# NACS Electronic Commerce Guidelines 

# XML Business-to-Business <br> Document Exchange 

Version 1.0
(NAXML)

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DRAFT

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## Table of Contents

Acknowledgments ..... 1
Chapter 1 - General Information ..... 2
Background ..... 2
Caution ..... 3
Providing Feedback ..... 4
Recommending Changes ..... 4
Future Work ..... 4
Chapter 2 - Introduction ..... 5
Purpose ..... 5
Scope ..... 5
NAXMLCstore ..... 5
References ..... 5
Chapter 3 - XML for DOCUMENT EXHANGE ..... 7
XML Background ..... 7
How XML Works ..... 8
XML Parsers ..... 9
Namespaces ..... 9
XML Schemas ..... 10
XSL/XSLT ..... 10
Document Exchanges ..... 10
Chapter 4 - NAXML Framework ..... 11
Design Principles ..... 11
XML Document Content Types ..... 11
Repository ..... 12
NAXML-BusDoc DTD Usage ..... 12
Document Naming ..... 12
Document Construction ..... 12
Chapter 5 - Data Dictionary ..... 15
Chapter 6 - NAXML Document Type Definitions (DTD) For General Merchandise - NAXML- BusDoc.dtd ..... 45
NAXML Data Dictionary ..... 45
Chapter 7 - NAXML Document Type Definitions (DTD) For Lottery Process- NAXML- LotDoc.dtd ..... 47
Chapter 8 - NAXML Document Type Definitions (DTD) For Motor Fuels - NAXML- MotorFuelsDoc.dtd ..... 48
Chapter 10 - Sample XSL Documents ..... 50
Appendix A - Implementation Notes ..... 52
Appendix B - Obtaining Additional Information ..... 53
Appendix C - Recommending Changes ..... 54
Appendix D - Record of Changes ..... 55

## Acknowledgments

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## Chapter 1 - General Information

## BACKGROUND

Beginning in late 1995, at the request of the retailer community, NACS began a technology standards initiative. This initiative was aimed at bringing the benefits that accrue from the use of standards to achieve interoperability among systems serving the same function but from different manufacturers. Specific areas addressed included; connectivity, data exchange, and application interoperability. The primary objective was to develop standards in areas where they previously did not exist or to adopt or modify existing standards where feasible.

One of the committees formed was the EDI Standards Working Committee. Early on, the committee recommended that NACS adopt the Uniform Communications Standard (UCS) Guidelines for ASC X12 EDI Standards. These guidelines are administered by the Uniform Code Council (UCC) and maintained by a Standards Maintenance Committee (SMC) composed of EDI practitioners from the convenience store, warehouse distribution, grocery, wine and spirits, and food service industries.

However, the Committee recognized that the UCS Guidelines as written needed extensive modification and reduction in scope to meet the needs of the convenience store industry. The Committee set about developing an EDI Foundation Model for the Convenience Store Industry. This Foundation Model is composed of three business processes: Item Maintenance/Database Synchronization; Fulfillment and Settlement. It covers seven ASC X12 transaction sets: 810 - Invoice; 820 - Payment Notice; 850 - Purchase Order; 878 - Product Authorization/DeAuthorization; 879 - Price Notification; 888 - Item Maintenance; and 889 - Promotion Announcement.

The Committee prepared a set of Functional Profiles for each of these transaction sets (except 820) for submission to the UCS Standards Maintenance Committee. These Profiles have been adopted and published beginning in Version 4020 of the UCS Guidelines. They are available from the UCC on CD-Rom. The Committee expects that it will continue to recommend changes to the UCS Guidelines and Functional Profiles as implementation progresses in the industry.

Additionally, subcommittees of the EDI Committee recommended changes to certain transaction sets and developed Functional Profiles for the business processes involved in (1) motor fuel ordering, delivery, invoicing and payment and (2) lottery product activity and invoicing. Functional

Profiles have been published or are in the process of being published for each of these processes.

The Committee also recognizes that there are still barriers to implementation of traditional EDI within the industry, particularly among the small and mid-sized companies. Implementation of EDI is not an inexpensive proposition both in terms of manpower required to maintain the system and tools to perform mapping and translation.

XML, which was introduced in early 1999 as a "recommendation" of the World Wide Web Consortium, has quickly become a widely supported technology standard for the exchange of data and documents. With its potential for low cost implementation, maintenance, and support the Committee believed there might be an opportunity to use this technology to translate its Functional Profiles into XML DTDs and documents. At the meeting of the Committee on February 2, 2000, it was agreed that a CStore XML Task Force would be created to begin the work on xmlifying EDI documents. Members of the Task Force are identified in the earlier Acknowledgments section. In addition, the NACS Technology Standards Steering Committee directed work be started on xmlifying the lottery documents required for product activity and invoicing. At about the same time, the Motor Fuels subcommittee, known as the Downstream Distributors and Retailers Task Group, began work on xmlifying its business documents.

The CStore XMLTask Force met for the first time on March 23 and 24, 2000, to begin the process of defining the data elements needed for the functions of item synchronization, price notification, promotion announcement and invoicing. The respective working groups have developed the lottery and motor fuels documents. The work contained in this document is a result of all of those efforts.

## CAUTION

The Task Force and Committee recognize that gaps may exist and that they will be uncovered as implementation advances. In addition, it is expected that this work will be blended with the work of the Uniform Code Council (UCC) as its Global Data Dictionary takes shape.

Additionally, changes may be required as the various derivatives of XML reach the approved "standards" stage. The continued participation by wholesalers, suppliers, solution providers and retailers in the work of the Task Force and/or Committee is essential to insure the completion of the task. The committee also believes that early implementers should be aware that changes to the
guidelines may be required and that the Committee and Task Groups will not be constrained by any existing implementation.

PROVIDING FEEDBACK
NACS EDI Standards Committee, one of the four working committees of the NACS Technology Standards Project, has an open membership policy. Membership is open to anyone desiring to participate. The results of the Committee's activities are open to feedback and comment by anyone desiring to do so. Feedback and comments are encouraged so that the Electronic Commerce Guidelines - XML EB2B Document Exchange have the broadest possible support within the industry. See below and Appendix $\mathbf{C}$ for procedures for submitting feedback and comments.

## RECOMMENDING CHANGES

A formal adoption procedure is not being pursued at this time because this work is in the early stages of development and may become a subset of the UCC XML EB2B electronic documents or it may be supplemented or replaced at a future date by the UCC work in this area. However, the NACS Technology Standards Committee is expected to review this work and endorse its use in the convenience store industry between consenting trading partners.

Therefore, suggested changes should be submitted to the designated representative, John Hervey, as outlined below:

Comments, suggested changes, or enhancements on these guidelines should be addressed to:

| via Mail | via Phone or Fax | via e-mail |
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## FUTURE WORK

The Committee anticipates that as refiners, wholesalers, suppliers, solution providers, state lottery authorities, jobbers/distributors, and retailers gain experience with the use of these NAXML guidelines, revisions, modifications and enhancements will be required. As these are identified they will be referred to the respective Task Group for action.

Additional follow-on work is identified elsewhere in this document.

# Chapter 2 - Introduction 

## PURPOSE

This document is intended to describe the recommended electronic commerce business-to-business document interchange mechanism and methodology using XML, eXtensible Markup Language, and associated Document Type Definitions (DTDs).

## SCOPE

Topics covered by this document include:

- A history of XML
- How XML works
- Why XML
- NAXML Business Document framework and design principles
- NAXML Business Document Type Definitions (DTDs) NAXMLBusDoc sample documents


## NAXMLCSTORE

The NACS Electronic Commerce Guidelines - XML Business-to-Business Document Exchange provides a methodology mechanism that allows trading partners to exchange business documents in a standard manner using commonly understood data elements.

