mandatory
<i>Retailer</i>	The AEMO market code identifying the Retailer.	CHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS.	CHAR(14)	Mandatory

5.2.3 Remittance Details

Field	Description	Attributes	Comments
<i>Record Type</i>	'810' Remittance Detail record.	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this remittance advice relates to.	VCHAR(20)	Mandatory
<i>NMI</i>	National Meter Identifier.	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum.	CHAR(1)	Mandatory
<i>Amount Paid</i>	Amount paid including GST.	NUMERIC (s15.2)	Mandatory
<i>Paid Date</i>	Payment Date to signal when the funds will be available for transfer.	CCYYMMDD	Optional
<i>Payment Reference</i>	Cross reference from this remittance advice to at least one electronic payment. This reference could be the date and method by which the payment was sent or the payment transaction reference number supplied by the financial intermediary.	VCHAR(60)	Mandatory (see Remittance Method, section 3.2)

5.2.4 Remittance File Footer

Field	Description	Attributes	Comments
<i>Record Type *</i>	'820' Remittance Footer record	CHAR(3)	Mandatory
<i>Remittance total record count</i>	Total number of records (count "810" records).	NUMERIC (10)	Mandatory

B2B Process Specification
Network Billing

Field	Description	Attributes	Comments
<i>Remittance total amount</i>	Total amount paid (sum of amount paid from "810" records)	NUMERIC (s15.2)	Mandatory

5.3 Network Charge dispute notification sent to LNSP.

5.3.1.1 When a Retailer validates the charges received from a LNSP, there may be differences (in the consumption quantity, for example). The record types below enable a Retailer to notify a LNSP of such differences (“disputes”) at the charge line. **Disputes will not be raised at the NMI level.**

5.3.2 Dispute File Header

Field	Description	Attributes	Comments
<i>Record Type</i> *	‘910’ Dispute File Header record	CHAR(3)	Mandatory
<i>LNSP</i>	The AEMO market code identifying the LNSP	VCHAR(10)	Mandatory
<i>Retailer</i>	The AEMO market code identifying the Retailer	VCHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS	CHAR(14)	Mandatory

5.3.3 Dispute Record Detail

Field	Description	Attributes	Comments
<i>Record Type</i>	‘911’ Dispute Detail record	CHAR(3)	Mandatory
<i>Invoice Number</i> *	Invoice Number this dispute record relates to	VCHAR(20)	Mandatory
<i>Line Identifier</i> *	The sequence number assigned to each charge to enable a line to be uniquely identified within an invoice.	VCHAR(17)	Mandatory
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Disputed Amount</i>	LNSPs calculated charge, excluding GST as specified in Network invoice	NUMERIC (s15.2)	Optional
<i>GST Amount</i>	LNSPs GST amount as shown against the charge line item in dispute	NUMERIC (s9.2)	Optional
<i>GST Indicator</i>	LNSPs GST indicator as shown against the charge line item in dispute	CHAR(1)	Optional
<i>Dispute ReasonCode</i>	Applicable Dispute Reason Code (see table 5.7.4).	CHAR(4)	Mandatory
<i>Dispute ReasonComment</i>	Free text field to provide additional explanation for the dispute.	VCHAR(240)	Optional

5.3.4 Dispute File Footer

Field	Description	Attributes	Comments
Record Type *	'912' Dispute File Footer record	CHAR(3)	Mandatory
Disputed Record total record count	Total number of records (count "911" records).	NUMERIC (10)	Mandatory

5.4 Dispute Status Change Advice

5.4.1.1 When an LNSP updates the dispute status from "Open" to either "Closed" or "Cancelled," the transaction will be used to advise the Retailer of the outcome of the investigation. This update may occur before or at the same time as the adjustment note generation.

5.4.2 Dispute Status Change Advice File Header

Field	Description	Attributes	Comments
<i>Record Type *</i>	'913' Dispute Status Change Header record	CHAR(3)	Mandatory
<i>LNSP</i>	The AEMO market code identifying the LNSP	VCHAR(10)	Mandatory
<i>Retailer</i>	The AEMO market code identifying the Retailer	VCHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS	CHAR(14)	Mandatory
<i>Start Period</i>	Start period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory
<i>End Period</i>	End period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory

5.4.3 Dispute Status Change Advice Detail Record

Field	Description	Attributes	Comments
<i>Record Type</i>	'914' Dispute Status Change Detail record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this dispute status change record relates to	VCHAR(20)	Mandatory
<i>Line Identifier *</i>	The sequence number assigned to each charge to enable a line to be uniquely identified within an invoice.	VCHAR(17)	Mandatory
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory

Field	Description	Attributes	Comments
<i>New Dispute StatusCode</i>	Dispute Status Code assigned by the LNSP (see table 3.9.5 for values)	CHAR(4)	Mandatory
<i>Dispute StatusChange Comments</i>	Free text field to provide additional explanation for the dispute status change.	VCHAR(240)	Optional

5.4.4 Dispute Status Change Advice File Footer

Field	Description	Attributes	Comments
<i>Record Type *</i>	'915' Dispute Status Change Footer record	CHAR(3)	Mandatory
<i>Dispute Status Changes record count</i>	Total number of dispute status changes (count of '914' records)	NUMERIC (10)	Mandatory

5.5 Outstanding Invoice Advice

5.5.1.1 When an LNSP identifies an invoice has past the due date, and full payment has not been received, the transaction will be used to remind the Retailer of the overdue invoice.

