ARTS POSLog V6.0

Volume 22: Foodservice Volume Technical Specification
February 10, 2014 – Last Call Working Draft

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2 REFERENCED DOCUMENTS

- ARTS Technical Committees Development Process V6.0.4 2009/11/30
- ARTS XML Best Practices V2.2 2010/11/11
- ARTS Best Practice for Process Modeling V1.0.0 2011/01/04
- A RTS SOA Best Practices Technical Report V1.2
- ARTS XML Interface Conformance Tool Manual V1.0 2005/08/11

These documents are available for download from http://nrf.com

3 ARTS COMMON HEADER

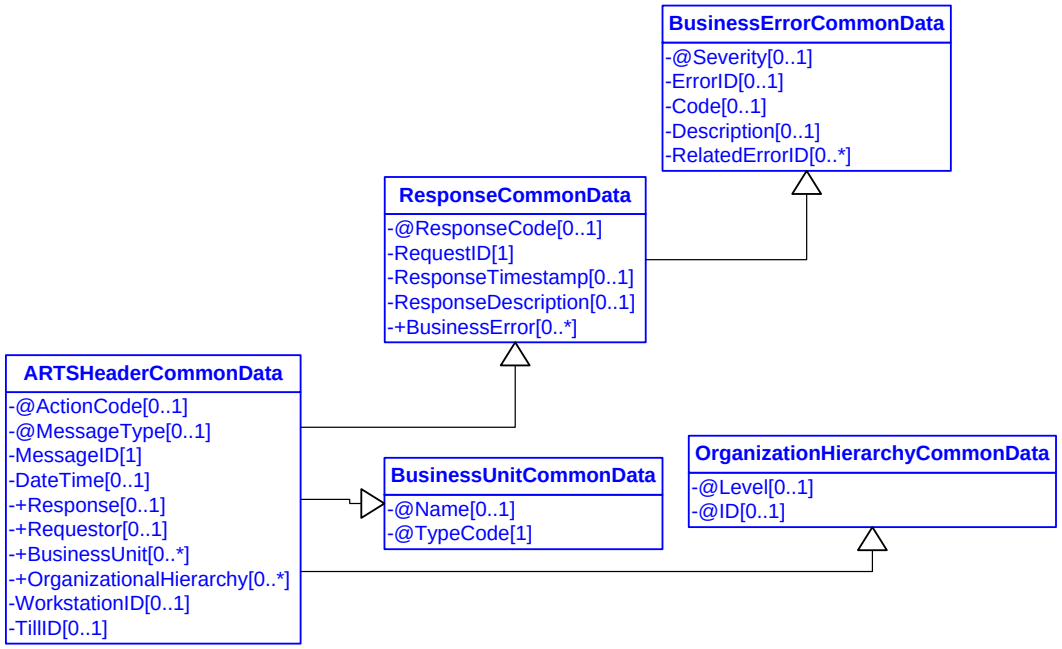


Figure 1: ARTS Common Header Domain View

The ARTS common header is used in all service name schemas. It provides the ability to set session level information and return business error information in one standard format to all SOA implementations.

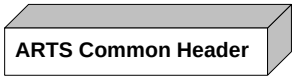


Figure 2: ARTS Common Header Representation

Since this structure is common to all service name schemas, it will not be replicated below. In place of the details, the attached box will be used to represent this complex type structure.

4 SECTION: CUSTOMER ORDER TRANSACTIONS

4.1 USE CASE: Item Sales

Customer Orders split a transaction into intermediate steps prior to “finalization” (that is, delivery and tender). For example, when one dines at a restaurant, the drinks are taken first and entered into the POS. The order is stored and the drinks are delivered. The customers then order their main course. At which time these are entered into the POS and sent to the kitchen. Finally after the customer finishes their meal, they pay and the transaction is finalized.

In a drive thru environment, the customer orders at the first window, pays at the second and picks up their food at the third. Each of these steps is an intermediate step in the Customer Order.

Or in a pizza environment, the customer calls in their order and has it delivered to their home. This is functionally equivalent in the retail world to a customer ordering a piano to be delivered from the factory.

4.1.1 Scenario: One Behind, Normal Drive-Up Customer Order (V3.0)

Taxes are Not Available Until Subtotal, Store, or Total. NOTE: this order is not tendered.

Brief Description

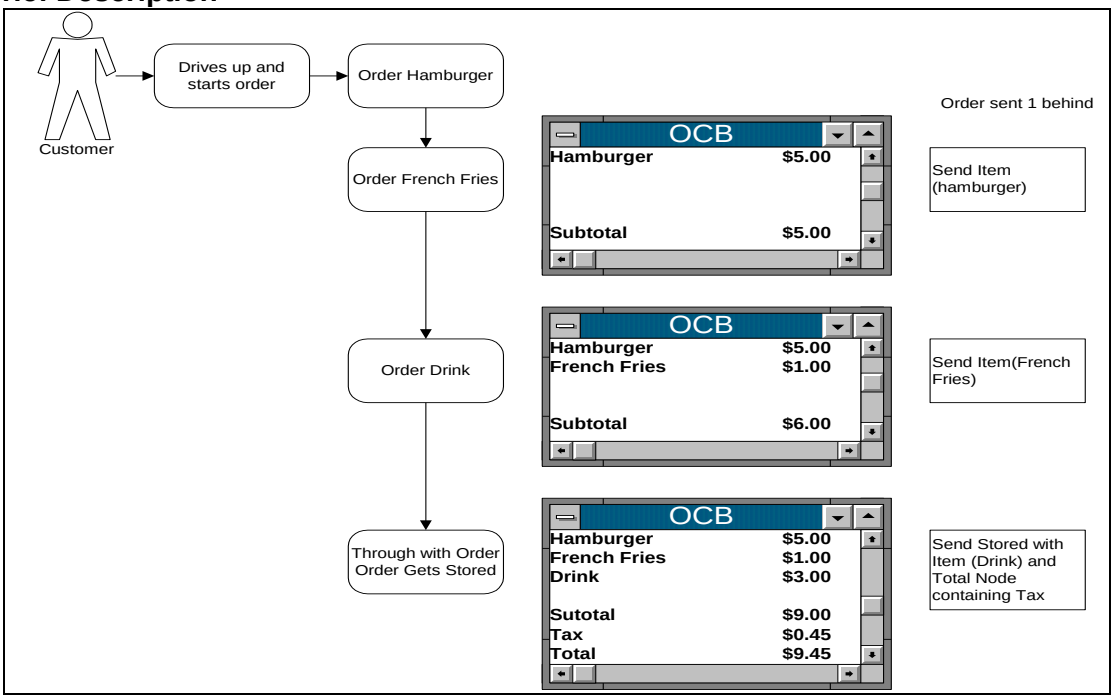


Figure 3: One Behind, Normal Drive-Up Customer Order Sample Flow Diagram

Three order transactions are created, one for each item, the hamburger, the drink, the French fries, when it is ordered and sent one-behind. That is, when item 2 is entered, item 1 is sent to the order confirmation board (OCB)

Post-Conditions

Customer pays when they pick up their order. At that point the retail transaction is created showing the entire transaction.

4.1.1a Conformance XML Instance Document – Normal Drive-Up - Send Item – Hamburger

In one-behind mode, this Hamburger XML Document is sent when the French fries are entered.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
         <LineItem>
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.1.1b Conformance XML Instance Document - Normal Drive-Up - Send Item – Add French Fries

This French Fries XML Document is sent when the drink is entered.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
```

```
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
         <LineItem>
            <!-- French Fries -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>1.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.1.1c Conformance XML Instance Document - Normal Drive-Up - Send Item – Add Drink with total and tax

This Drink with Total and Tax XML Document is sent when the order is stored.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Drink -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
```

```
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>4</SequenceNumber>
      </LineItem>
      <Total>9.45</Total>
   </CustomerOrderTransaction>
</Transaction>
</POSLog>
```

4.1.1d Conformance XML Instance Document - Normal Drive-Up - Customer picks up the food and a POSLog Retail Transaction is created.

This Retail Transaction XML Document is created at the end of the order when the items are delivered and the order is paid.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- French Fries -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>1.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
```

```
            <!-- Drink -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
               <Amount>.45</Amount>
               <Percent>7</Percent>
            </Tax>
            <SequenceNumber>4</SequenceNumber>
         </LineItem>
         <Total>9.45</Total>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.1.2 Scenario: One Behind, Normal Drive-Up Customer Order with Taxes (V3.0)

Brief Description

This scenario shows a running total and taxes are calculated and reported as each item is added.

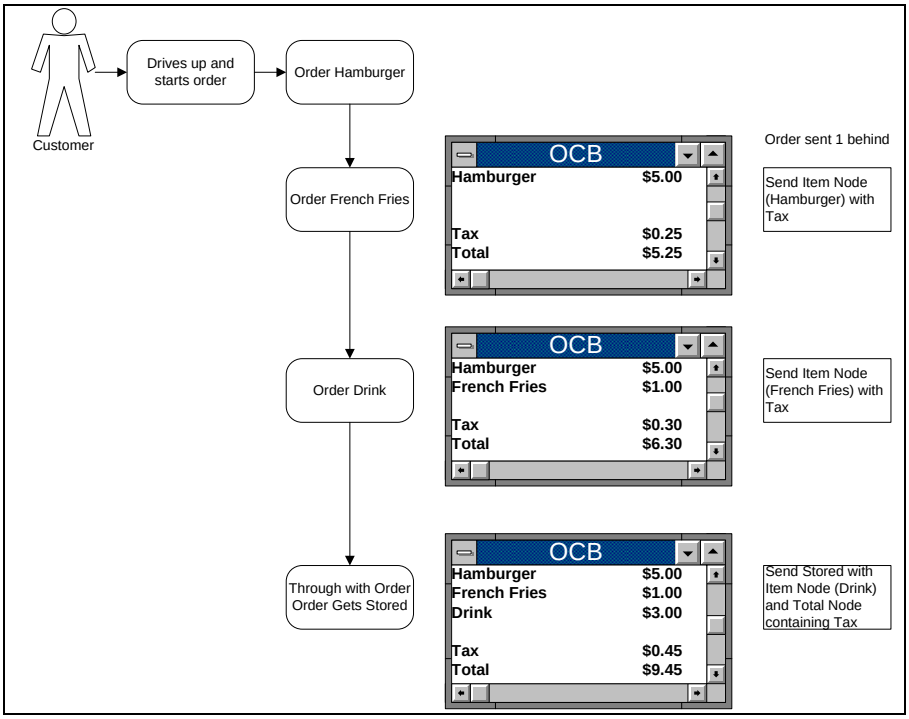


Figure 4: One Behind, Normal Drive-Up Customer Order with Taxes Sample Flow Diagram

4.1.2a Conformance XML Instance Document - Customer Order with Taxes - Send Item – Hamburger with Tax

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
         <LineItem>
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
               <Amount>.25</Amount>
               <Percent>5</Percent>
            </Tax>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.1.2b Conformance XML Instance Document - Customer Order with Taxes - Send Item – Add French Fries with Tax

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
```

```
            <UnitID>HighStreet</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <OperatorID>John</OperatorID>
        <CustomerOrderTransaction TransactionStatus="InProcess">
            <LineItem>
                <!-- French Fries -->
                <Sale>
                    <POSIdentity POSIDType="SKU">
                        <POSItemID>2345</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>1.00</ExtendedAmount>
                    <OrderItemStatus>Dispatch</OrderItemStatus>
                </Sale>
                <SequenceNumber>3</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tax>
                    <Amount>.30</Amount>
                    <Percent>5</Percent>
                </Tax>
                <SequenceNumber>4</SequenceNumber>
            </LineItem>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.1.2c Conformance XML Instance Document - Customer Order with Taxes - Send Item – Add Drink with total and tax

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Ricardo's Taco Stand</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <OperatorID>John</OperatorID>
        <CustomerOrderTransaction TransactionStatus="Suspended">
            <LineItem>
                <!-- Drink -->
                <Sale>
```

```
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>3.00</ExtendedAmount>
            <OrderItemStatus>Dispatch</OrderItemStatus>
         </Sale>
         <SequenceNumber>5</SequenceNumber>
      </LineItem>
      <LineItem>
         <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>6</SequenceNumber>
      </LineItem>
      <Total>9.45</Total>
   </CustomerOrderTransaction>
</Transaction>
</POSLog>
```