Data elements that have been identified for this initial implementation are listed in the Data Dictionary section. Additional data elements may be exchanged as required to meet individual company business requirements.

## REFERENCES

[1] NACS POS/ Back Office Interface Guidelines - Common Data Elements Version 2: Available from NACS at http://www.cstorecentral.com go to Technology Standards.
[2] Extensible Markup Language (XML ${ }^{T M}$ ) http://www.w3.org/XML/

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0
[3] XML.COM: http://www.xml.com
[4] IBM XML Web Site: http://www.software.ibm.com/xml/
[5] MSDN Online- Web Workshop - XML TOC:
http://msdn.microsoft.com/xml/toc.htm/
[6] Commerce One - Conventions - http://www.commerceone.com

# Chapter 3 - XML for DOCUMENT EXHANGE 

NACS Electronic Commerce Guidelines - XML Business-to-Business Document Exchange recommend using the eXtensible Markup Language (XML) as a vendor neutral medium for the exchange of business documents between trading partners. Specifically, XML documents contained herein are used to transfer business data between trading partners. The content of these documents is defined and constrained by using document type definitions (or DTDs) as defined in XML 1.0.

## XML BACKGROUND

XML is essentially a lighter weight, Web-friendly version of its parent language, the Standard Generalized Markup Language (SGML). Like SGML, XML is a meta-language, and for this reason it is suitable for defining other languages or data exchange vocabularies. As such, it is an architecture, not an application. In contrast, HTML is one particular vocabulary that has been defined using SGML. The difference is one of extensibility - while HTML has a single, fixed set of tags designed for a single purpose (describing how a document should be rendered for viewing in a browser), XML may be used to describe new document types in almost limitless ways.

XML brings a host of advantages for solving the problem of loose system-to-system integration and data exchange. It is a readily available open standard, which is designed to attach meaning directly to the data it represents, rendering it both "human readable" as well as simple to work with programmatically. Its ability to flexibly represent data sets whose content may often change makes XML a logical choice for a dynamic business environment. As more and more organizations adopt XML as a standard way to represent virtually any kind of structured data, the ability to exchange data using XML becomes increasingly appealing. In summary, XML offers the following features:

- Vendor neutral
- Human and machine readable
- Flexible and easily extensible
- Handles batch and real-time modes of operation
- Can be used for both legacy and the latest object-oriented systems
- Simple to create and read using "Off-the-Shelf" parsers and other tools
- Approved and hosted by the World Wide Web Consortium (W3C) http://www.w3.org.


## HOW XML WORKS

XML uses data elements to hold data. A data element is made up of three parts: a start-tag, content, and end-tag. The start-tag is enclosed in angle brackets (<>) and contains an identifier (sometimes called a generic identifier, or GI), which names the data. The start-tag may also have attributes (hereafter called XML attributes), which are simple name/value pairs, which describe the content data. The end-tag of the element is also enclosed in angle brackets and uses the same identifier as the start-tag, except that it starts with a slash (/). Data between the start-tag and the end-tag is the content of the element.

A typical XML tag is essentially an instruction issued by the sender (SEN) to the receiver (REC) that states, in effect, to treat the data enclosed in the brackets as the tag specifies, i.e., as customer name if the tags are <CustomerName>....</CustomerName>. Both the receiver and sender must have a common understanding of the tag names that are assigned to fields in an XML document. The use of the NACS EB2B Data Elements assures that both the receiver and sender have agreed on the meaning of the tags. This agreement is assured by the use of an associated Document Type Definition (DTD).

The use of an optional character following an element name in a DTD indicates a usage requirement for the element in the conforming XML document as follows:

- ? indicates the element may be present zero or one time.
-     * indicates the element may be present zero or more times.
-     + indicates the element may be present one or more times.
- If no character appears after an element name the element is required one time.

A DTD is a formal definition of data elements allowed and expected in a specific XML document. It specifies what names can be used for tags, where they may occur, the allowed value of associated data content, and how everything fits together.

The body of work contained in this document includes both the NAXML Document Type Definitions (DTDs) and examples of their corresponding XML documents.

It is possible to design a set of XML documents for the interchange of business information without reference to Document Type Definitions (DTDs). However, to do so could produce a chaotic situation whereby each trading partner could specify its own elements and document constructs. The result would be one-off solutions likely negating the benefits gained by "standardization" of the exchange.

## XML PARSERS

From a programmatic standpoint, XML is very easy to work with, at least in its more basic forms. To generate XML compliant documents, a sending program need only produce standard text in a predefined way. XML receivers typically employ an XML parser to break the incoming document into its constituent data elements.

There are two levels of determining if an XML document is error free. The basic level checks to insure the document is "well-formed", i.e., it conforms to all of the syntactic rules for an XML document. The second level determines if the document is "valid", i.e., does it conform to the DTD that has been associated with it. An XML document can be well-formed but not valid. A valid document also must be well-formed (by definition).

Various XML parsers are available depending on the needs of the thirdparty application. Some parsers check only for being well-formed and others for being both well-formed and validity. Because these guidelines recommend utilizing DTDs, a validating parser is a necessity. An up-todate listing of parsers commonly available can be found at http://www.xml.com.

## NAMESPACES

In July 1999, the W3C approved the namespaces specification. Namespaces provides scoping for element and XML attribute names, and its use avoids naming collisions when XML documents are being exchanged in a broader context. Namespaces are a collection of names that are identified by a URI (Uniform Resource Identifier) where the names are used as XML elements and XML attributes. By reference to an XML namespace, the same element name such as <bat> can be used with different meaning depending upon its referenced namespace declarations. Although these NACS Guidelines do not utilize namespaces in this version, trading partners should provide a namespace reference when exchanging these NAXML-BusDoc documents within a broader
context that can include element and attribute names from other sources.

## XML SCHEMAS

In April 2000, the W3C issued a set of "last call" draft documents containing the latest version of $X$-schema. $X$-schema will extend the capabilities offered by DTDs: it will define data-types (such as string, date, and integer) as well as allow stronger reusable data-structures within documents. Because these documents have not yet been issued as a W3C "Recommendation", they are still subject to change. For this reason the work in this document does not utilize any "unofficial" schema implementation. While other schema definitions already exist (SOX, XDR, etc.), these are each vendor specific. Implementers of these Guidelines should follow the data formats recommended in the Data Dictionary to ease the transition to the more rigorous type checking that Schemas will allow.

It is anticipated that modification of these Guidelines may be necessary when $X$-schema is issued as a "Recommendation".

## $\underline{\text { XSL/XSLT }}$

One of the challenges presented to a designer of XML documents is how to define tags so that they can be easily recognized and used by all trading partners. This simply isn't possible to achieve. However, the use of XSLT (eXtensible Style Sheet Transformations) provides each trading partner the ability to transform an XML document conforming to the NACS Guidelines into an XML document or other document format required by that trading partner. It is left to each trading partner to develop the XSLT stylesheets needed to accomplish its own translation/transformation. For information purposes, one example of a XSLT transformation is provided in these Guidelines.

## DOCUMENT EXCHANGES

The only requirement imposed by these Guidelines for the exchange of documents is that both trading partners must be able to send the other an EDI like Functional Acknowledgment within 2 to 4 hours of receipt of the primary business document. A Functional Acknowledgment is simply a receipt that the document arrived at its intended destination. It does not imply that the received document is either well-formed or valid. Additional messages may be necessary to provide for choreography between sender and receiver. These may be dealt with at a later time.