5.5.2 Outstanding Invoice Advice File Header

Field	Description	Attributes	Comments
<i>Record Type *</i>	'930' Outstanding Invoice Header record	CHAR(3)	Mandatory
<i>LNSP</i>	The AEMO market code identifying the LNSP	VCHAR(10)	Mandatory
<i>Retailer</i>	The AEMO market code identifying the Retailer	VCHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS	CHAR(14)	Mandatory
<i>Start Period</i>	Start period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory
<i>End Period</i>	End period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory

5.5.3 Outstanding Invoice Advice Detail Record

Field	Description	Attributes	Comments
<i>Record Type</i>	'931' Outstanding Invoice Detail record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number	VCHAR(20)	Mandatory
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory

Field	Description	Attributes	Comments
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Invoice Date</i>	Date invoice issued	CCYYMMDD	Mandatory
<i>Due Date</i>	Date payment of invoice was due	CCYYMMDD	Mandatory
<i>Total Amount Payable</i>	Total value of all invoice line items in this invoice, inclusive of GST.	NUMERIC (s15.2)	Mandatory
<i>Dispute Received Indicator</i>	Y/N indicator to specify if a dispute has been received for this invoice	CHAR(1)	Mandatory
<i>Comments</i>	Free text field to provide additional information.	VCHAR(240)	Optional

5.5.4 Outstanding Invoice Advice File Footer

Field	Description	Attributes	Comments
<i>Record Type *</i>	'932' Outstanding Invoice Footer record	CHAR(3)	Mandatory
<i>Outstanding Invoice total record count</i>	Total number of records (count "931" records).	NUMERIC (10)	Mandatory
<i>Outstanding Invoice total amount</i>	Total amount (sum of Total Amount Payable from all "931" records)	NUMERIC (s15.2)	Mandatory

5.6 Credit Balance Invoice Advice

5.6.1.1 On a periodic basis, when the LNSP identifies invoices that have a credit balance (for various reasons), the transaction will be used to remind the Retailer of the credit balance invoice to prompt for allocation to other invoices as required.

5.6.2 Credit Balance Invoice Advice File Header

Field	Description	Attributes	Comments
<i>Record Type*</i>	'940' Credit Balance Invoice Header record	CHAR(3)	Mandatory
<i>LNSP</i>	The AEMO market code identifying the LNSP	VCHAR(10)	Mandatory
<i>Retailer</i>	The AEMO market code identifying the Retailer	VCHAR(10)	Mandatory
<i>Timestamp</i>	Timestamp when file was generated, CCYYMMDDHHMMSS	CHAR(14)	Mandatory
<i>Start Period</i>	Start period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory

B2B Process Specification
Network Billing

Field	Description	Attributes	Comments
<i>End Period</i>	End period for the transaction. This value is used to define the required reporting period.	CCYYMMDD	Mandatory

5.6.3 Credit Balance Invoice Advice Detail Record

Field	Description	Attributes	Comments
<i>Record Type</i>	'941' Credit Balance Invoice Detail record	CHAR(3)	Mandatory
<i>Invoice Number *</i>	Invoice Number this credit balance advice record relates to	VCHAR(20)	Mandatory
<i>NMI</i>	National Meter Identifier	CHAR(10)	Mandatory
<i>NMI Checksum</i>	NMI Checksum	CHAR(1)	Mandatory
<i>Total Amount Payable</i>	Total billed value of all transactions for the specified invoice, inclusive of GST	NUMERIC (s15.2)	Mandatory
<i>Balance</i>	Balance (billed charge less payments received) outstanding for all invoice line items for the specified invoice, inclusive of GST	NUMERIC (s15.2)	Mandatory

5.6.4 Credit Balances Advice File Footer

Field	Description	Attributes	Comments
<i>Record Type *</i>	'942' Credit Balance Invoice Footer record	CHAR(3)	Mandatory
<i>Credit Balance Invoice total record count</i>	Total number of records (count "941" records).	NUMERIC (10)	Mandatory
<i>Credit Balance Invoice total amount</i>	Total amount (sum of Balance from all "941" records)	NUMERIC (s15.2)	Mandatory

5.7 Predefined Codes

5.7.1 Record Type Codes

5.7.1.1 Each record type supported by this B2B will have its own unique detail record identified by a code:

Code	Description
010	Network Charges Header
011	Network Charges Footer
020	Invoice Summary
100	NUOS Charge
200	Event Charge
900	Interest Charge
800	Remittance Header
810	Remittance Detail
820	Remittance Footer
910	Dispute Header
911	Dispute Detail
912	Dispute Footer

Code	Description
913	Dispute Status Change Header
914	Dispute Status Change Detail
915	Dispute Status Change Footer
930	Outstanding Invoice Header
931	Outstanding Invoice Detail
932	Outstanding Invoice Footer
940	Invoices with Credit Balance Invoice Header
941	Invoices with Credit Balance Invoice Detail
942	Invoices with Credit Balance Invoice Footer
Nnn	<i>Other transaction types as required</i>

5.7.2 Units of Measure

5.7.2.1 The Unit of Measure values for NUoS charges will be aligned to those values agreed by industry for use in MSATS (CATS Register Identifier). Additional values for non-energy charges have also been included, marked with (#).

UOM Code	Description	UOM Code	Description
		MVAH	Million VA Hours
DAY	Per Day (#)	MVARH	Megavar Hours

B2B Process Specification
Network Billing

UOM Code	Description	UOM Code	Description
EA	Each (#)	MW	Megawatts
		MWH	Megawatt Hours
KV	Kilo-volts	PA	Per Annum (#)
KVA	Thousand VA	PF	Power Factor
KVAH	Thousand VA Hours	V	Volts
KVAR	Kilo var	VA	Volt Amps
KVB	Kilo-volt-amp Capacity	VAH	VA Hours
KW	Kilowatts	VAR	Volt Amps Reactive Hours
KWH	Kilowatt Hours	W	Watts
MTH	Per Month (#)	WH	Watt Hours

5.7.3 Time of Day codes

Designates codes that are only to be used with flat access charges in preference to meter consumption time bands.