4.1.2d Conformance XML Instance Document - Customer Order with Taxes - Customer picks up the food and a POSLog Retail Transaction is created.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- French Fries -->
            <Sale>
```



```
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>2</SequenceNumber>
      </LineItem>
      <LineItem>
         <!-- Drink -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>3.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>3</SequenceNumber>
      </LineItem>
      <LineItem>
         <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>4</SequenceNumber>
      </LineItem>
      <Total>9.45</Total>
   </RetailTransaction>
</Transaction>
</POSLog>
```

4.1.3 Scenario: One Behind, Normal Drive Up Customer Order with Subtotal (V3.0)

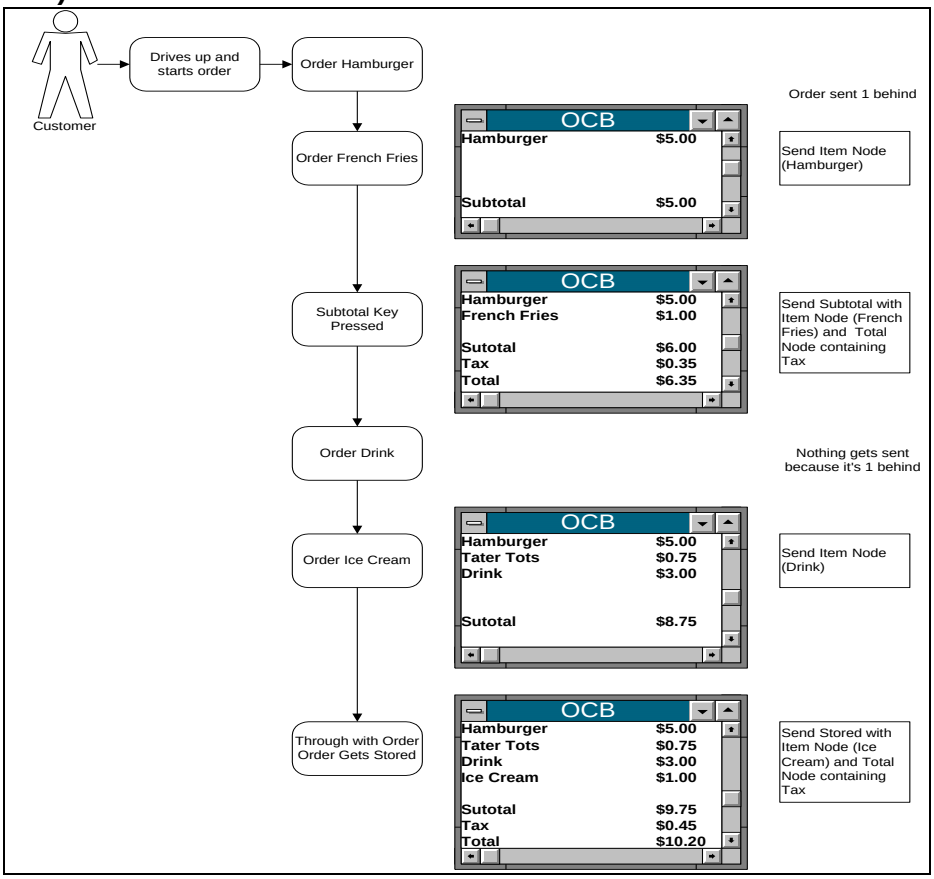


Figure 5: One Behind, Normal Drive Up Customer Order with Subtotal Sample Flow Diagram

4.1.3a Conformance XML Instance Document - Customer Order with Subtotal - Send Item – Hamburger

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>highStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
         <LineItem>
```

```
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.1.3b Conformance XML Instance Document - Customer Order with Subtotal - Send Subtotal with tax

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Subtotal">
         <LineItem>
            <!-- French Fries -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>1.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
               <Amount>.35</Amount>
               <Percent>7</Percent>
            </Tax>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
```



```
            <Total>6.35</Total>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.1.3c Conformance XML Instance Document - Customer Order with Subtotal - Send Item – Drink

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>HighStreet</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <OperatorID>John</OperatorID>
        <CustomerOrderTransaction TransactionStatus="InProcess">
            <LineItem>
                <!-- Drink -->
                <Sale>
                    <POSIdentity POSIDType="SKU">
                        <POSItemID>2345</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>3.00</ExtendedAmount>
                    <OrderItemStatus>Dispatch</OrderItemStatus>
                </Sale>
                <SequenceNumber>4</SequenceNumber>
            </LineItem>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.1.3d Conformance XML Instance Document - Customer Order with Subtotal - Send Item on Store – Ice Cream

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>HighStreet</UnitID>
        </BusinessUnit>
```

```
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
        <LineItem>
          <!-- Ice Cream -->
          <Sale>
            <POSIdentity POSIDType="SKU">
              <POSItemID>9876</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
            <OrderItemStatus>Dispatch</OrderItemStatus>
          </Sale>
          <SequenceNumber>5</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
          </Tax>
          <SequenceNumber>6</SequenceNumber>
        </LineItem>
        <Total TotalType="TransactionSubtotal">9.75</Total>
        <Total>10.20</Total>
      </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.1.3e Conformance XML Instance Document - Customer Order with Subtotal - Customer picks up the food and a POSLog Retail Transaction is created.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
      <BusinessUnit>
        <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
        <LineItem>
          <!-- Hamburger -->
          <Sale>
```

```
            <POSIdentity POSIDType="SKU">
               <POSItemID>123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>5.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>1</SequenceNumber>
      </LineItem>
      <LineItem>
         <!-- French Fries -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>2</SequenceNumber>
      </LineItem>
      <LineItem>
         <!-- Drink -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>3.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>3</SequenceNumber>
      </LineItem>
      <LineItem>
         <!-- Ice Cream -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>9876</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>4</SequenceNumber>
      </LineItem>
      <LineItem>
         <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>5</SequenceNumber>
      </LineItem>
      <Total>10.20</Total>
   </RetailTransaction>
</Transaction>
</POSLog>
```

4.1.4 Scenario: Web Interface Sale to Store System (V3.0)

Order Entry and Order Payment (via credit card or other approved method) are preformed by the customer via web interface to the store system.

Brief Description

Product is entered into the system by the customer thru a Web Interface. The transaction is Stored/Saved until the customer arrives on-site to “pick up” the order or until the order is devired to the customer. At that time, the order is recalled and re-opened on the same or on a different terminal, by the same or a different operator. If/when order entry is completed; Payment is made by cash, credit card/debit/gift card, house charge or other. If applicable, a cash or charge “Tip” may be added to the transaction total. The order is completed, and Product Delivered is done. When the process is completed, the order is closed and archived. Taxing rules are determined based on appropriate Taxation parameters. Inventory usage is determined based on appropriate recipe usage including off-premises packaging.

Scenario Description

Suzy orders a cheese pizza from Mamma Lou’s Web Site to be delivered to her home.

Assumptions

Multiple registers don’t matter as the order originated from the web

4.1.4a Conformance XML Instance Document – Customer Order thru Web Interface Sale To Store System.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Mamma Lou's</UnitID>
        </BusinessUnit>
        <WorkstationID> Web Site</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <CustomerOrderTransaction OrderChannel="Web"
TransactionStatus="InProcess">
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
                    <POSIdentity POSIDType="String">
                        <POSItemID>56786578</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.11</ExtendedAmount>
                    <OrderItemStatus>Sent</OrderItemStatus>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <Delivery>
                <CustomerID>12341234</CustomerID>
```

```
            <Name><Name Location="First">Suzy</Name></Name>
            <Address>
                <AddressLine TypeCode="Street">125 E North Street</AddressLine>
                <City>Mid-America</City>
                <Territory>Oklahoma</Territory>
                <PostalCode>77777</PostalCode>
            </Address>
        </Delivery>
    </CustomerOrderTransaction>
</Transaction>
</POSLog>
```

4.1.4b Conformance XML Instance Document – Web Interface Sale to Store System Final Retail Transaction.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Mamma Lou's</UnitID>
        </BusinessUnit>
        <WorkstationID> Web Site</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <RetailTransaction>
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
                    <POSIdentity POSIDType="String">
                        <POSItemID>56786578</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.11</ExtendedAmount>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tender>
                    <Amount>13.11</Amount>
                </Tender>
                <SequenceNumber>2</SequenceNumber>
            </LineItem>
            <Delivery>
                <CustomerID>12341234</CustomerID>
                <Name>
                    <Name Location="First">Suzy</Name>
                </Name>
                <Address>
                    <AddressLine TypeCode="Street">125 E North Street</AddressLine>
                    <City>Mid-America</City>
```



```
                <Territory>Oklahoma</Territory>
                <PostalCode>77777</PostalCode>
            </Address>
        </Delivery>
    </RetailTransaction>
</Transaction>
</POSLog>
```

4.1.5 Scenario: Call Center Sale (V3.0)

Order entry and payment (via credit card or other approved method) are preformed by the customer at a Call Center.

Brief Description

The Call Center routes the order to the appropriate store for Order Processing and Product Delivery to the store system. The transaction is Stored/Saved into the store POS System until the customer arrives on-site to “pick up” the order. Product Delivery is performed at a store based terminal.

Product is entered into the system via the Call Center interface to the in-store system; Payment is made by credit card, house charge or other means. If applicable, a cash or charge “Tip” may be added to the transaction total. When the customer arrives at the store, the order is recalled on Terminal B by an Operator A. If needed, additional product can be added to or changes made to the order. If/when order entry is completed, Product Delivered is done. When the process is completed, the order is archived. Taxing rules are determined based on appropriate Taxation parameters. Inventory usage is determined based on appropriate recipe usage including off-premises packaging.

Capture the name of the call center in case of multiple call centers

Scenario Description

Joe calls in a pizza to the pizza call center and pays for it with a credit card. The call center routes the order to Harry’s Pizza Parlor. Then tell Joe to where to pick up the pizza.

4.1.5a Conformance XML Instance Document – Call Center Order with Tender

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Harry's Pizza</UnitID>
        </BusinessUnit>
        <WorkstationID>Call Center</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <CustomerOrderTransaction OrderChannel="PhoneIn"
TransactionStatus="InProcess">
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
```

```
                <POSIdentity POSIDType="String">
                    <POSItemID>56786578</POSItemID>
                </POSIdentity>
                <ExtendedAmount>13.11</ExtendedAmount>
                <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
            <Tender>
                <Amount>13.11</Amount>
                <Authorization>
                    <AuthorizationCode>465346</AuthorizationCode>
                </Authorization>
                <CreditDebit>

  <PrimaryAccountNumber>ZGVmYXVsdA==</PrimaryAccountNumber>
                </CreditDebit>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
        </LineItem>
    </CustomerOrderTransaction>
  </Transaction>
</POSLog>
```

4.1.5b Conformance XML Instance Document – Retail Transaction to Record Call Center Order

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Harry's Pizza</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <RetailTransaction>
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
                    <POSIdentity POSIDType="String">
                        <POSItemID>56786578</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.11</ExtendedAmount>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
```

```
            <Tender>
                <Amount>13.11</Amount>
                <Authorization>
                    <AuthorizationCode>465346</AuthorizationCode>
                </Authorization>
                <CreditDebit>

    <PrimaryAccountNumber>ZGVmYXVsdA==</PrimaryAccountNumber>
                </CreditDebit>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
        </LineItem>
    </RetailTransaction>
</Transaction>
</POSLog>
```

4.1.6 Scenario: Kiosk Sale (V3.0)

Order entry and payment (via credit card or other approved method) are preformed by the customer at a Kiosk in the store lobby.