## Chapter 4 - NAXML Framework

## DESIGN PRINCIPLES

For this initial version of the Guidelines it is important to note that they have been designed in accordance with the following principles:

- There is no attempt to specify the communications mechanism by which the documents are exchanged at this time. This may be added at a later time. However, it is anticipated that the Internet will be used. Therefore, TCP/IP connectivity is required by both trading partners.
- There is no attempt to specify the application interface between systems, only the business documents they exchange.
- There is no attempt to specify the manner by which the sending system produces the documents or to specify what actions will result when they are received. The Task Force, however, recommends that complete integration of the received business data into the receiver's back office system will be the measure of a successful implementation.
- Because there is no requirement for a particular transport, many aspects of message security, such as digital signatures and similar issues, are not addressed at this time.
- By keeping the integration on the business level, each business is able to present a clear and stable interface to its business partners despite changes in its internal technology implementation, organization or process.
- The extensibility of XML allows data elements not specified in the NACS EB2B Data Element Dictionary to be accommodated. The Committee intends to provide a means to achieve additional flexibility in a later version.
- Parsed character data (\#PCDATA) elements will get more explicit data-types when XML Schemas are introduced.


## XML DOCUMENT CONTENT TYPES

These guidelines have defined the following business document types to facilitate the data exchange:

| XML DTD | Corresponding EDI Document |
| :--- | :--- |
| Item Maintenance | $\mathbf{8 8 8}$ - Item Maintenance |


| Price Notification | 879 - Price Notification |
| :--- | :--- |
| Promotion Announcement | $\mathbf{8 8 9}$ - Promotion Announcement |
| Invoice | $\mathbf{8 1 0}$ - Invoice |
| Purchase Order | $\mathbf{8 5 0}$ - Purchase Order |
| Product Activity | 852 - Product Activity |
| Functional Acknowledgment | $\mathbf{9 9 7}$ - Functional Acknowledgment |

## REPOSITORY

On an interim basis, the DTDs and sample XML documents can be located at http://208.144.173.70/NAXML/DTDs/. The Guidelines will be available at www.cstorecentral.com Once testing is complete cstorecentral will also be the repository for the DTDs and XML sample documents. The DTDs and sample XML documents shown in this document are hard coded to provide an uri to the above listed server. These should be modified as necessary by implementers and testers.

## NAXML-BUSDOC DTD USAGE

To be in conformance with these guidelines, the use of a NAXMLBusDoc/LotteryDoc/FuelsDoc.DTD is required in a XML document. The XML document must conform to the corresponding DTD in order to satisfy the requirements of these Guidelines.

## DOCUMENT NAMING

The XML document should contain all information required to completely identify its content without reference to some external transport mechanism.

## DOCUMENT CONSTRUCTION

There are 5 DTDs that contain all of the requirements for producing XML documents that provide for the exchange of the business documents.

These are:

1. NAXML-DataDictionary.dtd

This DTD contains declarations for all of the data elements listed in the Data Element Dictionary.
2. NAXML-Common.dtd

This DTD contains declarations for Common Data Elements Entity declarations that are used in all of the XML documents.
3. NAXML-BusDoc.dtd

This DTD defines the structure of Item Maintenance/Database Synchronization, Price Notification, Promotion Announcement, Purchase Order, Invoice, and Product Activity XML business documents.
4. NAXML-LotDoc.Dtd

This DTD defines the structure of Lottery process XML business documents: product activity and invoice.
5. NAXML-FuelsDoc.dtd

This DTD defines the structure of Motor Fuel process XML business documents: invoice, credit card notification, purchase order.

## Chapter 5 - Data Dictionary

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Complex <br> Children-Sequence <br> \%Partylnfo <br> TotalAccountAmt <br> Batch <br> Transaction |  | IdentType (Required) | ident <br> (Required) |  |
| Activity | Complex Children (choice) <br> PCDATA <br> ReportPeriod <br> Parties <br> ActivityDetail |  | UOMBasis(Implied) <br> Pack <br> Each <br> Denotes the basis on which the allowance is being given or taken, such as per case, per box, etc. | status (Implied) <br> QuantityReturned <br> QuantityInTransit <br> QuantityStolen <br> QuantityDamaged <br> QuantitySold <br> QuantityReceived <br> QuantityCommitted <br> QuantityAvailableForSa le |  |
| ActivityDate | Simple | Specifies the reference date for activities in the lottery process. | Status (Required) Issued Settlement Shipped Posted Received Returned |  |  |
| ActivityDetail | Complex Children-Sequence Lineltem |  |  |  |  |
| ActivityStatus | Complex <br> Children-Sequence <br> Activity <br> ActivityDate |  |  |  |  |
| AdditionalAllowancAndrCharges | Complex <br> Children-Sequence <br> AllowanceOrCharge <br> ToatalAdditionalAllowances <br> AndChargesNetAmt |  |  |  |  |
| AdditionalTaxes | Complex Children-Sequence Taxes |  |  |  |  |

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| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | TotalAdditionalTaxesNetA mt |  |  |  |  |
| Address | Simple | The physical address of a party in the trading partner relationship for the transaction. |  |  |  |
| AllowanceAmt | Simple | The amount of the allowance being offered or claimed. | UOMBasis (Required) Denotes the basis on which the allowance is being given or taken, such as per case, per box, etc. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. | quanity (Implied) |
| AllowanceAndCharges | Complex <br> Children-Sequence <br> DisbursementAllowance <br> OtherAllowanceOrChare <br> TotalAllowancesANdCharg <br> esNetAmt |  |  |  |  |
| AllowanceOrCharge | Complex <br> Children-Sequence <br> AllowanceOrChargeReason <br> Choice: <br> AllowanceAmt <br> ChargeAmt |  |  |  |  |
| AllowanceOrChargeAmt | Simple | The amount of an allowance or charge associated with the referenced activity or item. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. |  |  |
| AllowanceOrChargeReason | Simple | The reason an allowance or charge is being taken or offered. | ident <br> (Implied) | quantity (Implied) |  |
| Batch | Complex <br> Children-Sequence <br> BatchNumber <br> SequenceNumber <br> Terminalld <br> BatchDate <br> Toat\|BatchAmt <br> CardType |  | identType <br> (Required) <br> Choice: <br> Automated <br> Manual |  |  |
| BatchDate | Simple | The reference date for the batch in the credit card processing reconciliation. |  |  |  |

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| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BatchNumber | Simple | The reference number for the batch in the credit card processing reconciliation. |  |  |  |
| BillOfLadingNumber | Simple | The reference number for the bill of lading in the motor fuels invoicing process. |  |  |  |
| Buyer | Complex Entity - PartyInfo $\quad$ (Name Address City State PostalCode Contact Organizationld) |  |  |  |  |
| BuyersCost | Simple | The price paid by the buyer for the item. | UOMBasis (Implied) Denotes the code for the currency whose amount is being specified. | currency (Implied) |  |
| CardType | Complex <br> Children-Sequence AllowanceOrCharge |  | quantity (Required) | grossAmount (Required) | netAmount (Required) identType (Required) |
| CarrierRefNumber | Simple | The reference number for the carrier in the motor fuels invoicing process. |  |  |  |
| ChargeAmt | Simple | The amount of a charge being offered or taken. | UOMBasis <br> (Required) Denotes the basis on which the allowance is being given or taken, such as per case, per box, etc. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. | Quantity (Implied) |
| Chargeback | Complex <br> Children-Sequence: <br> CreditCardType <br> ChargebackDate <br> CreditCardAccountNumber <br> AllowanceOrChargeReason <br> PosPaper <br> CrindIndicator <br> TicketNumber <br> Remit |  | amount (Required) |  |  |
| ChargebackDate | Simple |  |  |  |  |