Time of Day Code	Description
CL1	ENERGY CL OFF PEAK 1
CL2	ENERGY CL OFF PEAK 2
CL3	ENERGY CL OFF PEAK 3
INTERUPT	INTERRUPTABLE ALL TIMES
INTERPEAK	INTERRUPTABLE PEAK

Time of Day Code	Description
MAX	DEMAND KVA ALL TIMES
MAXOP	DEMAND KVA OFF PEAK
MAXPEAK	DEMAND KVA ON PEAK
MAXSH	DEMAND KVA SHOULDER
MAXWKEND	DEMAND KVA WEEKEND

B2B Process Specification
Network Billing

Time of Day Code	Description
INTERSHLDR	INTERRUPTABLE SHOULDER
INTEROFFPK	INTERRUPTABLE OFF PEAK
PEAKSHLDR	ENERGY PEAK & SHOULDER
ALLDAY	ENERGY ALL TIMES
KWD	ENERGY DAY
EXPORT	ENERGY EXPORT
OFFPEAK	ENERGY OFF PEAK
IMPORT	ENERGY IMPORT
NIGHT	ENERGY NIGHT
PEAK	ENERGY ON PEAK
SHOULDER	ENERGY SHOULDER
WEEKEND	ENERGY WEEKEND
KVASUMMER	SEASONAL DEMAND KVA SUMMER
KVAWINTER	SEASONAL DEMAND KVA WINTER
KWSUMMER	SEASONAL DEMAND KW SUMMER
KWWINTER	SEASONAL DEMAND KW WINTER
KVADEMAND	SPECIAL KVA DEMAND (as published by LNSP)

Time of Day Code	Description
MAXPKSH	DEMAND KVA PEAK AND SHOULDER
WDA	DEMAND KW ALL TIMES
WDF	DEMAND KW OFF PEAK
WDO	DEMAND KW ON PEAK
WDS	DEMAND KW SHOULDER
WDD	DEMAND KW PEAK& SHOULDER
STANDBY	STANDBY SUPPLY
WCA	CAPACITY DEMAND KW ALL TIMES
WCF	CAPACITY DEMAND KW OFF PEAK
WCO	CAPACITY DEMAND KW ON PEAK
WCS	CAPACITY DEMAND KW SHOULDER
WCD	CAPACITY DEMAND KW PEAK & SHOULDER
KCA	CAPACITY DEMAND KVA ALL TIMES
KCF	CAPACITY DEMAND KVA OFF PEAK
KCO	CAPACITY DEMAND KVA ON PEAK
KCS	CAPACITY DEMAND KVA SHOULDER
KCW	CAPACITY DEMAND KVA WEEKEND

B2B Process Specification
Network Billing

Time of Day Code	Description
NCCL1	NETWORK ACCESS CHARGE CL OFF PEAK 1
NCCL2	NETWORK ACCESS CHARGE CL OFF PEAK 2
NCCL3	NETWORK ACCESS CHARGE CL OFF PEAK 3
NCINTERUPT	NETWORK ACCESS CHARGE INTERRUPTABLE ALL TIMES
NCINTPEAK	NETWORK ACCESS CHARGE INTERRUPTABLE PEAK
NCINTSHLDR	NETWORK ACCESS CHARGE INTERRUPTABLE SHOULDER
NCINTOFFPK	NETWORK ACCESS CHARGE INTERRUPTABLE OFF PEAK
NCPKSHLDR	NETWORK ACCESS CHARGE ENERGY PEAK & SHOULDER
NCALLDAY	NETWORK ACCESS CHARGE ENERGY ALL TIMES

Time of Day Code	Description
KCD	CAPACITY DEMAND KVA PEAK & SHOULDER
NCMAX	NETWORK ACCESS CHARGE KVA ALL TIMES
NCMAXOP	ENERGY CRITICAL PEAK MINIMUM
NCMAXPEAK	ENERGY CRITICAL PEAK MAXIMUM
NCMAXSH	NETWORK ACCESS CHARGE DEMAND KVA SHOULDER
NCMAXWKEND	NETWORK ACCESS CHARGE DEMAND KVA WEEKEND
NCMAXPKSH	NETWORK ACCESS CHARGE DEMAND KVA PEAK AND SHOULDER
NCWDA	NETWORK ACCESS CHARGE DEMAND KW ALL TIMES
NCWDF	NETWORK ACCESS CHARGE DEMAND KW OFF PEAK
NCWDO	NETWORK ACCESS CHARGE DEMAND KW ON PEAK
NCWDS	NETWORK ACCESS CHARGE DEMAND KW SHOULDER

B2B Process Specification
 Network Billing

Time of Day Code	Description
NCKWD	METERING SERVICE CHARGE
NCEXPRT	NETWORK ACCESS CHARGE ENERGY EXPORT
NCOFFPEAK	NETWORK ACCESS CHARGE ENERGY OFF PEAK
NcIMPORT	NETWORK ACCESS CHARGE ENERGY IMPORT
NCNIGHT	NETWORK ACCESS CHARGE ENERGY NIGHT
NCPEAK	NETWORK ACCESS CHARGE ENERGY ON PEAK
NCSHOULDER	NETWORK ACCESS CHARGE ENERGY SHOULDER
NCWEEKEND	NETWORK ACCESS CHARGE ENERGY WEEKEND
NCKVASUMMR	NETWORK ACCESS CHARGE SEASONAL DEMAND KVA SUMMER
NCKVAWINTR	NETWORK ACCESS CHARGE SEASONAL DEMAND KVA WINTER
NCKWSUMMR	NETWORK ACCESS CHARGE SEASONAL DEMAND KW SUMMER