Brief Description

The Kiosk is part of the in-store POS system deriving menu item names, pricing, tax tables etc from the POS systems database in real time or via database download from the POS system. Product Delivery is performed by an operator at the front counter.

Product is entered into the system via the Call Center interface to the in-store system; Payment is made by credit card, house charge or other means. If applicable, a cash or charge “Tip” may be added to the transaction total. When the customer arrives at the store, the order is recalled on Terminal B by an Operator A. If needed, additional product can be added to or changes made to the order. If/when order entry is completed, Product Delivered is done. When the process is completed, the order is archived. Taxing rules are determined based on appropriate Taxation parameters. Inventory usage is determined based on appropriate recipe usage including off-premises packaging.

Scenario Description

Customer walks up to the kiosk located in the deli lobby and orders a ham and cheese sandwich for which he pays with cash. He then walks to the check out line where he picks up his sandwich.

4.1.6a Conformance XML Instance Document – Kiosk Customer Order

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Harry's Pizza</UnitID>
```

```
        </BusinessUnit>
        <WorkstationID>Kiosk 1</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <CustomerOrderTransaction TransactionStatus="InProcess">
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
                    <POSIdentity POSIDType="String">
                        <POSItemID>56786578</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.11</ExtendedAmount>
                    <OrderItemStatus>Dispatch</OrderItemStatus>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.1.6b Conformance XML Instance Document – Kiosk Retail Transaction

When the previously paid for Order is picked up, it becomes a Retail Transaction.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Harry's Pizza</UnitID>
        </BusinessUnit>
        <WorkstationID>Kiosk 1</WorkstationID>
        <SequenceNumber>125</SequenceNumber>
        <RetailTransaction>
            <LineItem>
                <Sale>
                    <!-- Cheese Pizza -->
                    <POSIdentity POSIDType="String">
                        <POSItemID>56786578</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.11</ExtendedAmount>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tender>
                    <Amount>13.11</Amount>
                    <Authorization>
                        <AuthorizationCode>465346</AuthorizationCode>
                    </Authorization>
                    <CreditDebit>
```



```
    <PrimaryAccountNumber>ZGVmYXVsdA==</PrimaryAccountNumber>
                    </CreditDebit>
                </Tender>
                <SequenceNumber>2</SequenceNumber>
            </LineItem>
        </RetailTransaction>
    </Transaction>
</POSLog>
```

4.2 USE CASE: Modify Sales

4.2.1 Scenario: One Behind, Normal Drive Up Customer Order with Customer Changing the Order (V3.0)

Brief Description

The customer orders Sandwich A and then changes his mind to want Sandwich B. The order taker cancels Sandwich A and enters Sandwich B before the order is totaled. The effect is as if Sandwich A was never entered in the sale other than the currency value of the Item cancels for that operator is increased by the currency value of Sanswich A for tracking purposes.

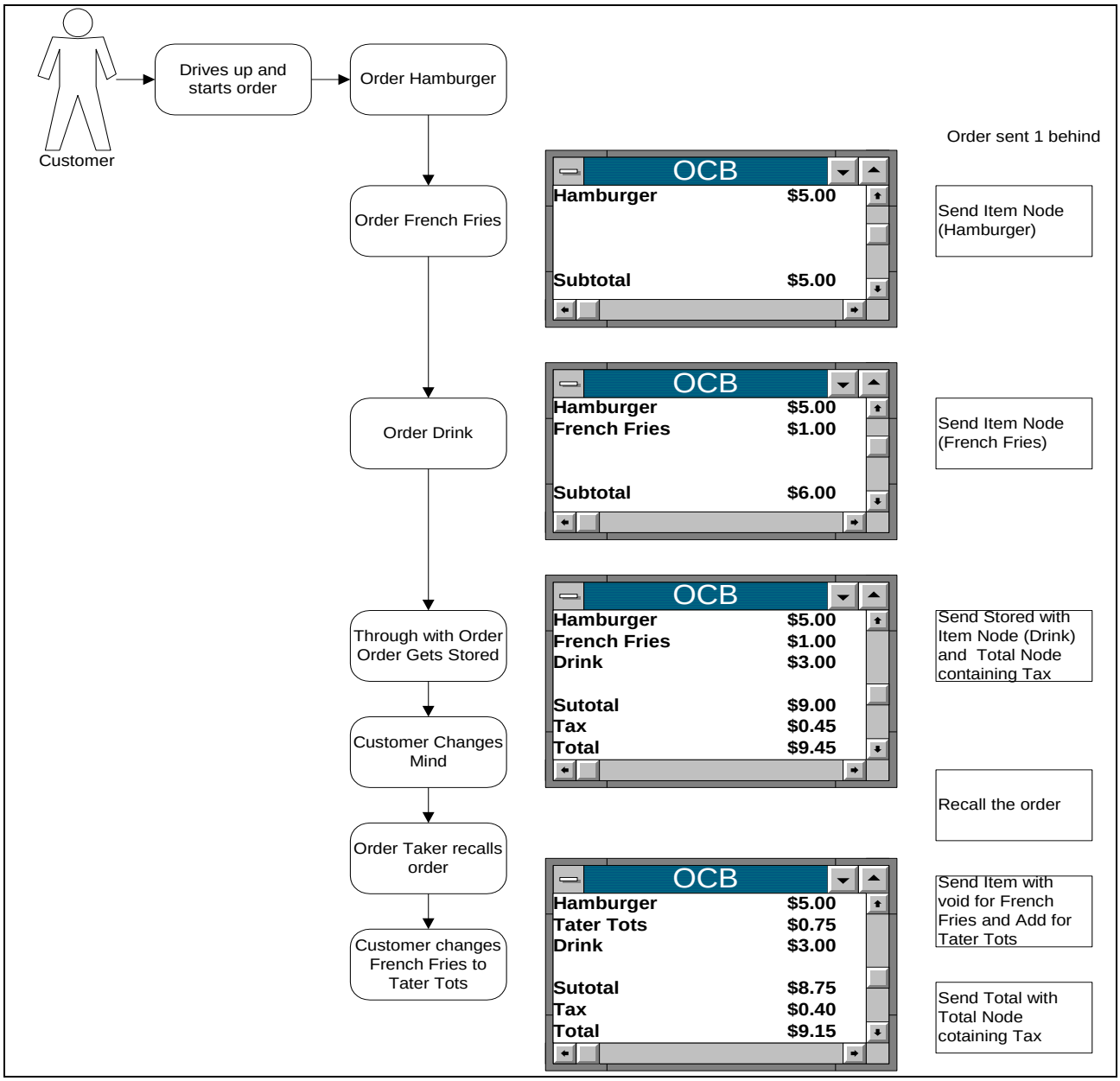


Figure 6: One Behind, Normal Drive Up Order with Customer Changing the Order Sample Flow Diagram

4.2.1a Conformance XML Instance Document — Customer Changing the Order — Send Item – Hamburger

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
```

```
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
        <LineItem>
          <!-- Hamburger -->
          <Sale>
            <POSIdentity POSIDType="SKU">
              <POSItemID>123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>5.00</ExtendedAmount>
            <OrderItemStatus>Sent</OrderItemStatus>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.2.1b Conformance XML Instance Document — Customer Changing the Order — Send Item – French Fries

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
      <BusinessUnit>
        <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
        <LineItem>
          <!-- French Fries -->
          <Sale>
            <POSIdentity POSIDType="SKU">
              <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
            <OrderItemStatus>Sent</OrderItemStatus>
          </Sale>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
```

```
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.2.1c Conformance XML Instance Document — Customer Changing the Order — Store Order — Send Item – Drink with total and tax

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <!--Store the order -->
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Drink -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.00</ExtendedAmount>
               <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <!-- Tax  -->
         <LineItem>
            <Tax>
               <Amount>.45</Amount>
               <Percent>7</Percent>
            </Tax>
            <SequenceNumber>4</SequenceNumber>
         </LineItem>
         <!-- Total -->
         <Total>9.45</Total>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.2.1d Conformance XML Instance Document — Customer Changing the Order — Recall Order – remove FF add tater tots

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- French Fries -->
            <Voids>
               <ItemLink>2</ItemLink>
            </Voids>
            <SequenceNumber>5</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Tater Tots -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>Yummy</POSItemID>
               </POSIdentity>
               <ExtendedAmount>.75</ExtendedAmount>
               <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>6</SequenceNumber>
         </LineItem>
         <!-- Remove Tax  -->
         <LineItem CancelFlag="true">
            <Tax>
               <Amount>.45</Amount>
               <Percent>7</Percent>
            </Tax>
            <SequenceNumber>7</SequenceNumber>
         </LineItem>
         <!-- New Tax -->
         <LineItem>
            <Tax>
               <Amount>.40</Amount>
               <Percent>7</Percent>
            </Tax>
```

```
            <SequenceNumber>8</SequenceNumber>
         </LineItem>
         <!-- Total -->
         <Total>9.15</Total>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.2.1e Conformance XML Instance Document — Customer Changing the Order — Customer picks up the food and a POSLog Retail Transaction is created.

Assuming one wants to track every change

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Hamburger -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- French Fries -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>2345</POSItemID>
               </POSIdentity>
               <ExtendedAmount>1.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Drink -->
            <Sale>
```

```
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>3.00</ExtendedAmount>
         </Sale>
         <SequenceNumber>3</SequenceNumber>
      </LineItem>
      <!-- Tax -->
      <LineItem>
         <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>4</SequenceNumber>
      </LineItem>
      <LineItem CancelFlag="true">
         <!-- Remove French Fries -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>2345</POSItemID>
            </POSIdentity>
            <ExtendedAmount>1.00</ExtendedAmount>
            <ItemLink>2</ItemLink>
         </Sale>
         <SequenceNumber>5</SequenceNumber>
      </LineItem>
      <LineItem>
         <!-- Tater Tots -->
         <Sale>
            <POSIdentity POSIDType="SKU">
               <POSItemID>Yummy</POSItemID>
            </POSIdentity>
            <ExtendedAmount>.75</ExtendedAmount>
         </Sale>
         <SequenceNumber>6</SequenceNumber>
      </LineItem>
      <!--Remove Tax -->
      <LineItem CancelFlag="true">
         <Tax>
            <Amount>.45</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>7</SequenceNumber>
      </LineItem>
      <!-- New Tax -->
      <LineItem>
         <Tax>
            <Amount>.40</Amount>
            <Percent>7</Percent>
         </Tax>
         <SequenceNumber>8</SequenceNumber>
```

```
        </LineItem>
        <!-- Total -->
        <Total>9.15</Total>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.2.2 Scenario: Add Modifiers to an Item (V2.2)

Brief Description

Suzy wants to add Pickles and Onions to her order. Note these don't add to the price

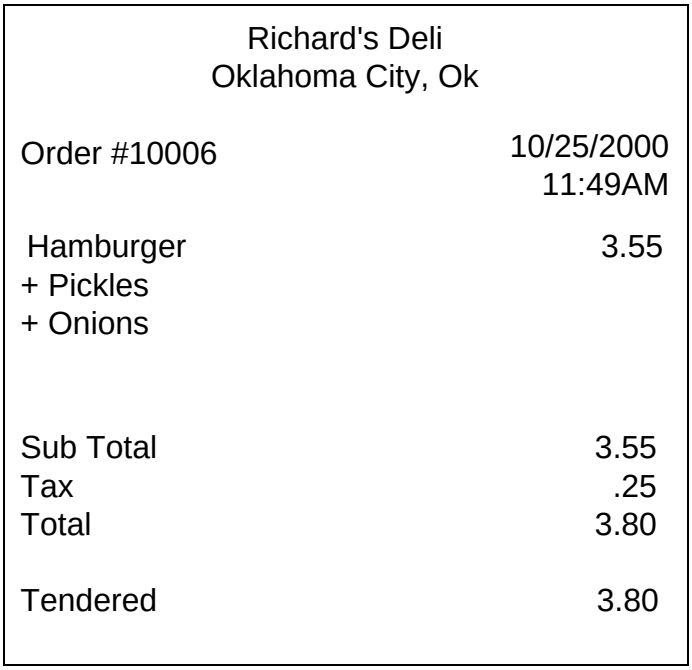


Figure 7: Add Modifiers to an Item Receipt Example

4.2.2 Conformance XML Instance Document — Customer Order Add Modifiers to an Item

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="InProcess">
```

```
        <LineItem>
          <!-- Hamburger -->
          <Sale>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>3.55</ExtendedAmount>
            <Item Action="Add">
              <!-- Add Pickles -->
              <POSIdentity>
                <POSItemID>2345</POSItemID>
              </POSIdentity>
              <ExtendedAmount>0</ExtendedAmount>
            </Item>
            <Item Action="Add">
              <!-- Add Onions -->
              <POSIdentity>
                <POSItemID>6789</POSItemID>
              </POSIdentity>
              <ExtendedAmount>0</ExtendedAmount>
            </Item>
            <OrderItemStatus>Hold</OrderItemStatus>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tax>
            <Amount>.25</Amount>
            <Percent>7</Percent>
          </Tax>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender>
            <Amount>3.80</Amount>
          </Tender>
          <SequenceNumber>3</SequenceNumber>
        </LineItem>
      </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.2.3 Scenario: Subtract Modifiers from an Item (V2.2)

Brief Description

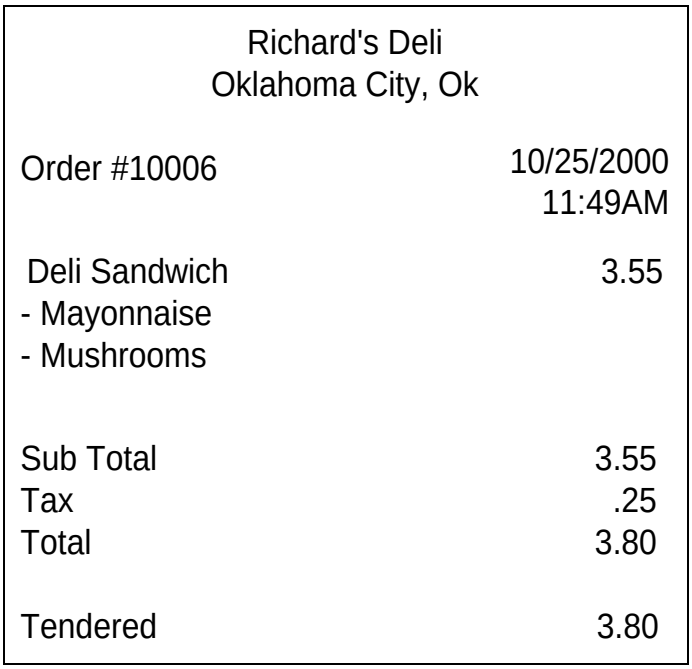


Figure 8: Subtract Modifiers from an Item Receipt Example

4.2.3 Conformance XML Instance Document - Subtract Modifiers from an Item

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0">
    <Transaction>
        <BusinessUnit>
            <UnitID>Richard's Deli</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>10006</SequenceNumber>
        <POSLogDateTime TypeCode="Message">2000-10-
25T11:49:00</POSLogDateTime>
        <OperatorID>John</OperatorID>
        <RetailTransaction>
            <LineItem>
                <!-- Deli Sandwich -->
                <Sale ItemType="Stock">
                    <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>3.55</ExtendedAmount>
                    <Kit>
```

```
                    <!-- Remove Mayonnaise -->
                    <Member Action="IsRemovedFrom">
                        <Sale>
                            <POSIdentity>
                                <POSItemID>2345</POSItemID>
                            </POSIdentity>
                            <ExtendedAmount>0</ExtendedAmount>
                        </Sale>
                    </Member>
                    <!-- Remove Mushrooms -->
                    <Member Action="IsRemovedFrom">
                        <Sale>
                            <POSIdentity>
                                <POSItemID>6789</POSItemID>
                            </POSIdentity>
                            <ExtendedAmount>0</ExtendedAmount>
                        </Sale>
                    </Member>
                </Kit>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
            <Tax>
                <Amount>.25</Amount>
                <Percent>7</Percent>
            </Tax>
            <SequenceNumber>2</SequenceNumber>
        </LineItem>
        <LineItem>
            <Tender>
                <Amount>3.80</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
        </LineItem>
    </RetailTransaction>
  </Transaction>
</POSLog>
```