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| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| City | Simple | The city of a party to the transaction. |  |  |  |
| ClassOfTrade | Simple | The class of trade generally associated with the item, i.e. grocery, mass merchandiser, fast food, convenience stores, warehouse club stores. |  |  |  |
| Conditions | Complex <br> Children-Sequence <br> PromoConditionOption <br> PromoPurchaseUnit <br> Markets <br> Dates <br> Terms |  |  |  |  |
| Contact | Complex Entity-\%Contactllnfo (ContactType Name Fax Email Phone) |  |  |  |  |
| ContactType | Simple | The function of the designated contact, i.e. manager, accounts receivable, accounts payable, etc. | role <br> (Implied) <br> Specifies the position of the individual whose name is specified as the ContactType, such as AR Clerk, Category Manager, etc. |  |  |
| CardAccountNumber |  |  |  |  |  |
| CreditCardAccountNumber | Simple |  |  |  |  |
| CreditCardType | Simple |  |  |  |  |
| CreditCardsPreDraft | Complex Children-Sequence ReferenceNumber ReferenceDate DraftDate ReportPeriod Currency TotalPreDraftNetAmt CreditCardsProcessed InvoiceReconciliation |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | OtherTransactions |  |  |  |  |
| CredtTCardsProcessed | Complex <br> Children-Sequence <br> TotalCreditCaardsNetAmt <br> Account |  |  |  |  |
| CrindIndicator | Simple |  | identType (Required) |  |  |
| Currency | Simple | Specifies the code for the currency being used in the document. At the header level it applies to all amounts in the document, except as specified by an individual Element currency Attribute. | code (Required) |  |  |
| DateActivated | Simple | The date a book/pack of lottery tickets was activated by the retailer. |  |  |  |
| Dates | Complex <br> Children-Sequence <br> Entity-\%DateInfo <br> FirstOrderDate <br> LastOrderDate <br> OrderDate <br> RequestedDeliveryDate <br> EffectiveDate <br> EndDate <br> FirstShipDate <br> LastShipDate <br> Marketld <br> DateActivated |  |  |  |  |
| DateSold | Simple | The date a book/pack of lottery tickets was sold by the retailer. |  |  |  |
| DeliveryDateAndTime | Simple | The date and time of delivery of products in the motor fuels invoicing process. |  |  |  |
| DeferredPayment Date | Simple | The date payment of deferred taxes is due. |  |  |  |
| DisbursementAllowance | Complex Children-Sequence DisbusementDate |  |  |  |  |
| DisbursementDate | Complex Children-Sequence |  | date (Required) |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AllowanceOrCharge |  |  |  |  |
| Discount | Complex <br> Children-Sequence <br> DiscountDueDate <br> DisocuntAmt <br> DiscountPercent <br> InvoiceAfterDiscountNetDu <br> eAmt |  | applies <br> (Required) |  |  |
| DiscountAllowancePerUnitAmt | Simple | The amount of the discount allowed off the buyers cost for the item on a per unit basis. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. |  |  |
| DiscountAmt | Simple | The amount of the discount being offered or taken. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. |  |  |
| DiscountDueDate | Simple | The date the invoice must be paid in order to take the discount. |  |  |  |
| DiscountMinimumQty | Simple | The minimum quantity of item that must be purchased to qualify for the discount. | UOMBasis <br> (Required) <br> The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| DisocuntPercent | Simple | The percentage to be applied to the invoice to arrive at the discount to be taken or applied. |  |  |  |
| DraftDate | Simple | The expected date the retailers/jobbers account will be drafted. |  |  |  |
| EffectiveDate | Simple | The date the referenced activity is effective. |  |  |  |
| Email | Simple | The e-mail address of a party to the transaction. |  |  |  |
| EndDate | Simple | The date on which the referenced activity ends. |  |  |  |
| Fax | Simple | The fax telephone number of a party to the transaction. |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FirstOrderDate | Simple | The first date on which the referenced item can be ordered. |  |  |  |
| FirstShipDate | Simple | The first date on which the referenced item will be shipped. |  |  |  |
| FleetCardAccountNumber | Simple |  |  |  |  |
| FleetRebate | Complex <br> Children-Sequence <br> FleetCardAccountNumber Product PosPaper |  |  |  |  |
| FreeGoods | Complex <br> Children-Sequence <br> Tradeltemld <br> FreeGoodsQty |  |  |  |  |
| FreeGoodsQty | Simple | The quantity of free goods associated with the referenced promotion. | UOMBasis (Implied) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| GameDescription | Simple | The description of the lottery game. | identType (Required) | ident <br> (Required) |  |
| Gameld | Simple | The identification reference assigned to the lottery game by the issuing authority. | identType (Required) Pack-Book_Number Tickets | ident (Required) |  |
| Invoice (NAXML-BusDoc) | Complex Children-Sequence InvoiceNumber InvoiceDate Currency InvoiceDetail |  |  |  |  |
| Invoice (NAXML-FuelsDoc) | Complex <br> Children-Sequence <br> InvoiceNumber <br> InvoiceDate <br>  <br> $\quad$ BillOfLadingNumber <br> CarrierRefNumber <br> Currency |  |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | InvoiceDetail |  |  |  |  |
| Invoice (NAXML-LotDoc) | Complex <br> Children-Sequence InvoiceNumber InvoiceDate SettlementDate Currency InvoiceDetail |  |  |  |  |
| InvoiceDate | Simple | The date of the invoice. |  |  |  |
| InvoiceDescription | Simple | A free form description of the type of invoice. |  |  |  |
| InvoliceDetail (NAXML-BusDoc) | Complex Children-Sequence Lineltem InvoiceSummary Terms |  |  |  |  |
| InvoliceDetail (NAXML-FuelsDoc) | Complex <br> Children-Sequence LoadingDateAndTime DeliveryDateaAndTime Lineltem InvoiceSummary Terms |  |  |  |  |
| InvoliceDetail (NAXML-LotDoc) | Complex <br> Children-Sequence Lineltem InvoiceSummary |  |  |  |  |
| InvoiceDue | Complex <br> Children-Sequence InvoiceDate InvoiceNumber InvoiceType InvoiceDescription InvoiceDueAmt |  | count <br> (Required) |  |  |
| InvoiceDueAmt | Complex <br> Children-Sequence <br> AllowanceOrCharge <br> Terms |  | grossAmt (Required) | ```netAfterAllowanceOrChargeA mt (Required)``` | netAfterDiscountAmt (Required) |
| InvoiceDueDate | Simple | The date on which payment of |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | the invoice is expected. |  |  |  |
| InvoiceAfterDiscountNetDueAmt | Simple | The net amount due and payable after discounts are taken. |  |  |  |
| InvoiceNumber | Simple | The reference number assigned to the invoice. |  |  |  |
| InvoiceReconciliation | Complex <br> Children-Sequence <br> $\quad$ TotallnvoicesNetAmt <br> InvoiceDue |  |  |  |  |
| InvoiceSubTotals | Complex <br> Children-Sequence <br> InvoiceTradeltemClassifica <br> tion |  |  |  |  |
| InvoiceSummary (NAXMLFuelsDoc) | Complex Children-Sequence InvoiceSubTotals InvoiceTotals |  |  |  |  |
| InvoiceSummary (NAXML-LotDoc) | Complex <br> Children-Sequence InvoiceTotals |  |  |  |  |
| InvoiceTotals (NAXML-BusDoc) | Complex <br> Children-Sequence <br> TotallnvoiceUnits <br> TotalLineltemNetAmt <br> AllowanceOrCharge <br> TotalWeight <br> TotallTaxes <br> TotallnvoiceDueAmt |  |  |  |  |
| InvoiceTotals (NAXML-FuelsDoc) | Complex <br> Children-Sequence <br> TotallnvoiceUnits AdditionalAllowancesAndC harges AdditionalTaxes TotalLineltemNetAmt TotallnvoicesDueAmt |  |  |  |  |
| InvoiceTotals (NAXML-LotDoc) | Complex <br> Children-Sequence <br> $\quad$ Lineltems <br> $\quad$ TotalLineltemNetAmt |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AllowanceAndCharges TotallnvoiceDueAmt |  |  |  |  |