Time of Day Code	Description
NCWDD	NETWORK ACCESS CHARGE DEMAND KW PEAK& SHOULDER
NCSTANDBY	NETWORK ACCESS CHARGE STANDBY SUPPLY
NCWCA	NETWORK ACCESS CHARGE CAPACITY DEMAND KW ALL TIMES
NCWCF	NETWORK ACCESS CHARGE CAPACITY DEMAND KW OFF PEAK
NCWCO	NETWORK ACCESS CHARGE CAPACITY DEMAND KW ON PEAK
NCWCS	NETWORK ACCESS CHARGE CAPACITY DEMAND KW SHOULDER
NCWCD	NETWORK ACCESS CHARGE CAPACITY DEMAND KW PEAK & SHOULDER
NCKCA	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA ALL TIMES
NCKCF	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA OFF PEAK
NCKCO	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA ON PEAK
NCKCS	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA SHOULDER

B2B Process Specification
Network Billing

Time of Day Code	Description
NCKWWINTR	NETWORK ACCESS CHARGE SEASONAL DEMAND KW WINTER
NCKVADEMND	NETWORK ACCESS CHARGE SPECIAL KVA DEMAND (as published by LNSP)
BUS	ENERGY BUSINESS

Time of Day Code	Description
NCKCW	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA WEEKEND
NCKCD	NETWORK ACCESS CHARGE CAPACITY DEMAND KVA PEAK & SHOULDER
EVE	ENERGY EVENING

B2B Process Specification

Network Billing

5.7.4 Dispute Reason Codes

5.7.4.1 Dispute codes are assigned to detailed charge items, and thus are generic to cater for the same dispute code used for different time splits and charge types.

5.7.4.2 Comments may be used to provide additional information to report compounding disputes.

Code	Description	Order
NNMI	NMI unknown to Retailer (i.e. Retailer has never supplied a customer for this NMI).	1
LRTB	NMI not responsibility of Retailer before the start period (i.e. Retailer not the FRMP for period specified).	2
LRTD	NMI not responsibility of Retailer at the end period (i.e. Retailer has changes during bill period).	3
DUPL	Duplicate charge (invoice already received for bill period)	4
BPDF	Billing period overlaps previous invoice or billing period does not match Retailer.	5
QNTY	Quantity different. This may apply to any time period, unit of measure or event-based charges. Note: This code should not be used where a charge should be a zero quantity.	6
TARF	Network rate code different. This may apply to NUoS, excluded services, interest or any other charges.	7
RATE	Rate different then published. This may apply to NUoS, excluded services, interest or any other charges.	8
OTHR	Charge disputed (retailer does not believe this amount should be charged at all). Please use comments to specific nature of dispute. Note: This dispute should not be used to raise technical disputes.	9
INTP	Interest period different	10

5.7.5 Dispute Status Codes

5.7.5.1 Note: A dispute status change transaction will only be generated for disputes that change from “Open” to “Cancelled” or “Closed.”

Code	Description
OPEN	The dispute has been acknowledged and is currently under investigation by the LNSP.
CANC	The LNSP has completed the investigation, and no basis for the dispute has been reliably demonstrated. No further action will be taken by the LNSP for this dispute.
CLSD	The LNSP has completed the investigation, and has confirmed an error with the invoice. A new invoice and/or reversal will be generated.

5.8 Performance Considerations

5.8.1.1 Frequency and timeframes will be determined by bilateral agreement or as prescribed within default Use of System/ Market Operation Rules.

5.9 Acknowledgment Notifications

5.9.1.1 Acknowledgment transactions are required to confirm the receiving party has taken receipt of the transmission.

5.9.1.2 These return transactions are “technical acknowledgments”, meaning that a quality transmission has occurred (e.g. formatted correctly, field definitions validated, whole transaction received, control totals match). The acknowledgment is not a business acknowledgment, meaning the data may be queried later during business processing by the recipient.

5.9.1.3 Refer to Technical Transmission Standards for details of the prescribed method for technical acknowledgments.

6 Sample Format of Network Billing Transaction Files

6.1 Sample Transaction Flow

6.1.1 Network Invoice File sent to Generic FRMP - with GST disclosed at line level

```
10, LNSP123456, FRMP123456, 20020520031000
20, 123456787, NEEEE000112, 6, 20020519, 20020530, LNSP ABC, 11 222 333 444, FRMP ABC, 11 222 333 555, Tax Invoice, 3300, 330, 3630, Y
100, 123456787, 1, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, NCCL1, A, Network Access Charge, 30, Day, 10, 300, 30, Y
100, 123456787, 2, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, MAX, A, Gen Bus Demand, 1000, KVA, 1, 1000, 100, Y
100, 123456787, 3, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, OFFPEAK, A, Gen Bus Off Peak, 10000, KWH, 0.1, 1000, 100, Y
100, 123456787, 4, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, PEAK, A, Gen Bus Peak, 10000, KWH, 0.1, 1000, 100, Y
100, 123456787, 5, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, SHOULDER, A, Gen Bus Peak, 10000, KWH, 0.1, 1000, 100, Y
20, 123456788, NEEEE000113, 7, 20020519, 20020530, LNSP ABC, 11 222 333 444, FRMP ABC, 11 222 333 555, Tax Invoice, 2160, 216, 2376, Y
100, 123456788, 1, 20020519, N, NEEEE000113, 7, N70, 1, 20020128, 20020430, NCCL1, A, Network Access Charge, 91, Day, 10, 1160, 116, Y
100, 123456788, 5, 20020519, N, NEEEE000113, 7, N70, 1, 20020128, 20020430, ALLDAY, A, Domestic, 10000, KWH, 0.1, 1000, 100, Y
11, 4, 1, 5460, 546, 6006
```

6.1.2 Dispute Notification sent to LNSP - based on Aug 02 Bill Period Invoice File

```
910, ENERGYAP, GENERIC, 20021001151235
911, GEN2002AUG1000003, 5, EATEST7122, 9, QNTY,
912, 1
```