4.2.4 Scenario: Add Special Instructions to an Item (V2.2)

Brief Description

The prep instruction is specific to an individual item.

Deli Sandwich
(*) cut in half
Ribeye
(*) well done
Fillet
(*) medium
(*) butterfly

Scenario Description
Hirano-san entered Richard's Deli and ordered a well-done ribeye.

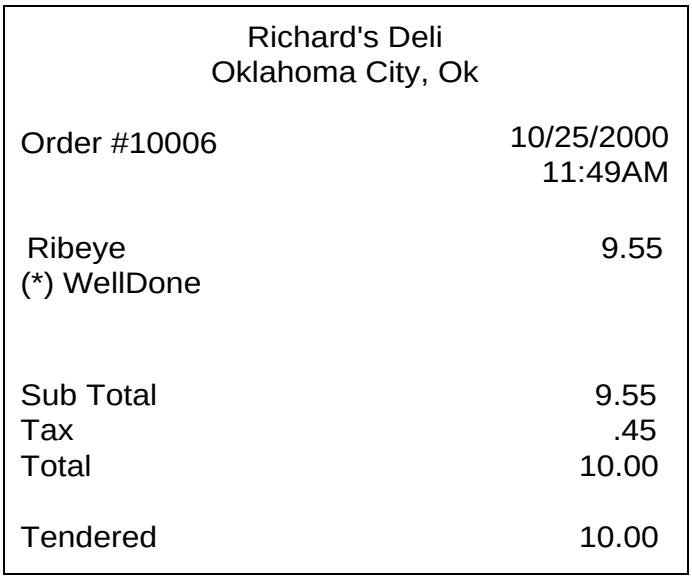


Figure 9: Add Special Instructions to an Item Receipt Example

4.2.4 Conformance XML Instance Document - Add Special Instructions to an Item

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0">
    <Transaction>
        <BusinessUnit>
            <UnitID>Richard's Deli</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>10006</SequenceNumber>
        <POSLogDateTime TypeCode="Message">2000-10-
25T11:49:00</POSLogDateTime>
        <OperatorID>John</OperatorID>
        <RetailTransaction>
            <LineItem>
                <!-- Ribeye -->
                <Sale ItemType="Stock">
                    <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>9.55</ExtendedAmount>
                    <Modification Action="PreparationInstructions">
                        <Name>Well Done</Name>
                    </Modification>
```

```
            </Sale>
            <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
            <Tax>
                <Amount>.45</Amount>
                <Percent>7</Percent>
            </Tax>
            <SequenceNumber>2</SequenceNumber>
        </LineItem>
        <LineItem>
            <Tender>
                <Amount>10.00</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
        </LineItem>
    </RetailTransaction>
</Transaction>
</POSLog>
```

4.2.5 Scenario: Add Serving Instructions to an Item (V3.0)

Brief Description

The serving instruction is specific to an individual item, for example, serve the coffee with the dessert.

Scenario Description

Sakami-san at the Sushi Dinner ordered his coffee to be delivered with his dessert.

4.2.5 Conformance XML Instance Document - Add Serving Instructions to an Item

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0" FixVersion="0">
    <Transaction>
        <BusinessUnit>
            <UnitID>Sushi Diner</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <CustomerOrderTransaction TransactionStatus="InProcess">
            <LineItem>
                <!-- Dessert -->
                <Sale>
                    <POSIdentity>
                        <POSItemID>asdasdf</POSItemID>
```

```
                </POSIdentity>
                <ExtendedAmount>7.95</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
            <!-- Coffee -->
            <Sale>
                <POSIdentity POSIDType="SKU">
                    <POSItemID>123</POSItemID>
                </POSIdentity>
                <ExtendedAmount>5.00</ExtendedAmount>
                <Modification Action="ServingInstructions">
                    <Name>Serve with Dessert</Name>
                </Modification>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
        </LineItem>
    </CustomerOrderTransaction>
  </Transaction>
</POSLog>
```

4.3 USE CASE: C. O. D. (Cash on Delivery) [aka P.O.D. — Payment on Delivery]

Brief Description

Cash on Delivery (C. O. D) is a form of transaction in which the final payment of an item is done at the time of delivery, a transaction in which a shipping company and/or carrier collects payment on behalf of the sender. It basically consists of the item amount, tax, shipping and handling fees which appear on a detailed statement and/or receipt. There are some cases where the customer has to deposit a certain amount on the occurrence of a COD and there is a choice to either pay the deposit in cash or by credit card. Payment method on delivery can also be chosen, to either be paid in cash or by credit card. However, POS transactions can be left out of consideration since the denomination of payment is managed by the shipping company/carrier who collects the payment.

Although the processes of a COD are based on the store's occurrence of a COD -> COD sale amount -> COD payment, there is a need to take cases like order cancellations mid-delivery process, or returns after COD transactions have been completed, into consideration. The POS will transmit the transaction status regarding these 5 states (Occurred, Sales, Payment, Cancel, Returned) into the host system. Aside from managing the logistical status, the host system can also manage the item's logistic routes such as the delivery store branch or to which store branch to relay to.

4.3.1 Scenario: Future Order with Partial Payment (V3.0)

Brief Description

Order Placed today for next Friday's lunch with downpayment made.

Scenario Description

Fred ordered 12 pizzas to be delivered next Friday for the boss's promotion lunch at 123 E. Main St., London, England. He paid a £12.00 deposit. The remaining amount will be paid on delivery.

Data

4.3.1 Conformance XML Instance Document – Future Order with Partial Payment

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Good Pizza Palace</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Pizzas -->
            <SaleForDelivery>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>120.00</ExtendedAmount>
               <Quantity>12</Quantity>
               <OrderItemStatus>Sent</OrderItemStatus>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Deposit>
               <Amount>12.00</Amount>
            </Deposit>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <Delivery>
            <Address>
               <AddressLine>123 E Main St</AddressLine>
               <City>London</City>
            </Address>
            <PreferredDateTime>2006-10-07T09:01:00</PreferredDateTime>
            <AmountToCollect>108.00</AmountToCollect>
         </Delivery>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.3.2 Scenario: Occurrence of a C.O.D. – Delivery Orders (V3.0)

Brief Description

Telephone orders for product delivery (typically food) are placed and the order is entered into the system. Payment is made by cash or credit card when the food is delivered to the customer.

Scenario Description

Atul orders 6 hamburgers from The Hamburger House to be delivered in time for the big game at his house of 123 Main Street, Mustang.