| InvoiceTradeltemClassification (NAXML-BusDoc) | Complex <br> Children-Sequence <br> TradeltemClassificationSys tem <br> TradeltemClassifricationld Lineltems <br> RetaillnventoryValue |  |  |  |  |
| InvoiceTradeltemClassification (NAXML-FuelsDoc) | Complex <br> Children-Sequence <br> TradeltemClassificationSys <br> tem <br> TradeltemClassifricationId <br> Lineltems |  |  |  |  |
| InvoiceType | Simple | The type of invoice issued. |  |  |  |
| InvoiceUnit (NAXML-BusDoc | Complex Children-Sequence InvoiceUnitld InvoiceUnitQty InvoiceUnitCost AllowanceOrCharge Taxes LineItemGrossAmt LineltemNetAmt |  |  |  |  |
| InvoiceUnit (NAXML-FuelsDoc) | Complex <br> Children-Sequence <br> InvoiceUnitld <br> InvoiceUnitQty <br> InvoiceUnitCost <br> Taxes <br> TotallnvoiceUnitPaidTaxes <br> Amt <br> TotallnvoiceUnitNetAmt |  |  |  |  |
| InvoiceUnit (NAXML-LotDoc) | Complex <br> Children-Sequence <br> GameDescription <br> Gameld <br> InvoiceUnitQty <br> InvoiceUUnitCost <br> RetailUnitaty <br> RetailPrice <br> (DateActivated OR |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | DateSold) <br> AllowanceOrCharge LineltemGrossAmt LineltemNetAmt |  |  |  |  |
| InvoiceUnitCost | Simple | The cost to the buyer of the line item. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. |  |  |
| InvoiceUnitld | Simple | The identification of the line item. | identType <br> (Required) <br> VIN <br> PLU <br> GTIN. <br> Indicates the type of identification scheme used to identify the PromoPurchaseUnit. |  |  |
| InvoiceUnitQty | Simple | The quantity of the line item being invoiced. | ```fuelUOMBasis (Implied) Gross_Gallons Net_Gallons Lottery UOMBasis (Implied) Pack Book Each CstoreUOMBasis (Implied) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc.,``` |  |  |
| ItemPrice | Complex <br> Children-Sequence <br> Currency <br> Tradeltem <br> Shipper <br> Promotion |  |  |  |  |
| ItemPromo | Complex <br> Children-Sequence <br> Currency <br> Tradeltem <br> Shipper |  |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion |  |  |  |  |
| ItemSync | Complex <br> Children-Sequence Currency Tradeltem Shipper Promotion |  |  |  |  |
| LastOrderDate | Simple | The last date on which the referenced item can be ordered. |  |  |  |
| LastShipDate | Simple | The last date on which the referenced item will be shipped. |  |  |  |
| Lineltem (NAXML-BusDoc) | Complex Children-Sequence (PurchaseOrderInfo InvoiceUnit RetailUnitPricing PurchaseOrderUnit) OR (PurchaseOrderUnit RetailUnitPricing TradeltemClassification) OR (InvoiceUnit RetailUnit) |  | $\begin{aligned} & \text { count } \\ & \text { (Required) } \end{aligned}$ |  |  |
| Lineltem (NAXML-FuelsDoc) | Complex <br> Children-Sequence InvoiceUnit |  | count (Required) |  |  |
| Lineltem (NAXML-LotDoc) | Complex <br> Children-Sequence (InvoiceUnit OR GameDescription Gameld ActivityStatus) |  | count <br> (Required) |  |  |
| LineltemGrossAmt | Simple | The gross amount being invoiced for the line item. | identType (Implied) <br> Credit <br> Debit <br> Denotes the code for the currency whose amount is being specified. | $\begin{aligned} & \text { amount } \\ & \text { (Implied) } \end{aligned}$ | currency (Implied) |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LineltemNetAmt | Simple | The net amount being invoiced for the line item after discounts, allowances, charges and taxes. | identType (Implied) <br> Credit <br> Debit <br> Denotes the code for the currency whose amount is being specified. | $\begin{aligned} & \text { amount } \\ & \text { (Implied) } \end{aligned}$ | currency (Implied) |
| Lineltems (Empty) | Simple | The number of line items in the invoice or purchase order. | count <br> (Required) <br> A count of the number of line items included in the invoice or purchase order. |  |  |
| LoadingDateaAndTime | Simple | The date and time the product(s) was/were loaded on the delivery vehicle. |  |  |  |
| Marketld | Simple | The identification of the market. | identType <br> (Required) <br> Choice <br> All <br> Area <br> Location <br> State <br> Postal Code <br> Other <br> Specifies the type of identification scheme used to identify the Market, such as All, Area, Location, State, Postal Code, etc. | identRole <br> (Implied) <br> Choice <br> Supplier <br> Buyer <br> Manufacturer <br> Other <br> Specifies who has identified the identification scheme in identType, such as Supplier Buyer, etc. |  |
| Markets | Complex Children-Sequence $\quad$ Marketld Dates |  |  |  |  |
| Measures | Complex <br> Children-Sequence <br> PackageHeight <br> PackageWidth <br> PackageDepth <br> PackageNetWeight <br> PackageGrossWeight PackageVolume PackageNetContent |  |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MinimumOrderQty | Simple | The minimum quantity of this item that can be ordered. |  |  |  |
| MinimumPurchaseQty | Simple | Indicates the minimum quantity of the Purchase Unit that must be purchased to qualify for the price quoted. |  |  |  |
| MinimumPurchaseQtyRequired | Simple | The minimum quantity of the item that must be ordered in order to satisfy the requirements of the referenced promotion. |  |  |  |
| MinimumShipQty | Simple | The minimum quantity of the item that will be shipped. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| Name | Simple | The name of a party in a transaction. | identType (Implied) Indicates the type of identification scheme being used to identify the party, such as, DUN +4, AR num, FEIN | ident (Implied) <br> The identifying number or description referenced by the identType |  |
| NAXML-BusDoc | Complex Children-Sequence TransmissionHeader Parties ItemSync ItemPrice ItemPromo Invoice PurchaseOrder |  | version (Required) |  |  |
| NAXML-FuelsDoc | Complex <br> Children-Sequence <br> TransmissionHeader Parties Invoice CreditCardsPreDraft PaymentOrder |  | version (Required) |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NAXML-LotDoc |  <br> Complex <br> Children-Sequence <br> TransmissionHEader <br> Parties <br> Invoice <br> Activity |  | version <br> (Required) |  |  |
| OrderDate | Simple | The date on which the order was placed. |  |  |  |
| Organizationld | Simple | The identification of the organization within the hierarchy of the referenced party. |  |  |  |
| Other | Complex Entity - PartyInfo (Name Address City State PostalCode Contact Organizationld) |  |  |  |  |
| OtherAllowanceOrCharge | Complex <br> Children-Wequence <br> AllowanceOrCharge |  |  |  |  |
| OtherTransactions | Complex Children-Sequence Account |  |  |  |  |
| PackageDepth | Simple | The distance from the front face of the item package to the back. | ```UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc.,``` |  |  |
| PackageGrossWeight | Simple | The overall weight of the item. It includes the item weight and the weight of the packaging. | UOMBasis <br> (Required) <br> The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| PackageHeight | Simple | The height of the trade item as measured on the front face. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| PackageNetContent | Simple | The net contents of the item package excluding the package. | UOMBasis (Required) |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| PackageNetWeight | Simple | The weight of the item exclusive of the packaging. | UOMBasis <br> (Required) <br> The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| PackageSize | Simple | The size of the package. | identType <br> (Required) <br> Choice <br> Retail <br> Ship <br> Inner <br> Outer <br> Identifies the type of measurement being used, such as, Retail, Shipper, inner, outer, etc. |  |  |