6.1.3 Payment by Generic FRMP to LNSP for Aug 02 Bill Period

```
$1026.64 - ABC
```

6.1.4 Remittance Advice sent to LNSP - based on Aug 02 Bill Period Invoice File

```
800, ENERGYAP, GENERIC, 20021002121059
810, GEN2002AUG1000001, EATEST2869, 0, 1015.85, 20021001, ABC
810, GEN2002AUG1000002, EATEST7640, 8, 10.79, 20021001, ABC
820, 2, 1026.64
```

6.1.5 Payment by Generic FRMP to LNSP for Sept 02 Bill Period

```
$4048.25 DEF
```

6.1.6 Remittance Advice sent to LNSP - based on Sept 02 Bill Period Invoice File

```
800, ENERGYAP, GENERIC, 20021101131025
810, GEN2002AUG1000003, EATEST7122, 9, 1541.17, 20021101, DEF
810, GEN2002SEP1000001, EATEST2869, 0, 1012.61, 20021101, DEF
810, GEN2002SEP1000002, EATEST7122, 9, 1516.20, 20021101, DEF
810, GEN2002SEP1000003, EATEST7122, 9, -1541.17, 20021101, DEF
810, GEN2002SEP1000004, EATEST7122, 9, 1519.44, 20021101, DEF
820, 4, 4048.25
```

6.1.7 Network Invoice File - with multiple time of day codes.

```
10, LNSP123456, FRMP123456, 2.00205E+13, .....
20, 123456787, NEEEE000112, 6, 20020519, 20020530, LNSP ABC, 11 222 333 444, FRMP ABC, 11 222 333 555, Tax Invoice, 5600, 630, 6230, Y, .....
100, 123456787, 1, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, NCALLDAY, A, Network Access Charge, 30, Day, 10, 300, 30, Y
100, 123456787, 2, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, MAX, A, Gen Bus Demand, 1000, KVA, 1, 1000, 100, Y
100, 123456787, 3, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, OFFPEAK, A, Gen Bus Off Peak, 10000, KWH, 0.1, 1000, 100, Y
100, 123456787, 4, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, PEAK, A, Gen Bus Peak, 10000, KWH, 0.1, 1000, 100, Y
100, 123456787, 5, 20020519, N, NEEEE000112, 6, N19, 1, 20020331, 20020430, SHOULDER, A, Gen Bus Peak, 10000, KWH, 0.1, 1000, 100, Y
100, 123456787, 6, 20020519, N, NEEEE000112, 6, N54, 1, 20020331, 20020430, NCCL1, A, Off Peak, 30, Day, 5, 300, 100, Y
100, 123456787, 7, 20020519, N, NEEEE000112, 6, N54, 1, 20020331, 20020430, CL1, A, Off Peak, 10000, KWH, 0.1, 1000, 100, Y
```

6.2 Permitted Adjustments Scenarios

6.2.1.1 The sample transactions below assumes an Original Tax invoice as per following:

Record Type	Invoice Number	GST Tax Invoice Status	GST Exclusive Amount	GST Payable	Amount Payable	GST Indicator
020	13913485	Tax Invoice	300	30	330	N

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable	GST Indicator
100	13913485		1	N		100	0	N
100	13913485		2	N		200	0	N

6.2.2 Combined Cancellation and Recalculation transaction (with headers for ease of viewing)

6.2.2.1 Using the "Combined Cancellation and Recalculation" option, the cancellations and recalculation would therefore be represented as:

Record Type	Invoice Number	GST Tax Invoice Status	GST Exclusive Amount	GST Payable	Amount Payable
020	13913486	Adjustment Note	100	10	110

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable
100	13913486	13913485	1	C	INCORRECT CHARGE	-100	-10
100	13913486	13913485	2	C	INCORRECT CHARGE	-200	-20
100	13913486	13913485	3	R		200	20
100	13913486	13913485	4	R		200	20

6.2.3 Common Invoice Number for Original Invoicing and Cancellation invoice (with headers for ease of viewing).

6.2.3.1 Using the "Common Invoice Number for Original Invoicing and Cancellation invoice" option, the cancellations and recalculation would therefore be represented as:

Cancellation

Record Type	Invoice Number	GST Tax Invoice Status	GST Exclusive Amount	GST Payable	Amount Payable
020	13913485	Adjustment Note	-300	-30	-330

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable
-------------	----------------	--------------------	-------------	----------------------	-------------------	----------------------	-------------

B2B Process Specification

Network Billing

100	13913485	13913485	1	C	INCORRECT CHARGE	-100	-10
100	13913485	13913485	2	C	INCORRECT CHARGE	-200	-20

Re-invoice

Record Type	Invoice Number	GST Tax Invoice Status			GST Exclusive Amount	GST Payable	Amount Payable
-------------	----------------	------------------------	--	--	----------------------	-------------	----------------

020	13913486	Tax Invoice			400	40	440
-----	----------	-------------	--	--	-----	----	-----

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable
100	13913486	13913485	3	R		200	20
100	13913486	13913485	4	R		200	20

6.2.4 Separate invoice Numbers for all transactions (with headers for ease of viewing)

6.2.4.1 Using the "separate Invoice Number for all transactions" option, that is original invoicing, cancellation and Recalculation invoice are separately numbers with their own invoice headers.