4.3.2 Conformance XML Instance Document — Telephone Order with Payment On Delivery

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
 MajorVersion="6" MinorVersion="0" FixVersion="0"
 xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
 <Transaction>
  <BusinessUnit>
   <UnitID>The Hamburger House</UnitID>
  </BusinessUnit>
  <WorkstationID>Telephone</WorkstationID>
  <SequenceNumber>4294967295</SequenceNumber>
  <CustomerOrderTransaction TransactionStatus="Suspended">
   <LineItem>
    <!-- Hamburgers -->
    <SaleForDelivery>
     <POSIdentity>
      <POSItemID>01234567890123</POSItemID>
     </POSIdentity>
     <ExtendedAmount>30.00</ExtendedAmount>
     <Quantity>6</Quantity>
     <OrderItemStatus>Sent</OrderItemStatus>
    </SaleForDelivery>
    <SequenceNumber>1</SequenceNumber>
   </LineItem>
   <Delivery>
    <Address>
     <AddressLine>123 E Main St</AddressLine>
     <City>Mustang</City>
    </Address>
    <PreferredDateTime>2006-10-07T09:01:00</PreferredDateTime>
   </Delivery>
  </CustomerOrderTransaction>
 </Transaction>
</POSLog>
```

4.3.3 Scenario: Occurrence of a C.O.D. – Catering Orders (V3.0)

Brief Description

Catering orders for product delivery (typically food and services) are placed and the order is entered into the POS system. Payment is made by cash or credit/debit card when the food and services are delivered to the customer.

Scenario Description

Delayna ordered $20.00 of Lasagna from Little Italy for her wedding shower next Wednesday.

4.3.3 Conformance XML Instance Document — Catering Orders

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Little Italy</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Lasagna -->
            <SaleForDelivery>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>20.00</ExtendedAmount>
               <OrderItemStatus>Sent</OrderItemStatus>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <Delivery>
            <Address>
               <AddressLine>123 E Main St</AddressLine>
               <City>Mustang</City>
            </Address>
            <PreferredDateTime>2006-10-07T09:01:00</PreferredDateTime>
         </Delivery>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.3.4 Scenario: Delivery to the Table (V2.2)

Brief Description

The waitperson directs the guest(s) to a table.
The order is sent to the kitchen via the Order Entry System.

When the meal is ready, the waitperson serves it to the table.
After that, the guest may make an additional order.
The POS terminal receives all the above information, and consolidates them by table.
At the check out, the POS terminal calculates the total amount according to the information, and stores them into the POSLog.

Data

- The entity below contains the information required at the restaurant.

4.3.4 Conformance XML Instance Document — Delivery to the Table

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Message ">2000-10-
25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Japanese St y le    SUKIYAKI  -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <MerchandiseHierarchy
Level="Department">SUKIYAKI</MerchandiseHierarchy>
               <ExtendedAmount>300</ExtendedAmount>
               <Quantity>3</Quantity>
               <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>300</Amount>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <Foodservice DestinationType="DineIn">
            <TableSection>B1</TableSection>
            <TableID>1</TableID>
            <CheckInTime>2001-09-16T19:05:00</CheckInTime>
            <CheckOutTime>2001-09-16T21:00:00</CheckOutTime>
```

```
            <OrderTime>2001-09-16T19:15:00</OrderTime>
            <ServeTime>2001-09-16T19:45:00</ServeTime>
            <Gratuity>30</Gratuity>
            <TableCharge>10</TableCharge>
         </Foodservice>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.3.5 Scenario: Home Delivery Sale (V2.2)

Brief Description

A customer calls up a pizza parlor and orders a pizza to be delivered to their home

Richard's Pizzaria Oklahoma City, Ok	
Order #10006	10/25/2000 11:49AM
Large Pizza	13.50
Sub Total	13.50
Tax	.50
Total	14.00
Deliver to: Jane Doe 1420 Main Street Mustang, Ok (100)555-1234	

Figure 10: Sale to be Delivered Receipt Example

4.3.5 Conformance XML Instance Document – Delivery Sale

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Pizza</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime TypeCode="Message">2000-10-
25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
```

```
      <CustomerOrderTransaction TransactionStatus="Delivered">
        <LineItem>
          <SaleForDelivery>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>13.50</ExtendedAmount>
            <OrderItemStatus>Sent</OrderItemStatus>
          </SaleForDelivery>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tax>
            <Amount>.50</Amount>
          </Tax>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender>
            <Amount>14.00</Amount>
          </Tender>
          <SequenceNumber>3</SequenceNumber>
        </LineItem>
        <Delivery>
          <Address>
            <AddressLine>128 Main Street</AddressLine>
            <City>Mustang</City>
          </Address>
          <TelephoneNumber>
            <AreaCode>100</AreaCode>
            <LocalNumber>5551234</LocalNumber>
          </TelephoneNumber>
        </Delivery>
      </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.3.6 Scenario: Occurrence of a C.O.D.

Brief Description

The operator does the usual item registration, then registers the deposit, and prints out the COD voucher. The COD voucher is made up of 4 vouchers for each and every division. One is a customer's copy, one is a store copy, one is a delivery/distribution center copy and one is a delivery voucher. The POS will store the COD voucher number, deposit, balance, and transaction type in the POSLog.

- The following entities are additions to the aforementioned unsettled transaction.
  - Document Number
    Stores the COD voucher number.
  - Deposit
    Stores the deposit.
  - Balance
    Stores the balance (trade debtor).

- Classification
  Stores the transaction type.
- Due Date
  Stores the final payment's due date

4.3.6 Conformance XML Instance Document – Occurrence of a COD

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CODVoucherNumber>12341234</CODVoucherNumber>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <SaleForDelivery>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>50.00</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Deposit>
               <AccountNumber>12341234</AccountNumber>
               <Amount>5.00</Amount>
               <BalanceDue>45.00</BalanceDue>
            </Deposit>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <Delivery>
            <Address>
               <AddressLine>123 Main Street</AddressLine>
               <City>Mustang</City>
            </Address>
            <DueDate>2005-08-22</DueDate>
            <TrackingNumber>asdf238940</TrackingNumber>
            <Courier TypeCode="Ground">My Local Truck Company</Courier>
         </Delivery>
      </CustomerOrderTransaction>
```

```
   </Transaction>
</POSLog>
```

4.3.7 Scenario: Add C.O.D. Shipment

Brief Description

The COD shipment process is carried out at the point were the item is shipped from the delivery/distribution division and their operator retrieves the COD voucher information and inputs the shipping company/carrier name. The POS updates the status and stores it in the PosLog.

Data

- The following entities are additions to the aforementioned unsettled transaction.
  - Document Number
    Stores the COD voucher number.
  - Classification
    Stores the transaction type.
  - Company ID
    Stores the shipping company/carrier code.

4.3.7 Conformance XML Instance Document – Add COD Shipment

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0" FixVersion="0">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CODVoucherNumber>12341234</CODVoucherNumber>
      <CustomerOrderTransaction TransactionStatus="Delivered">
         <Delivery>
            <Address>
               <AddressLine>123 Main Street</AddressLine>
               <City>Mustang</City>
            </Address>
            <DueDate>2005-08-22</DueDate>
            <TrackingNumber>asdf238940</TrackingNumber>
            <Courier TypeCode="Ground">My Local Truck Company</Courier>
            <ReceivingBusinessUnit
TypeCode="RetailStore">100</ReceivingBusinessUnit>
         </Delivery>
      </CustomerOrderTransaction>
```

```
    </Transaction>
</POSLog>
```

4.3.8 Scenario: C. O. D. Completion

Brief Description

The Shipping Company/Carrier delivers the item to the shipping address, and the order is received in exchange for the balance due. Then, the amount is deposited by the shipping company/carrier to the store (sender). After the store has confirmed the deposit, the COD Voucher is retrieved from the POS and the deposit amount is stored in the PosLog. At this point, the regular transaction is completed.

Data

- The following entities are additions to the aforementioned unsettled transaction.
  - Document number
    Stores the COD voucher number.
  - Classification
    Stores the transaction type. .
  - Receipt branch ID
    Stores the balance receiving branch code

4.3.8 Conformance XML Instance Document –COD Completion

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CODVoucherNumber>12341234</CODVoucherNumber>
      <RetailTransaction>
         <LineItem>
            <SaleForDelivery>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>50.00</ExtendedAmount>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>50.00</Amount>
            </Tender>
```

```
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <Delivery>
            <Address>
               <AddressLine>123 Main Street</AddressLine>
               <City>Mustang</City>
            </Address>
            <DueDate>2005-08-22</DueDate>
            <TrackingNumber>asdf238940</TrackingNumber>
            <Courier TypeCode="Ground">My Local Truck Company</Courier>
         </Delivery>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.3.9 Scenario: C. O. D. Cancellation (V3.0)

Brief Description

In the case of a customer indicating their intention of canceling their shipping order before an item is shipped by the shipping company/carrier, the delivery process of the item will be cancelled, and the voucher number closed. Cancellation of the trade debtor must also be carried out. In the case of any deposits having been made, they would need to be refunded.

Data

- The following entities are additions to the aforementioned unsettled transaction.
  - Document number
    Stores the COD voucher number.
  - Classification
    Stores the transaction type.
  - Deposit
    Deposited amount is stored.

4.3.9 Conformance XML Instance Document – COD Cancellation

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CODVoucherNumber>12341234</CODVoucherNumber>
      <CustomerOrderTransaction TransactionStatus="Canceled">
         <LineItem CancelFlag="true">
```

```
            <SaleForDelivery>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>500.00</ExtendedAmount>
               <OrderItemStatus>Hold</OrderItemStatus>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem CancelFlag="true">
            <Deposit>
               <AccountNumber>12341234</AccountNumber>
               <Amount>50.00</Amount>
               <BalanceDue>450.00</BalanceDue>
            </Deposit>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender TypeCode="Refund">
               <Amount>50.00</Amount>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.3.10 Scenario: Customer Order with Multiple Operators (V3.0)

Order entry is preformed by one operator at one terminal, Payment and product delivery are preformed as a separate operation at the same or a different terminal.

Brief Description

Product is entered into the system. The transaction is Stored/Saved until the customer arrives on-site to “pick up” the order. At that time, the order is recalled and re-opened (on the same or on a different terminal, by the same or a different operator). If needed, additional product can be added to or changes made to the order. If/when order entry is completed; Payment is made by cash, credit card/debit/gift card, house charge or other. If applicable, a cash or charge “Tip” may be added to the transaction total (Order Processing). The order is completed, and Product Delivery is done. When the process is completed, the order is closed and archived. Taxing rules are determined based on appropriate Taxation parameters. Inventory usage is determined based on appropriate recipe usage including off-premises packaging.

4.3.10 Conformance XML Instance Document — Customer Order with Multiple Operators

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
```

```
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID OperatorType="OrderTaker">John</OperatorID>
      <OperatorID OperatorType="Cashier">Fred</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>5.00</ExtendedAmount>
               <OrderItemStatus>Hold</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>5.00</Amount>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.4 USE CASE: Customer Picks Up the Order at the Store

4.4.1 Scenario: Call-In Order with Customer Picking Up the Order at the Store (V3.0)

Brief Description

Customer calls in an order for Chinese food. They will pick it up and take it home

4.4.1 Conformance XML Instance Document – Call-In Order with Customer Picking Up the Order at the Store

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
```

```
            <UnitID>Chinese Restaurant</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <CustomerOrderTransaction TransactionStatus="Suspended">
            <LineItem>
                <!-- Chinese Dinner -->
                <SaleForPickup>
                    <POSIdentity POSIDType="SKU">
                        <POSItemID>123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>7.00</ExtendedAmount>
                    <OrderItemStatus>Hold</OrderItemStatus>
                </SaleForPickup>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tender>
                    <Amount>7.00</Amount>
                </Tender>
                <SequenceNumber>2</SequenceNumber>
            </LineItem>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.4.2 Scenario: Dine In and Pickup Order (V3.0)

Brief Description

Customer is dining in a restaurant and orders an item to take home to his wife.

4.4.2 Conformance XML Instance Document – Dine In and Pickup Order

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction CODFlag="true">
        <BusinessUnit>
            <UnitID>Chinese Restaurant</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
        <CustomerOrderTransaction TransactionStatus="Suspended">
            <LineItem>
                <!-- Eat In Dinner -->
```

```
            <Sale>
               <POSIdentity>
                  <POSItemID>456</POSItemID>
               </POSIdentity>
               <ExtendedAmount>6.00</ExtendedAmount>
               <OrderItemStatus>Delivered</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Take Home Dinner  -->
            <SaleForPickup>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>7.00</ExtendedAmount>
               <OrderItemStatus>Hold</OrderItemStatus>
            </SaleForPickup>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>13.00</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.5 USE CASE: USE CASE: Item Discounts with or without Tax Discounting

4.5.1 Scenario: An item in an order has a Percentage discounts with tax discount applied to it if eaten in or if carried out (V3.0)

Brief Description

A customer orders a Sandwich, Side Item and Drink from those product groups. The sandwich is given a 20% discount and tax is applied to the post-discount amount of the sale if eaten in or carried out. The “taxable amount” for use at Order Processing time for the sale if totaled as Eat In or totaled a Carry Out is reduced by the amount of the discount.

Scenario Description

Fred bought a Sandwich Combo at His Local Sandwich Shop that was on sale for 20% discount to take home (taxed).

4.5.1 Conformance XML Instance Document — Percentage discounts with tax applied to carry out

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>His Local Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Sandwich Combo -->
            <Sale>
               <POSIdentity>
                  <POSItemID>456</POSItemID>
               </POSIdentity>
               <!-- The extended amount includes the percent discount -->
               <ExtendedAmount>6.00</ExtendedAmount>
               <RetailPriceModifier>
                  <SequenceNumber>1</SequenceNumber>
                  <Percent Action="Subtract">20</Percent>
               </RetailPriceModifier>
               <Combo>
                  <!-- Sandwich -->
                  <Member>
                     <Sale>
                        <ItemID>10</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
                     </Sale>
                  </Member>
                  <!-- Chips -->
                  <Member>
                     <Sale>
                        <ItemID>15</ItemID>
                        <ExtendedAmount>00</ExtendedAmount>
                     </Sale>
                  </Member>
                  <!-- Drink -->
                  <Member>
                     <Sale>
                        <ItemID>1</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
                     </Sale>
```

```
            </Member>
          </Combo>
          <OrderItemStatus>Delivered</OrderItemStatus>
        </Sale>
        <SequenceNumber>1</SequenceNumber>
      </LineItem>
      <!-- Carry out gets taxed -->
      <LineItem>
        <Tax>
          <Amount>.25</Amount>
        </Tax>
        <SequenceNumber>2</SequenceNumber>
      </LineItem>
      <LineItem>
        <Tender>
          <Amount>6.25</Amount>
        </Tender>
        <SequenceNumber>3</SequenceNumber>
      </LineItem>
      <Foodservice DestinationType="ToGo">
        <PartyName>Fred</PartyName>
      </Foodservice>
    </CustomerOrderTransaction>
  </Transaction>
</POSLog>
```