| PackageSizeMultiplier | Simple | Indicates the number of |  |  |  |
| PackageVolume | Simple | The volume of the item. | UOMBasis (Required) | The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |
| PackageWidth | Simple | The width of the item. | UOMBasis (Required) | The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |
| Packaging | Complex <br> Children-Sequence <br> PackagingMaterialType <br> PackagingType | Used as a group header w/attributes. | markedReturnable (Required) Specifies whether or not the packaging is returnable. | markedRecyclable (Required) <br> Specifies whether or not the packaging is recyclable. |  |
| PackagingMaterialType | Simple | The type of packaging, i.e., corrugated cardboard, plastic, etc. |  |  |  |
| PackagingType | Simple | The type of packaging for the item being referred to: each, case, box, etc. |  |  |  |
| Parties | Complex <br> Entity-\%Partyld |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Supplier Buyer Other) |  |  |  |  |
| Partyld | Simple | The identification of the party to the transaction. |  |  |  |
| PaymentDate | Simple | The date on which the payment is to be made. |  |  |  |
| PaymentOrder | Complex Children-Sequence ReferenceNumber ReferenceDate PaymentDate ReportPeriod Currency TotalPaymentNetAmt InvoiceReconciliation |  |  |  |  |
| Phone | Simple | The telephone number of the party. |  |  |  |
| PosPaper | Simple |  | identType (Required) Choice POS Paper |  |  |
| PostalCode | Simple | The postal code of the party. In the US this is the zip code. |  |  |  |
| PrePaidActivation | Complex <br> Children-Sequence <br> CardAccountNumber <br> Terminalld <br> TicketNumber <br> PromotionIndicator |  |  |  |  |
| Product (Empty) | Simple | volume (Required) | ident (Required) |  |  |
| PromoConditionOption | Simple |  | count (Implied) |  |  |
| PromoConditionRequirement | Simple |  | actionType (Required) | value (Implied) |  |
| PromoPurchaseUnit | Complex Children-Sequence Entity\%PromoPurchaselnfo |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AllowanceOrChargeReaso n <br> (AllowanceAmt OR <br> ChargeAmt) <br> TradelTemld <br> TradeltemDescription <br> PromoRetailUnit <br> FreeGoods |  |  |  |  |
| PromoPurchaseUnitld | Simple |  | identType (Required) VIN PLU GTIN Indicate the type of identification scheme used to identify the PromoPurchaseUnit, |  |  |
| PromoPurchaseUnitQty | Simple | The quantity of the promotional item in the promotional offer. | identType (Required) VIN PLU GTIN Indicates the type of identification scheme used to identify the PromoPurchaseUnit whose quantity is being specified. | ident <br> (Required) <br> Specifies the code value or description indicated by the identType. | UOMBasis <br> (Required) <br> The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |
| PromoQuantityDiscount | Simple | The quantity discount associated with the promotional item. | identType <br> (Implied) <br> Indicates the type of identification scheme used to identify the <br> PromoQuantityDiscount, such as , off invoice, etc. |  |  |
| PromoRetailUnit | Complex Children-Sequence $\quad$ Entity-\%Retaillnfo RetailPrice |  |  |  |  |
| Promotion | Complex <br> Children-Sequence <br> PromotionStatus <br> EffectiveDate <br> Markets |  | ident <br> (Required) |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dates Terms Conditions |  |  |  |  |
| PromotionIndicator | Simple |  | identType (Required) |  |  |
| PromotionOption | Simple | A sequential number used to indicate the option. |  |  |  |
| PromotionPeriod | Simple |  | startDate (Required) | endDate (Required) |  |
| PromotionStatus | Simple | The status of the promotion. | actionType <br> (Required) <br> Confirm <br> Accept <br> Delete <br> Restore <br> Indicates the action required to be taken with regard to the promotion | IdentPromo (Required) |  |
| PurchaseOrder | Complex <br> Children-Sequence <br> PurchaseOrderNumber <br> Dates <br> Currency <br> PurchaseOrderDetail |  |  |  |  |
| PurchaseOrderDate | Simple | The date of the purchase order. |  |  |  |
| PurchaseOrderDetail | Complex Children-Sequence Terms Lineltem PurchaseOrdersummary |  |  |  |  |
| PurchaseOrderInfo | Complex <br> Children-Sequence <br> PurchaseOrderDate <br> PurchaseOrderNumber <br> PurchaseOrderQty <br> PurchaseOrderUnitld |  |  |  |  |
| PurhaseOrdeNumber | Simple | The reference number for the purchase order. |  |  |  |
| PurchaseOrderQty | Simple |  | UOMBasis <br> (Implied)) <br> The Unit of Measure Basis is, |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | i.e. ounces, pounds, liters, etc., |  |  |
| PurchaseOrderSummary | Complex <br> Children-Sequence Lineltems |  |  |  |  |
| PurchaseOrderUnit | Complex <br> Children-Sequence <br> PurchaseOrderUnitld PurchaseOrderUnitQty BuyersCost AlkowanceOrCharge Taxes |  |  |  |  |
| PurchaseOrderUnitld | Simple | The identification of the item on the purchase order. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the PurchaseOrderUnit. |  |  |
| PurchaseOrderUnitQty | Simple | The quantity of the trade item ordered on the purchase order. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| PurchaseUnit | Complex <br> Children-Sequence Entity-\%Purcahselnfo Measures |  |  |  |  |
| PurchaseUnitld | Simple | The identification of a purchase unit. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the PurchaseUnit | ident <br> (Implied) Identifies the Tradeltem specified by the scheme in identType. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PurchaseUnitPricing | Complex <br> Children-Sequence Entity-\%Purchaselnfo BuyersCost AllowanceOrChargeAmt |  |  |  |  |
| PurchaseUnitQty | Simple | Identifies the quantity of the Trade item contained in the purchase unit packaging. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the Tradeltem in the PurchaseUnit. | dent <br> (Implied) Identifies the Tradeltem specified by the scheme in identType. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |
| ReferenceDate | Simple | A specific date being referenced in the motor fuels invoicing process. |  |  |  |
| Remit | Complex <br> Children-Sequence <br> RemitTo <br> RemitToAddress |  |  |  |  |
| RemitTo | Simple |  |  |  |  |
| RemitToAddress | Simple |  |  |  |  |
| ReportPeriod | Simple | The period of time included in the report. |  |  |  |
| RequestedDeliveryDate | Simple |  |  |  |  |
| RetailPrice | Simple | The suggested retail price of the item. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is being specified. |  |  |
| RetaillnventoryValue | Simple | The inventory value of the item or group of items calculated at regular retail price. | currency <br> (Implied) <br> Denotes the code for the currency whose amount is |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | being specified. |  |  |
| RetailUnit | Complex Children-Sequence $\quad$ Entity-\%Retaillnfo Measures |  |  |  |  |
| RetailUnitld | Simple | The identification of a purchase unit. | identType (Required) Choice GTIN VIN PLU Indicates the type of identification scheme used to identify the RetailUnit. | ident (Implied) Identifies the Tradeltem specified by the scheme in identType. |  |
| RetailUnitPricing | Complex <br> Children-Sequence <br> Entity-\%Retaillnfo <br> RetailPrice <br> Dates <br> Markets |  |  |  |  |
| RetailUnitQty | Simple | Identifies the quantity of the Trade item contained in the retail unit packaging | identType (Required) Choice GTIN VIN PLU Indicates the type of identification scheme used to identify the Tradeltem in the RetailUnit. | ident <br> (Implied) <br> Identifies the Tradeltem specified by the scheme in identType. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |
| SequenceNumber | Simple | Used in the credit card processing reconciliation to denote a sequence within a batch. |  |  |  |
| SettlementDate | Simple | Used in the lottery process to indicate the draft date for the invoice. |  |  |  |
| Shipper | Complex <br> Children-Sequence |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ShipperltemId <br> Measures <br> Dates <br> Markets <br> Shipperltem |  |  |  |  |
| ShipperITem | Complex <br> Children-Sequence Tradeltem |  |  |  |  |
| ShipperItemId | Simple | Identifies the shipper. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the Shipperltem. |  |  |
| Size | Simple |  |  |  |  |
| State | Simple | The state code of the US state or Canadian Province of the party in the trading partner relationship. |  |  |  |
| Supplier | Complex <br> Entity - Partylnfo <br> (Name <br> Address <br> City <br> State <br> PostalCode <br> Contact <br> Organizationld) |  |  |  |  |
| Taxes | Complex <br> Childeren <br> Choice: <br> PCDATA <br> DeferredPaymentDate | A group heading for taxes. | taxable <br> (Required) <br> Choice <br> Yes <br> No (Default) <br> Indicates whether or not the item is taxable. | taxType <br> (Implied) <br> Indicates the type of tax such as, sales tax, VAT, etc. | taxAmount <br> (Implied) <br> Indicates the amount of tax to be applied to the item. |
| TerminalID | Simple | Used in credit card processing reconciliation to indicate the terminal at the retailer's location which processed the credit |  |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | cards. |  |  |  |
| Terms (NAXML-BusDoc) | Complex <br> Children-Sequence <br> TermsType (InvoiceDueDate Discount) <br> OR <br> (Discount) |  |  |  |  |
| Terms (NAXML-FuelsDoc) | Complex <br> Children-Sequence <br> TermsType InvoiceDueDate Discount |  |  |  |  |
| TermsOfSale | Simple |  |  |  |  |
| TermsType | Simple | The type of terms being offered or requested. | Ident (Implied) <br> Specifies the type of Terms being offered or taken, such as, $1 \% 10$ days etc, |  |  |
| TotalAccountAmt | Simple | The total of credit cards processed for the identified account. | amount (Required) |  |  |
| TotalAdditionalAllowancesAndCharg esNetAmt | Simple | The total of all additional allowances or charges. | IdentType (Required) Choice: <br> Credit <br> Debit | amount (Implied) | currency (Implied) |
| TotalAdditionalTaxesNetAmt | Simple | The total of all additional taxes not identified by line itme. | IdentType (Required) Choice: <br> Credit <br> Debit | amount (Implied) | currency <br> (Implied) |
| TotalAllowancesAndChargesNetAmt | Simple | The total of all allowance and charges identified by line item. |  |  |  |
| TotalBatchAmt | Simple | The total amount of credit or debit of all credit cards processed within the identified batch. |  |  |  |
| TotalCreditOrDebitAmt | Simple | The total credit or debit identified within the structure. | IdentType <br> (Required) <br> Choice: <br> Credit <br> Debit | amount <br> (Required) | currency <br> (Implied) |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TotalCreditCardsNetAmt | Simple | The net amount of all credit cards associated entire reconciliation. | IdentType (Required) Choice: <br> Credit <br> Debit | amount <br> (Required) | currency <br> (Implied) |
| TotallnvoiceDueAmt | Simple | The total amount due on the specified invoice. | IdentType (Required) Choice: <br> Credit <br> Debit |  |  |
| TotallnvoicesDueAmt | Simple | The total amount due and payable on all invoices after taxes and allowances or charges. | IdentType (Required) Choice: <br> Credit <br> Debit | netAfterAllowanceOrChargeA mt (Implied) | netAfterDiscountAmt (Implied) |
| TotallnvoicesNetAmt | Simple | The net amount of all invoices inclusive of paid taxes and allowances or charges. | IdentType (Required) Choice: <br> Credit <br> Debit | amount <br> (Implied) | currency <br> (Implied) |
| TotallnvoiceUnitNetAmt | Simple | The total of the invoice inclusive of taxes and allowances. |  |  |  |
| TotallnvoiceUnitPaidTaxesAmt | Simple | The amount of taxes to be paid on the invoice (exclusive of deferred taxes). |  |  |  |
| TotallnvoiceUnits Empty | Simple | The total number of invoiced line items. | count <br> (Required) <br> A count of the number of invoiced units included |  |  |
| TotalLineltemNetAmt | Simple | The total net amount for the line item. | IdentType (Required) Choice: <br> Credit <br> Debit | amount <br> (Implied) | currency <br> (Implied) |
| TotalPaymentNetAmt |  |  | IdentType (Required) Choice: <br> Credit <br> Debit | amount (Implied) | currency (Implied) |
| TotalPreDraftNetAmt | Simple | The net amount of all invoice, allowance and charges, and taxes inclusive of credit card credits or debits. | IdentType (Required) Choice: <br> Credit <br> Debit | amount (Implied) | currency (Implied) |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| TotalTaxes | Simple | Attribute |  |  |
| TotalWeight | Simple total amount of tax charged |  |  |  |
| on the invoice. |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TradeltemClassificationSystem | Simple | A classification of trade item hierarchy as published by a trade or other organization. Examples: National Association of Convenience Stores. |  |  |  |
| TradelTemDeleteldentification | Complex <br> Children-Sequence <br> TradeITemReplacedByld <br> EffectiveDate |  |  |  |  |
| TradeltemDescription | Simple | The free form description of the item. | identType <br> (Implied) <br> Choice <br> Manufacturer <br> Brand <br> POS <br> Indicates the identifying scheme for the description. | length (Implied) <br> Specifies the number of characters in the description. Used for Tradeltem customer display descriptions, receipt descriptions, etc. |  |
| TradeItemFamilyCode | Simple | The manufacturer's product family code used for couponing. |  |  |  |
| TradeltemId | Simple | The identification of the trade item. It may be the GTIN, a PLU, a vendor' item number or other identification. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the Tradeltem. |  |  |
| TradeltemIdentification | Complex <br> Children-Sequence <br> TradeltemReplacesId <br> TeradelTemOrderingUnitIn dicator <br> TradeItemFamilyCOde <br> TradeltemSize <br> TradeltemAlcoholPercentV olume <br> TradeItemClassification |  |  |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TradeltemMultiPack | Simple | Indicates whether or not the trade item is part of a multipack. | yesOrNo <br> (Required) <br> Choice: <br> Yes <br> No (Default) <br> Specifies that the Tradeltem is a multi-pack |  |  |
| TradeltemOrderingUnitIndicator | Simple | An indicator showing whether or not the item is an ordering unit. | yesOrNo <br> (Required) <br> Choice: <br> Yes <br> No (Default) <br> Specifies that the Tradeltem is an ordering unit. |  |  |
| TradeltemPriceStatus | Simple | An indicator of the action to be taken regarding the price of the trade item. | actionType <br> (Required) <br> Choice <br> AddNew <br> Change <br> Delete <br> Restore <br> Indicates the action required to be taken with regard to the promotion price, such as add, change, delete, restore. |  |  |
| TradeltemPromotionStatus | Simple | The status of the trade item promotion. | actionType (Required) Choice <br> Add <br> Change <br> Delete <br> Restore <br> Indicates the action required to be taken with regard to the promotion, such as add, change, delete, restore. |  |  |
| TradeltemReplacedBy | Simple | Indicates that the Trade Item referenced by this identifier is being replaced by the Trade Item identified in Tradeltemld. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the replacing |  |  |