Cancel

Record Type	Invoice Number	GST Tax Invoice Status			GST Exclusive Amount	GST Payable	Amount Payable
-------------	----------------	------------------------	--	--	----------------------	-------------	----------------

020	13913486	Adjustment Note			-300	-30	-330
-----	----------	-----------------	--	--	------	-----	------

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable
100	13913486	13913485	1	C	INCORRECT CHARGE	-100	-10
100	13913486	13913485	2	C	INCORRECT CHARGE	-200	-20

Re-invoice

Record Type	Invoice Number	GST Tax Invoice Status			GST Exclusive Amount	GST Payable	Amount Payable
-------------	----------------	------------------------	--	--	----------------------	-------------	----------------

020	13913487	Tax Invoice			400	40	440
-----	----------	-------------	--	--	-----	----	-----

Record Type	Invoice Number	Old Invoice Number	Line Number	Adjustment Indicator	Adjustment Reason	GST Exclusive Amount	GST Payable
100	13913487		1	N		200	20
100	13913487		2	N		200	20

7 Transaction Pattern Examples

7.1.1 Example 1

7.1.1.1 The LNSP issues an invoice for \$100. The Retailer accepted the invoice and generates a remittance.

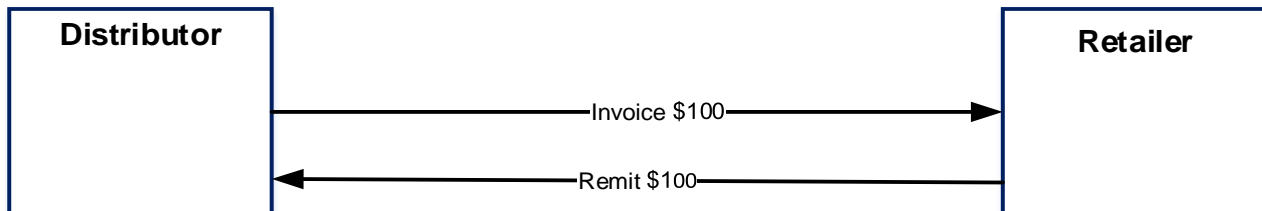


Figure 2: Transaction Pattern Example 1

7.1.2 Example 2

7.1.2.1 The LNSP issues an invoice for \$100. The Retailer realises there is a problem and raises disputes on the invoice via a Charge Dispute. The LNSP checks and finds that the original invoice was incorrect and should have been \$90 rather than \$100. The LNSP closed the dispute via a Dispute Status Change and raises a credit invoice for \$100 and an invoice for \$90. The Retailer accepted the closure of the dispute and remits the original \$100 invoice, the \$100 credit invoice and the new \$90 invoice.

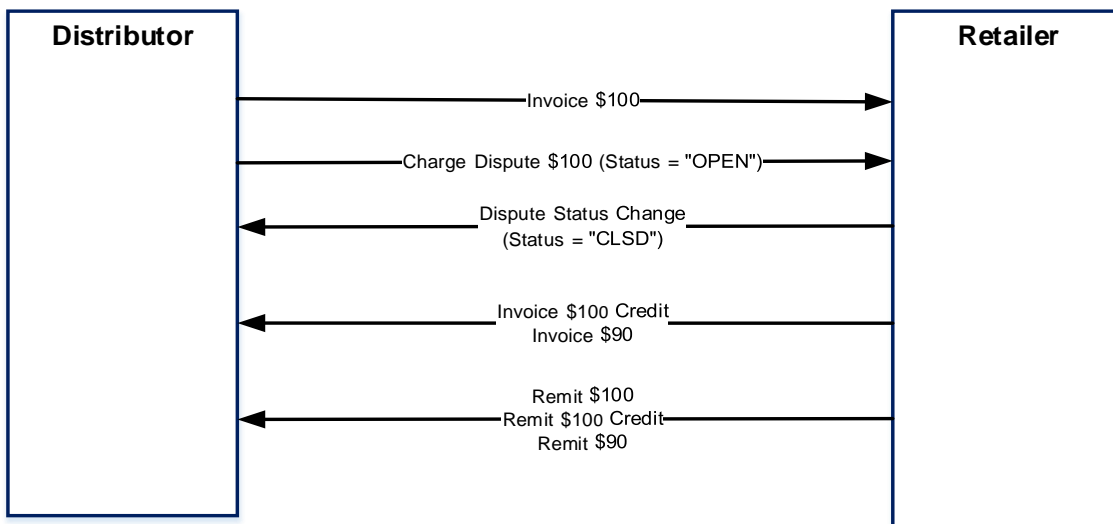


Figure 3: Transaction Pattern Example 2

7.1.3 Example 3

7.1.3.1 The LNSP issues an invoice for \$100. The Retailer accepted the invoice and generates a remittance. Later the Retailer realises there is a problem and raises disputes on the invoice via a Charge Dispute. The LNSP checks and finds that the original invoice was incorrect and should have been \$90 rather than \$100. The LNSP closed the dispute via a Dispute Status Change and raises a credit invoice for \$100 and an invoice for \$90. The Retailer accepted the closure of the dispute and remits the \$100 credit invoice and the new \$90 invoice.