4.5.2 Scenario: An item in an order has a currency discounts with no tax discount applied if eaten in (V3.0)

Brief Description

A customer orders a Sandwich, Side Item and Drink from those product groups. The side item is given a $.50 discount and tax is applied to the post-discount amount of the sale if carried out. The “taxable amount” for use at Order Processing time for the sale if the order is totaled as Eat-In, is not reduced by the discount amount. The “taxable amount” for use at Order Processing time for the sale if it is totaled as Carry Out is reduced by the discount amount.

Scenario Description

Fred bought a Sandwich Combo at His Local Sandwich Shop that was on sale for 20% discount to eat in (non-taxed)

4.5.2 Conformance XML Instance Document — currency discounts – with no tax discount applied

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
```

```
      <BusinessUnit>
         <UnitID>His Local Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Sandwich Combo -->
            <Sale>
               <POSIdentity>
                  <POSItemID>456</POSItemID>
               </POSIdentity>
               <!-- The extended amount includes the percent discount -->
               <ExtendedAmount>6.00</ExtendedAmount>
               <RetailPriceModifier>
                  <SequenceNumber>1</SequenceNumber>
                  <Percent Action="Subtract">20</Percent>
               </RetailPriceModifier>
               <Combo>
                  <!-- Sandwich -->
                  <Member>
                     <Sale>
                        <ItemID>10</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
                     </Sale>
                  </Member>
                  <!-- Chips -->
                  <Member>
                     <Sale>
                        <ItemID>15</ItemID>
                        <ExtendedAmount>00</ExtendedAmount>
                     </Sale>
                  </Member>
                  <!-- Drink -->
                  <Member>
                     <Sale>
                        <ItemID>1</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
                     </Sale>
                  </Member>
               </Combo>
               <OrderItemStatus>Delivered</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>6.00</Amount>
            </Tender>
```

```
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <Foodservice DestinationType="DineIn">
            <TableID>4</TableID>
         </Foodservice>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.5.3 Scenario: Transaction Level Discount (V3.0)

Brief Description

Scenario Description

A customer orders 3 pizzas and receives a discount on the whole transaction of either a fixed amount or percentage for any reasons.

4.5.3 Conformance XML Instance Document – Transaction Level Discount

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction CODFlag="true">
      <BusinessUnit>
         <UnitID>His Local Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Sandwich Combo -->
            <Sale>
               <POSIdentity>
                  <POSItemID>456</POSItemID>
               </POSIdentity>
               <!-- The extended amount includes the percent discount -->
               <ExtendedAmount>6.00</ExtendedAmount>
               <RetailPriceModifier>
                  <SequenceNumber>1</SequenceNumber>
                  <Percent Action="Subtract">20</Percent>
               </RetailPriceModifier>
               <Combo>
                  <!-- Sandwich -->
                  <Member>
                     <Sale>
                        <ItemID>10</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
```

```
                </Sale>
            </Member>
            <!-- Chips -->
            <Member>
                <Sale>
                    <ItemID>15</ItemID>
                    <ExtendedAmount>00</ExtendedAmount>
                </Sale>
            </Member>
            <!-- Drink -->
            <Member>
                <Sale>
                    <ItemID>1</ItemID>
                    <ExtendedAmount>0.00</ExtendedAmount>
                </Sale>
            </Member>
        </Combo>
        <OrderItemStatus>Sent</OrderItemStatus>
    </Sale>
    <SequenceNumber>1</SequenceNumber>
</LineItem>
<LineItem>
    <Tender>
        <Amount>6.00</Amount>
    </Tender>
    <SequenceNumber>3</SequenceNumber>
</LineItem>
<Foodservice DestinationType="DineIn">
    <TableID>4</TableID>
</Foodservice>
</CustomerOrderTransaction>
</Transaction>
</POSLog>
```

4.6 USE CASE: Multiple Revenue Centers Customer Order Transactions

4.6.1 Scenario: Multiple Revenue Centers — Purchase at the Bar and Pay at the Table (V3.0)

Brief Description

Purchase at the Bar, an additional Purchase at Table and Pay at the Table for both – The Bar portion of the order is taken on a bar register (register A) by Operator A totaled as a Bar Order, and the check detail is saved as part of an Open Check. The check is recalled by Operator B at a dining room terminal (Terminal C) and additional items are added to the check and it is Totaled as a Dining Room Order. The check detail is saved as part of an Open Order. The check is later recalled by Operator C and Tendered on Terminal E. Each operator and terminal ID is tracked as to the portion of the check that was attributed to each operator and where the operation was preformed.

Richard's Deli Oklahoma City, Ok		Richard's Deli Oklahoma City, Ok	
Order #10006 Bar Tab	10/25/2000 11:55AM	Order #10006	10/25/2000 11:55AM
Brennivin (2 @ 3.50)	7.00	Brennivin (Bar Tab)	7.00
		Alligator Sandwich	3.50
		Kangaroo	6.00
Sub Total	7.00	Sub Total	16.50
Tax	.50	Tax	1.00
Total	7.50	Total	17.50
Balance Due	7.50	Tendered	17.50

Figure 11: Purchase at the Bar and Pay at the Table Receipts

4.6.1a Conformance XML Instance Document – Purchase at the Bar

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS1</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Brennivin -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>9876</POSItemID>
               </POSIdentity>
               <ExtendedAmount>7.00</ExtendedAmount>
               <Quantity>2</Quantity>
               <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
      <RevenueCenterID>Bar Tab</RevenueCenterID>
   </Transaction>
</POSLog>
```

4.6.1b Conformance XML Instance Document –Pay at the Table

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Bar Tab -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>7.00</ExtendedAmount>
               <Quantity>2</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Alligator Sandwich -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>234</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.50</ExtendedAmount>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Kangaroo -->
            <Sale>
               <POSIdentity POSIDType="SKU">
                  <POSItemID>678</POSItemID>
               </POSIdentity>
               <ExtendedAmount>6.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
```

```
            <Amount>1.00</Amount>
            <Percent>7</Percent>
          </Tax>
          <SequenceNumber>4</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender>
            <Amount>17.50</Amount>
          </Tender>
          <SequenceNumber>5</SequenceNumber>
        </LineItem>
      </RetailTransaction>
      <RevenueCenterID>Dinning Room</RevenueCenterID>
    </Transaction>
</POSLog>
```

4.7 USE CASE: Suspending a transaction

4.7.1 Scenario: Suspending a transaction (V3.0)

Brief Description

Product is entered into the system by Operator B on Terminal A, and payment information is taken for cash, credit card, house charge or other means. The transaction is suspended until the customer arrives on-site to “pick up” the order. When the customer arrives at the store, the Stored/Saved transaction is recalled and re-opened at terminal a store based terminal.. It can be recalled by the same or a different operator at the same or a different terminal. If needed, additional product can be added to or changes made to the order. If/when order entry is completed; Payment is made by cash, credit card/debit/gift card, house charge or other. If applicable, a cash or charge “Tip” may be added to the transaction total. The order is completed, and Product Delivery is performed. When the process is completed, the order is closed and archived. Taxing rules are determined based on appropriate Taxation parameters. Inventory usage is determined based on appropriate recipe usage including off-premises packaging.

Scenario Description

Customer calls restaurant for a take out order, Clerk enters order into POS system to allow order to be fulfilled. Clerk puts transaction on hold. A different clerk at completes the transaction when customer arrives to pick up food.

Alternate Scenario Description

Customer calls restaurant for a delivery order, Clerk enters order into POS system to allow order to be fulfilled. Clerk puts transaction on hold. Delivery person delivers product and returns to restaurant and completes the transaction.

Pre-Conditions

Predefined items available for sale

Post-Conditions

Modification of inventory position based on recipe

4.7.1 Conformance XML Instance Document –Suspending a Transaction

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Joe's TakeOut</UnitID>
      </BusinessUnit>
      <WorkstationID>POS1</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction ">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>Joe</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>Chicken Dinner</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.95</ExtendedAmount>
               <OrderItemStatus>Sent</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>Bucket of Wings</POSItemID>
               </POSIdentity>
               <ExtendedAmount>9.99</ExtendedAmount>
               <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.7.2 Scenario: Delete Suspend Transaction (V3.0)

Brief Description

A transaction is started and suspended before it is Totaled or Tendered. The order is then recalled and Deleted e.g. removed from the system with no raw product usage, cash in drawer impact or notification sent to the kitchen for order production. The value of the deleted order is tracked in cash reporting as a deleted sale

Scenario Description

A customer has placed an order for some wings and a Chicken dinner; prior to fulfillment of the order (pick up or delivery) the order is canceled. The order taker cancels the entire

sale before the order is totaled. The effect is as if the products were never entered in the sale other than the currency value of the Sale Cancels for that operator is increased by the order value.

Pre-Conditions
Sales transaction placed in suspend mode

Post-Conditions
Inventory adjustment may be required based on the level of completion in preparing the order

4.7.2 Conformance XML Instance Document – Delete Suspended Transaction

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Joe's TakeOut</UnitID>
      </BusinessUnit>
      <WorkstationID>POS1</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime TypeCode="Transaction ">2001-08-
13T09:01:00</POSLogDateTime>
      <OperatorID>Joe</OperatorID>
      <CustomerOrderTransaction TransactionStatus="SuspendedDeleted">
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>Chicken Dinner</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.95</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>Bucket of Wings</POSItemID>
               </POSIdentity>
               <ExtendedAmount>9.99</ExtendedAmount>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </CustomerOrderTransaction>
   </Transaction>
</POSLog>
```