NACS Electronic Commerce Guidelines - XML B2B Document Exchange - Version 1.0

| Element Name | Element Type | Element Description | Attribute | Attribute | Attribute |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tradeltem. |  |  |
| TradeltemReplacesid | Simple | Indicates that the Trade Item referenced by this identifier replaces the Trade Item identified in TradeltemId. | identType <br> (Required) <br> Choice <br> GTIN <br> VIN <br> PLU <br> Indicates the type of identification scheme used to identify the replaced Tradeltem. |  |  |
| TradeltemShipper (Empty) | Simple | Identifies whether the item is a shipper. | yesOrNo <br> (Required) <br> Choice: <br> Yes <br> No (Default) <br> Specifies that the Tradeltem is a shipper. | multiltem (Implied) <br> Choice: <br> Yes <br> No (Default) <br> Conditional. Specifies that if the Tradeltem is a shipper whether or not it contains multiple Tradeltems. |  |
| TradeltemSize | Simple | This is the measured quantity of the net contents of the trade item in its packaged configuration, i.e. 12. | UOMBasis (Required) The Unit of Measure Basis is, i.e. ounces, pounds, liters, etc., |  |  |
| TradeltemStatus (Empty) |  | The status type of the item in this transaction. | actionType <br> (Required) <br> Choice <br> add <br> change <br> existing <br> delete <br> restore <br> Indicates the action to be <br> taken with the identified <br> Tradeltem. | I |  |
| TransactionDate |  | The date the transaction was created by the seller. |  |  |  |
| TransactionStatus Empty |  | The status type of the transaction. | actionType (Required) Choice <br> Original Change |  |  |


| Element Name | Element Type | Element Description | Attribute | Attribute |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Resend <br> Indicates the action to be <br> taken with the transmission. |  |
| TransactionTime |  | The time the transaction was <br> created by the sender. |  |  |
| TransmissionHeader | Complex <br> Childen-Sequence <br> Transactionld <br> TransactionDate <br> TransactionTime <br> TransactionStatus |  |  |  |

## Chapter 6 - NAXML Document Type Definitions (DTD) For General Merchandise - NAXML-BusDoc.dtd

An electronic version of the NAXML dtds is available from http://208.144.173.70/NAXML/DTDs/.
Data elements are declared in the appropriate DTD.
The use of an optional character following an element name in a DTD indicates a usage requirement for the element in the conforming XML document as follows:

- ? indicates the element may be present zero or one time.
-     * indicates the element may be present zero or more times.
-     + indicates the element may be present one or more times.

If no character appears after an element name the element is required one time.
The DTDs and sample XML documents shown in this document are hard coded to provide an uri to the above listed server. These should be modified as necessary by implementers and testers.

## NAXML DATA DICTIONARY

This is the DTD for the convenience store general merchandise business documents. All of the following types of documents can be incorporated in a single XMI instance conforming to this dtd:

1. Item Synchronization
2. Item Price Notification
3. Item Promotion
4. Item Purchase Order
5. Item Invoice
6. Lottery Invoice
7. Lottery Activity
8. MotorFuels Invoice
9. Motor Fuels Credit Card Processing and Pre-Draft Notification.

Chapter 7 - NAXML Document Type Definitions (DTD) For Lottery Process- NAXML-LotDoc.dtd

An electronic version of the NAXML dtds is available from http://208.144.173.70/NAXML/DTDs/.

# Chapter 8 - NAXML Document Type Definitions (DTD) For Motor Fuels - NAXML-MotorFuelsDoc.dtd 

An electronic version of the NAXML dtds is available from http://208.144.173.70/NAXML/DTDs/.

Chapter 9 - NAXML Sample Documents
An electronic version of the NAXML sample documents is available from $h t t p: / / 208.144 .173 .70 /$ NAXML/DTDs/.
These documents may be used as standalone documents or they may be combined into one document contained any combination of these documents. For illustration purposes they are shown as variations of individual document types: item synchronization; price notification; promotion announcement; purchase order; and invoice.

## Chapter 10 - Sample XSL Documents

An electronic version of the NAXML sample documents in this chapter are available from www.cstorecentral.com go to Technology Standards and look for NAXML Samples.

## Appendix A - Implementation Notes

1. In the transmission header, NAXMLCStoreVersion refers to the version of the NACS Electronic Commerce Guidelines - XML Business-toBusiness Document Exchange being used.

## Appendix B-Obtaining Additional Information

The minutes of the Task Force sessions are available from NACS at www.cstorecentral.com. To access do the following:

1. Logon to www.cstorecentral.com
2. Select Technology Standards
3. Select EDI Standards Committee
4. Select Meeting Minutes

Additional information may also be obtained by contacting:

| via Mail | via Fax | via e-mail |
| :--- | :--- | :--- |
| John Hervey | John Hervey | Uhervey@.gerke.com |
| Gerke \& Associates, Inc. | $270-782-1641$ Voice |  |
| 2511 Old 63 South | $270-846-1002$ Fax |  |
| Columbia, MO 65201 |  |  |

## Appendix C-Recommending Changes

The CStore XML Task Force meetings have been conducted under the auspices of the NACS EDI Standards Working Committee, one of the four working committees of the NACS Technology Standards Project. Membership on both the EDI Standards Working Committee and the CStore XML Task Force is open to anyone desiring to participate. The results of the Committee's activities are open to feedback and comment by anyone desiring to do so. Feedback and comments are encouraged so that these guidelines have the broadest possible support and implementation within the industry.

The NACS Technology Committee has endorsed the work of the Task Force in this area and encourages all NACS members to participate in this effort.

Because this work is in the early stages of development and may become a subset of the UCC XML EB2B electronic documents or it may be supplemented or replaced at a future date by the UCC work in this area a formal adoption procedure is not being pursued at this time. However, the NACS Technology Standards Committee is expected to review this work and endorse its use in the convenience store industry between consenting trading partners.

Therefore, suggested changes should be submitted to the Task Force representative, John Hervey, as outlined below:

Comments, suggested changes, or enhancements on these guidelines should be addressed to:

| via Mail | via Fax | via e-mail |
| :--- | :--- | :--- |
| John Hervey | John Hervey | Whervey@gerke.com |
| Gerke \& Associates, Inc. | $270-782-1641$ Voice |  |
| 2511 Old 63 South | $270-846-1002$ Fax |  |

## Appendix D - Record of Changes

This is a complete record of modifications, enhancements and changes to these Guidelines.

| Section | Change |
| :---: | :---: |
|  |  |
|  |  |
|  |  |


[^0]:    ${ }^{1}$ The NACS EB2B Commerce Committee was formerly known as the NACS EDI Standards Working Committee. The two names are used interchangeably in this document.