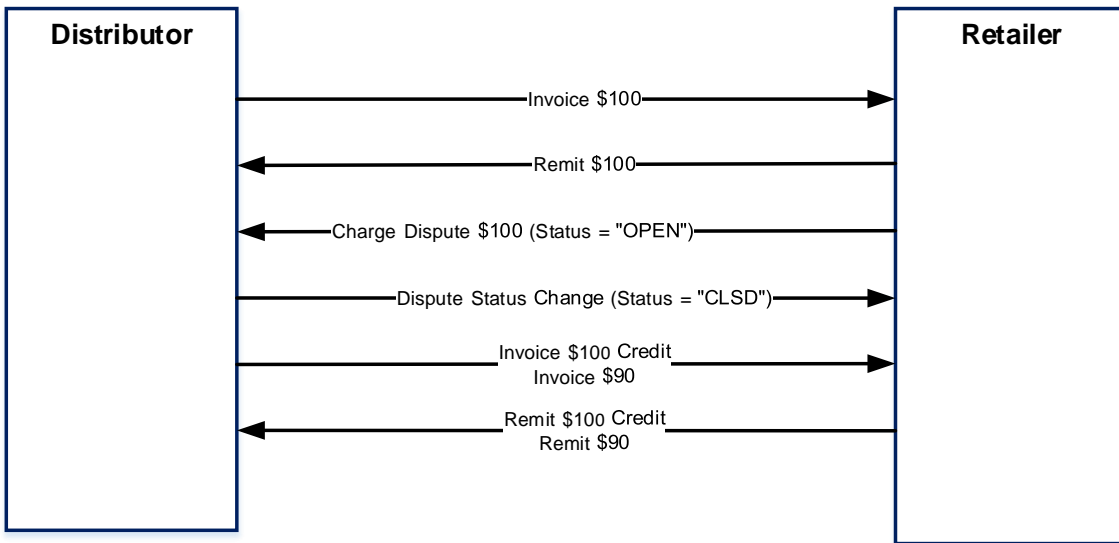


Figure 4: Transaction Pattern Example 3

7.1.4 Example 4

7.1.4.1 The LNSP issues an invoice for \$100. The Retailer disputes the invoice by raising a Charge Dispute. The LNSP checks and finds that the original invoice was incorrect. The LNSP closed the dispute via a Dispute Status Change and raises a credit invoice for \$100. The Retailer accepted the closure of the dispute and remits the original invoice and the credit invoice.

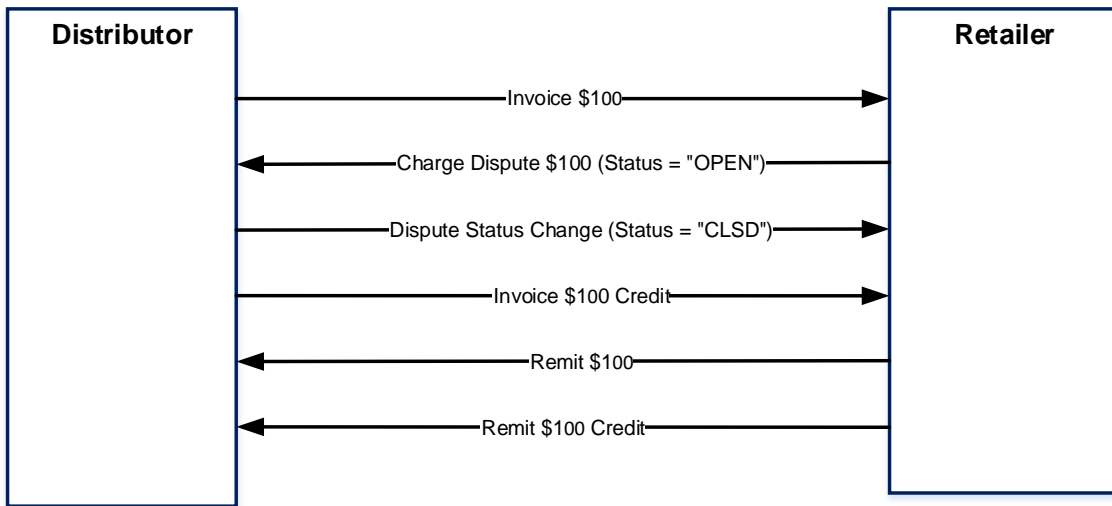


Figure 5: Transaction Pattern Example 4

7.1.5 Example 5

7.1.5.1 The LNSP issues an invoice for \$100. The Retailer accepted the invoice and generates a remittance. Later the Retailer realises there is a problem and raises disputes on the invoice via a Charge Dispute. The LNSP checks and finds that the original invoice was incorrect. The LNSP closed the dispute via a Dispute Status Change and raises a credit invoice for \$100. The Retailer accepted the closure of the dispute and remits the credit invoice.

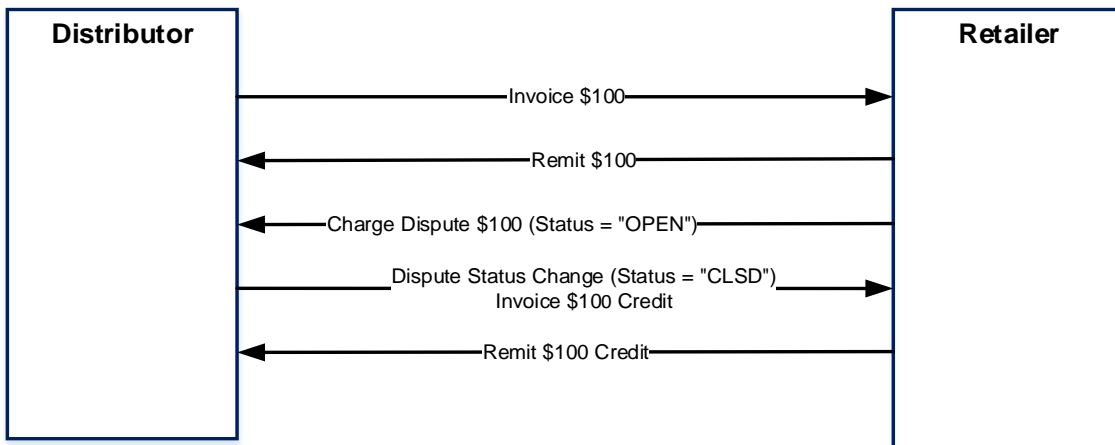


Figure 6: Transaction Pattern Example 5

7.1.6 Example 6

7.1.6.1 The LNSP issues an invoice for \$100. The Retailer disputes the invoice by raising a Charge Dispute. The LNSP checks and finds that the original invoice was correct. The LNSP cancelled the dispute via a Dispute Status Change. The Retailer accepted the cancellation of the dispute and remits the original invoice.