4.8 USE CASE: Combo Meals Sales

4.8.1 Scenario: Completed Combo Purchase (V3.0)

Brief Description

Jackson walked into Bubba's Burger Joint and ordered a Combo #1, hamburger, fries and a drink. For which he pays $4.75.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item, after substitutions have been applied.
  - The extended amount (i.e. Unit price * the number of items being sold)

4.8.1 Conformance XML Instance Document — Completed Combo Purchase

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase of Combo Item without substitution -->
<!--Note: Individual Collection members are listed, even though there is no substitution -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Bubba's Burger Joint</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="ItemCollection">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <Description>Hamburger Value Pack</Description>
               <ExtendedAmount>4.75</ExtendedAmount>
               <Combo>
                  <Member>
                     <Sale>
                        <!-- Hamburger -->
                        <POSIdentity>
                           <POSItemID>50000042</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>3.00</ExtendedAmount>
```

```
                </Sale>
              </Member>
              <Member>
                <Sale>
                  <!-- Fries -->
                  <POSIdentity>
                    <POSItemID>50000052</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0.75</ExtendedAmount>
                </Sale>
              </Member>
              <Member>
                <Sale>
                  <!-- Medium Soft Drink -->
                  <POSIdentity>
                    <POSItemID>50000060</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>1.00</ExtendedAmount>
                </Sale>
              </Member>
            </Combo>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

4.8.2 Scenario: Modifying an Entrée Item with Equivalent Side Items (V2.2)

Brief Description

The entrée item must retain its relationship to its sides so that the meal can be delivered to the table correctly with the correct combination of entrée. The side item does not 'change' the entrée per se, but is a peer item that must accompany the entrée. This is an equivalent item to the original item in the kit. For example, chose the Hakarl and get a choice of 2 sides from a list of corn, baked potato, house salad, or green beans

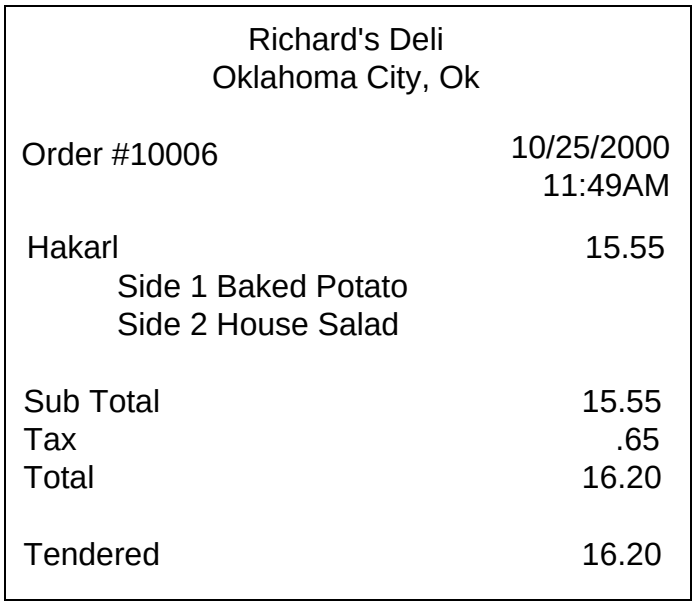


Figure 12: Modifying an Entrée Item with Equivalent Side Items Receipt Example

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item
  - The extended amount (i.e. Unit price * the number of items being sold)
- Substitution data, including:
  - An identifier for the item being added to the kit item.
  - A count of how many of those items is being added to the kit item.
  - The monetary amount the item being added is contributing to the kit price.

4.8.2 Conformance XML Instance Document — Modifying an Entrée Item with Equivalent Side Items

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Fred's Fish Market</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
```

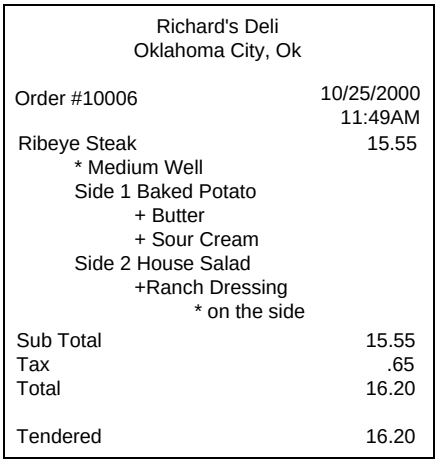
```
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
        <LineItem>
          <!-- Harkal Dinner -->
          <Sale>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>15.55</ExtendedAmount>
            <Combo>
              <Member>
                <!-- harkal -->
                <Sale>
                  <POSIdentity>
                    <POSItemID>01234567890123</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0</ExtendedAmount>
                  <Quantity>1</Quantity>
                </Sale>
              </Member>
              <Member>
                <!--Side Order - Baked Potato -->
                <Sale>
                  <POSIdentity>
                    <POSItemID>3465</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0</ExtendedAmount>
                </Sale>
              </Member>
              <Member>
                <!--Side Order  - Side Salad -->
                <Sale>
                  <POSIdentity>
                    <POSItemID>6534</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0</ExtendedAmount>
                </Sale>
              </Member>
            </Combo>
            <OrderItemStatus>Dispatch</OrderItemStatus>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.8.3 Scenario: Modifying Side Items without Additional Cost (V2.2)

Brief Description

The side items must retain relationship to their parent (entrée) item.
It also shows the sides are chosen from a group of side dishes. Therefore they are part a the merchandise hierarchy.
(On the receipt show one of the ingredients being charged a price and may be discounted because of the meal. For example the sour cream could be $.99 if ordered separately, but because it was ordered with the steak it may be free)

(A separate scenario is needed to cover chargable ingredients. For example the baked potate might cost $1.99)



Richard's Deli
Oklahoma City, Ok

Order #10006	10/25/2000 11:49AM
Ribeye Steak	15.55
* Medium Well	
Side 1 Baked Potato	
+ Butter	
+ Sour Cream	
Side 2 House Salad	
+Ranch Dressing	
* on the side	
Sub Total	15.55
Tax	.65
Total	16.20
Tendered	16.20

Figure 13: Modifying Side Items Receipt Example

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item, after substitutions have been applied.
  - The extended amount (i.e. Unit price * the number of items being sold)
- Substitution data, including:
  - An identifier for the item being removed from the kit item.
  - A count of how many of those items is being removed from the kit item.
  - The monetary amount the item being removed contributes to the kit price.
  - An identifier for the item being added to the kit item.
  - A count of how many of those items is being added to the kit item.
  - The monetary amount the item being added is contributing to the kit price.

4.8.3 Conformance XML Instance Document — Modifying Side Items without Additional Cost

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Ribeye Steak -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>15.55</ExtendedAmount>
               <Modification Action="PreparationInstructions">
                  <Name>Medium Well</Name>
               </Modification>
               <Combo>
                  <Member>
                     <Sale>
                        <MerchandiseHierarchy>SIde 1 Sub Menu</MerchandiseHierarchy>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Item>
                           <!-- Bake Potato -->
                           <POSIdentity>
                              <POSItemID>12431234</POSItemID>
                           </POSIdentity>
                           <ExtendedAmount>00.00</ExtendedAmount>
                           <Item Action="Add">
                              <!-- Butter -->
                              <POSIdentity>
                                 <POSItemID>2345</POSItemID>
                              </POSIdentity>
                              <ExtendedAmount>0</ExtendedAmount>
                           </Item>
                           <Item Action="Add">
                              <!-- Sour Cream -->
                              <POSIdentity>
                                 <POSItemID>5678</POSItemID>
                              </POSIdentity>
```

```
                        <ExtendedAmount>0</ExtendedAmount>
                    </Item>
                </Item>
            </Sale>
        </Member>
    </Combo>
    <Combo>
        <Member>
            <Sale>
                <MerchandiseHierarchy>Side 2 sub menu</MerchandiseHierarchy>
                <ExtendedAmount>0</ExtendedAmount>
                <!--House Salad -->
                <Item>
                    <POSIdentity>
                        <POSItemID>Dsagfjh</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>00.00</ExtendedAmount>
                    <Item Action="Add">
                        <!-- Ranch Dressing -->
                        <POSIdentity>
                            <POSItemID>6789</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Modification Action="ServingInstructions">
                            <Name>On the side</Name>
                        </Modification>
                    </Item>
                </Item>
            </Sale>
        </Member>
    </Combo>
    <OrderItemStatus>Dispatch</OrderItemStatus>
</Sale>
<SequenceNumber>1</SequenceNumber>
</LineItem>
</CustomerOrderTransaction>
</Transaction>
</POSLog>
```

4.8.4 Scenario: Modifying Items with Additional Cost (V3.0)

Brief Description

The side items must retain relationship to their parent (entrée) item.
(Shows the recursive relationship in the schema)

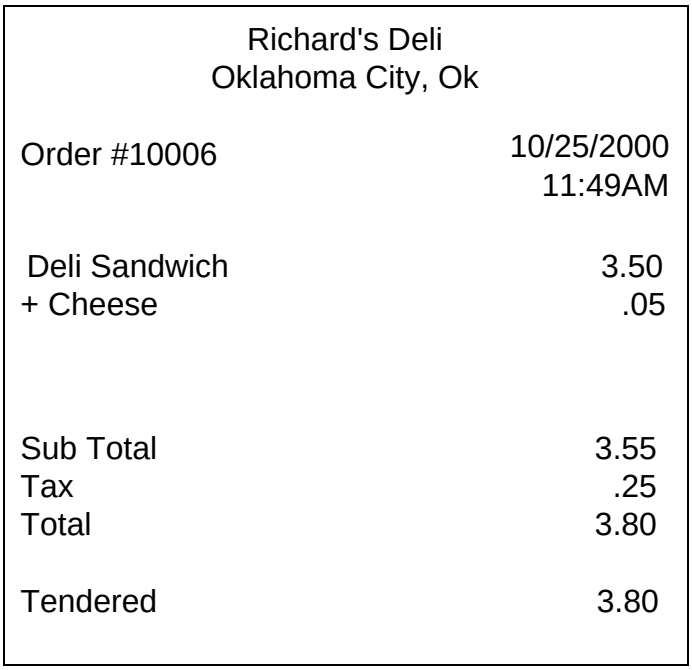


Figure 14: Modifying Items Receipt Example

4.8.4 Conformance XML Instance Document — Modifying Items with Additional Cost

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <CustomerOrderTransaction TransactionStatus="Suspended">
         <LineItem>
            <!-- Deli Sandwich -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.55</ExtendedAmount>
               <Item Action="Add">
                  <!-- Cheese -->
                  <POSIdentity>
                     <POSItemID>5678</POSItemID>
                  </POSIdentity>
```

```
                <ExtendedAmount Action="Add">.05</ExtendedAmount>
              </Item>
              <OrderItemStatus>Dispatch</OrderItemStatus>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
          </LineItem>
          <LineItem>
            <Tax>
              <Amount>25</Amount>
            </Tax>
            <SequenceNumber>2</SequenceNumber>
          </LineItem>
          <LineItem>
            <Tender>
              <Amount>3.55</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
          </LineItem>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

4.8.5 Scenario: Combo Meal Removing Multiple Items (V3.0)

Brief Description

This example shows how multiple items within a combo can be changed, having some items removed and others added with a corresponding change in the cost of the combo

Richard's Deli Oklahoma City, Ok	
Order #10006	10/25/2000 11:49AM
Deli Sandwich - Mayonnaise - Mushrooms	3.55
Sub Total	3.55
Tax	.25
Total	3.80
Tendered	3.80

Figure 15: Combo Meal Removing Multiple Items Receipt Example

4.8.5 Conformance XML Instance Document — Combo Meal Removing Multiple Items

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Ricardo's taco Stand</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Extra Value Combo Meal #9 -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.55</ExtendedAmount>
               <Combo>
                  <Member>
                     <!--Taco -->
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Item Action="Subtract">
                           <!-- Remove Lettuce -->
                           <POSIdentity>
                              <POSItemID>01234567890123</POSItemID>
                           </POSIdentity>
                           <ExtendedAmount>0</ExtendedAmount>
                        </Item>
                     </Sale>
                  </Member>
                  <Member Action="IsPartOf">
                     <!-- Taco -->
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Item Action="Subtract">
                           <!-- Remove Lettuce  -->
```

```
                        <POSIdentity>
                            <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                    </Item>
                </Sale>
            </Member>
            <Member Action="IsPartOf">
                <!-- Soft Drink  -->
                <Sale>
                    <POSIdentity>
                        <POSItemID>3465</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>0</ExtendedAmount>
                    <RetailPriceModifier>
                        <SequenceNumber>1</SequenceNumber>
                        <ReasonCode>Medium</ReasonCode>
                    </RetailPriceModifier>
                </Sale>
            </Member>
            <Member Action="AddsTo">
                <!-- Taco -->
                <Sale>
                    <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount Action="Add">.95</ExtendedAmount>
                    <Item Action="Subtract">
                        <!-- Remove Lettuce -->
                        <POSIdentity>
                            <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                    </Item>
                </Sale>
            </Member>
        </Combo>
    </Sale>
    <SequenceNumber>1</SequenceNumber>
</LineItem>
<LineItem>
    <Tax>
        <Amount>.25</Amount>
        <Percent>7</Percent>
    </Tax>
    <SequenceNumber>2</SequenceNumber>
</LineItem>
<LineItem>
    <Tender>
        <Amount>4.50</Amount>
    </Tender>
```

```
            <SequenceNumber>3</SequenceNumber>
          </LineItem>
        </RetailTransaction>
    </Transaction>
</POSLog>
```