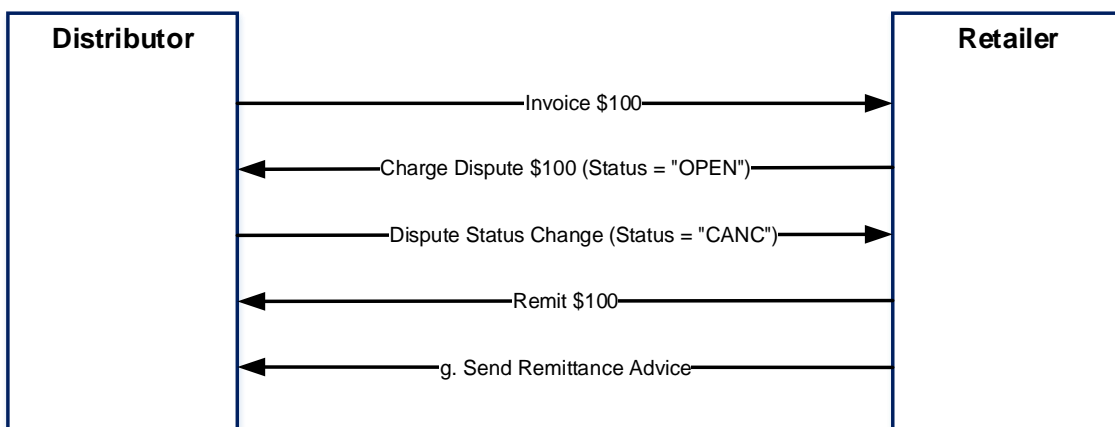


Figure 7: Transaction Pattern Example 6

7.1.7 Example 7

7.1.7.1 The LNSP issues an invoice for \$100. The Retailer accepted the invoice and generates a remittance. Later the Retailer realises there is a problem and raises disputes on the invoice via a Charge Dispute. The LNSP checks and finds that the original invoice was correct. The LNSP cancelled the dispute via a Dispute Status Change. The Retailer accepted the cancellation.

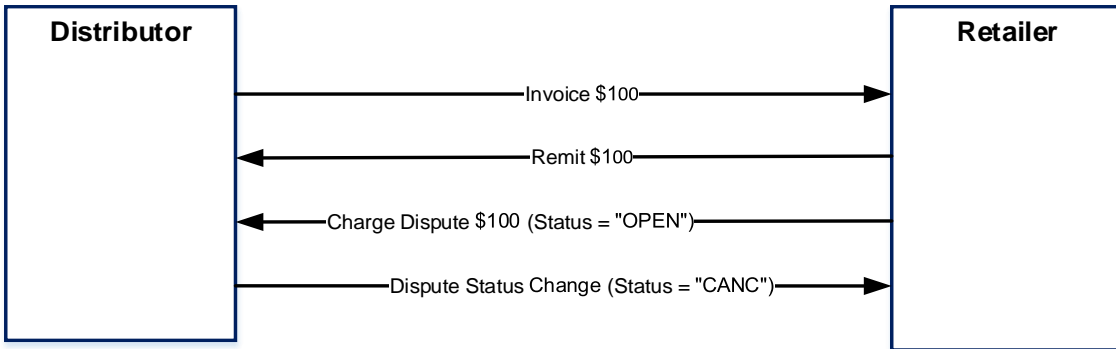


Figure 8: Transaction Pattern Example 7

7.1.8 Example 8

7.1.8.1 The LNSP issues an invoice for \$100. The Retailer accepted the invoice and generates a remittance. Later the Retailer realises there is a problem and raises disputes on the invoice via a Charge Dispute. The LNSP checks and finds that the original invoice was correct. The LNSP cancels the dispute via a Dispute Status Change. The Retailer does not accept the cancellation and opens another dispute on the original invoice via a second Charge Dispute. The LNSP checks and finds that the original invoice was actually incorrect. The LNSP closed the dispute via a Dispute Status Change and raises a credit invoice for \$100. The Retailer accepted the closure of the dispute and remits the credit invoice.

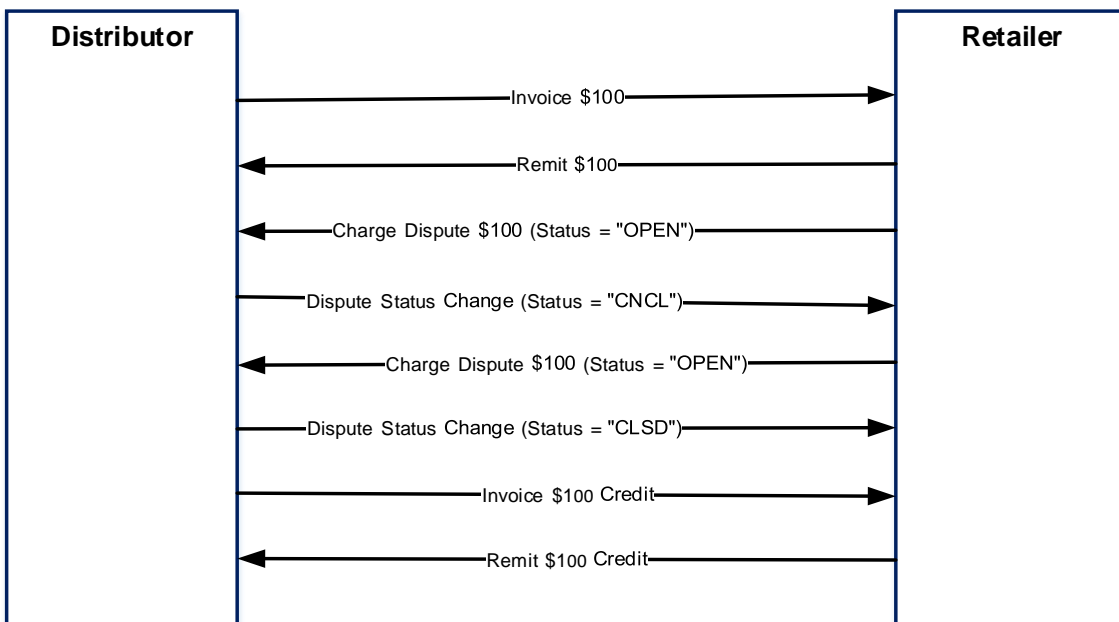


Figure 9: Transaction Pattern Example 8

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