4.8.6 Scenario: Combo Meal Containing Multiple Items (V2.2)

Brief Description

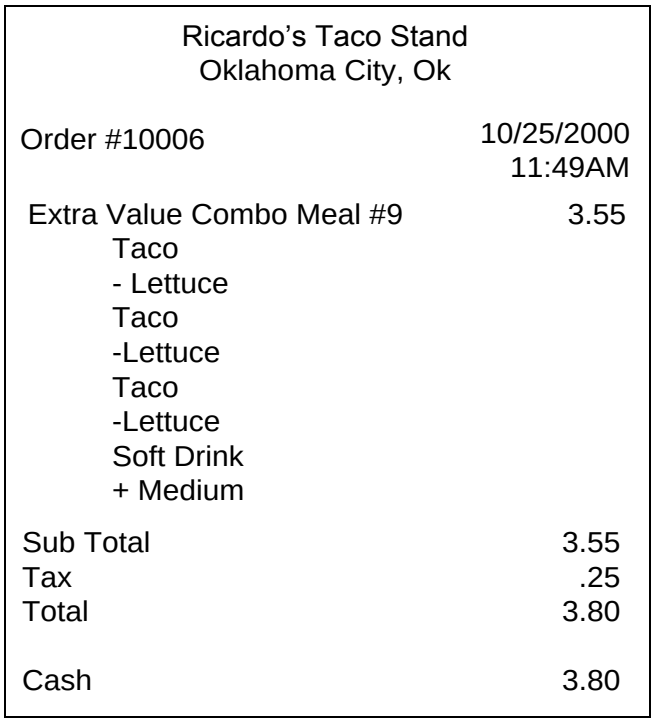


Figure 16: Combo Meal Containing Multiple Items Receipt Example

4.8.6 Conformance XML Instance Document - Combo Meal Containing Multiple Items

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd" MajorVersion="6" MinorVersion="0" FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>Ricardo's Taco Stand</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime TypeCode="Message">2000-10-
25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
```

```
<LineItem>
   <!-- Extra Value Combo Meal #9 -->
   <Sale ItemType="Stock">
      <POSIdentity>
         <POSItemID>01234567890123</POSItemID>
      </POSIdentity>
      <ExtendedAmount>3.55</ExtendedAmount>
      <Kit>
         <Member Action="IsPartOf">
            <!-- Taco -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>0</ExtendedAmount>
               <Kit>
                  <!-- Remove Lettuce -->
                  <Member Action="IsRemovedFrom">
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                     </Sale>
                  </Member>
               </Kit>
            </Sale>
         </Member>
         <Member Action="IsPartOf">
            <!-- Taco -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>0</ExtendedAmount>
               <Kit>
                  <!-- Remove Lettuce -->
                  <Member Action="IsRemovedFrom">
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                     </Sale>
                  </Member>
               </Kit>
            </Sale>
         </Member>
         <Member Action="IsPartOf">
            <!-- Taco -->
            <Sale>
```

```
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Kit>
                           <!-- Remove Lettuce -->
                           <Member Action="IsRemovedFrom">
                              <Sale>
                                 <POSIdentity>
                                    <POSItemID>01234567890123</POSItemID>
                                 </POSIdentity>
                                 <ExtendedAmount>0</ExtendedAmount>
                              </Sale>
                           </Member>
                        </Kit>
                     </Sale>
                  </Member>
                  <Member Action="IsPartOf">
                     <!-- Soft Drink -->
                     <Sale>
                        <POSIdentity>
                           <POSItemID>3465</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <RetailPriceModifier>
                           <SequenceNumber>1</SequenceNumber>
                           <ReasonCode>Medium</ReasonCode>
                        </RetailPriceModifier>
                     </Sale>
                  </Member>
               </Kit>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tax>
               <Amount>.25</Amount>
               <Percent>7</Percent>
            </Tax>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>3.80</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.8.7 Scenario: Combo Meal Containing Multiple Items, Some Added, Some Removed (V3.0)

Scenario Description

Ricardo's Taco Stand Oklahoma City, Ok	
Order #10006	10/25/2000 11:49AM
Extra Value Combo Meal #9	3.55
Taco - Lettuce	
Taco - Lettuce	
Soft Drink + Medium	
+ Taco + Lettuce	.95
Sub Total	4.50
Tax	.25
Total	4.75
Cash	4.75

Figure 17: Combo Meal Containing Multiple Items, Some Added, Some Removed Receipt Example

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item, after substitutions have been applied.
  - The extended amount (i.e. Unit price * the number of items being sold)
- Substitution data, including:
  - An identifier for the item being removed from the kit item.
  - A count of how many of those items is being removed from the kit item.
  - The monetary amount the item being removed contributes to the kit price.
  - An identifier for the item being added to the kit item.
  - A count of how many of those items is being added to the kit item.
  - The monetary amount the item being added is contributing to the kit price.

4.8.7 Conformance XML Instance Document — Combo Meal Containing Multiple Items, Some Added, Some Removed

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Ricardo's taco Stand</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Extra Value Combo Meal #9 -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>3.55</ExtendedAmount>
               <Combo>
                  <Member>
                     <!--Taco -->
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Item Action="Subtract">
                           <!-- Remove Lettuce -->
                           <POSIdentity>
                              <POSItemID>01234567890123</POSItemID>
                           </POSIdentity>
                           <ExtendedAmount>0</ExtendedAmount>
                        </Item>
                     </Sale>
                  </Member>
                  <Member Action="IsPartOf">
                     <!-- Taco -->
                     <Sale>
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                        <Item Action="Subtract">
                           <!-- Remove Lettuce  -->
```

```
                        <POSIdentity>
                            <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                    </Item>
                </Sale>
            </Member>
            <Member Action="IsPartOf">
                <!-- Soft Drink  -->
                <Sale>
                    <POSIdentity>
                        <POSItemID>3465</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>0</ExtendedAmount>
                    <RetailPriceModifier>
                        <SequenceNumber>1</SequenceNumber>
                        <ReasonCode>Medium</ReasonCode>
                    </RetailPriceModifier>
                </Sale>
            </Member>
            <Member Action="AddsTo">
                <!-- Taco -->
                <Sale>
                    <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount Action="Add">.95</ExtendedAmount>
                    <Item Action="Subtract">
                        <!-- Remove Lettuce -->
                        <POSIdentity>
                            <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0</ExtendedAmount>
                    </Item>
                </Sale>
            </Member>
        </Combo>
    </Sale>
    <SequenceNumber>1</SequenceNumber>
</LineItem>
<LineItem>
    <Tax>
        <Amount>.25</Amount>
        <Percent>7</Percent>
    </Tax>
    <SequenceNumber>2</SequenceNumber>
</LineItem>
<LineItem>
    <Tender>
        <Amount>4.50</Amount>
    </Tender>
```

```
            <SequenceNumber>3</SequenceNumber>
          </LineItem>
        </RetailTransaction>
    </Transaction>
</POSLog>
```

4.8.8 Scenario: Modify an Item in a Combo (V2.2)

Brief Description

Ricardo's Taco Stand Oklahoma City, Ok	
Order #10006	10/25/2000 11:49AM
Extra Value Combo Meal #9	3.55
Taco	
* Quantity 3	+.95
Soft Drink	
+ Medium	
Sub Total	4.50
Tax	.50
Total	5.00
Cash	5.00

Figure 18: Modify an Item in a Kit Receipt Example

4.8.8 Conformance XML Instance Document - Modify an Item in a Combo

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd" MajorVersion="6" MinorVersion="0" FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>Ricardo's Taco Stand</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>10006</SequenceNumber>
      <POSLogDateTime TypeCode="Message">2000-10-
25T11:49:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Extra Value Combo Meal #9 -->
            <Sale ItemType="Stock">
```

```
            <POSIdentity>
               <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>4.50</ExtendedAmount>
            <RetailPriceModifier MethodCode="PriceOverride">
               <SequenceNumber>1</SequenceNumber>
               <Amount Action="Add">.95</Amount>
               <PreviousPrice>3.55</PreviousPrice>
               <NewPrice>4.50</NewPrice>
            </RetailPriceModifier>
            <Kit>
               <Member Action="IsPartOf">
                  <!-- Taco -->
                  <Sale>
                     <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                     </POSIdentity>
                     <ExtendedAmount>0</ExtendedAmount>
                     <Quantity>2</Quantity>
                  </Sale>
               </Member>
               <Member Action="AddsTo">
                  <!-- Taco -->
                  <Sale>
                     <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                     </POSIdentity>
                     <ExtendedAmount>.95</ExtendedAmount>
                  </Sale>
               </Member>
               <Member Action="IsPartOf">
                  <!-- Soft Drink -->
                  <Sale>
                     <POSIdentity>
                        <POSItemID>3465</POSItemID>
                     </POSIdentity>
                     <ExtendedAmount>0</ExtendedAmount>
                     <RetailPriceModifier>
                        <SequenceNumber>1</SequenceNumber>
                        <ReasonCode>Medium</ReasonCode>
                     </RetailPriceModifier>
                  </Sale>
               </Member>
            </Kit>
         </Sale>
         <SequenceNumber>1</SequenceNumber>
      </LineItem>
      <LineItem>
         <Tax>
            <Amount>.50</Amount>
            <Percent>7</Percent>
```

```
            </Tax>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>5.00</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.9 USE CASE: Miscellaneous

4.9.1 Scenario: Print Despatch Docket with Product Delivery (V3.0)

Brief Description

A Despatch Docket is a copy of the original customer receipt, with the addition of the customer's Name and Address, and it is requested immediately after the transaction for which the Despatch Docket is required. Generically, there is a requirement to be able to print a Despatch Docket for any previous transaction. It is attached to the goods that will be collected later by the customer from a pickup area at the back of the store and must be matched with the customer's receipt when the customer eventually collects the goods.

4.9.1 Conformance XML Instance Document — Print Despatch Docket

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction TypeCode="DispatchDocket">
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.89</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <Customer>
            <Name>
               <SortingName>Fred and Suzy</SortingName>
```

```
            </Name>
            <Address>
               <AddressLine>1234 Home Address</AddressLine>
               <City>My Town</City>
               <Territory>New Mexico</Territory>
               <PostalCode>12345</PostalCode>
            </Address>
         </Customer>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

4.9.2 Alternate Scenario: Print Copy of Despatch Docket (V3.0)

Brief Description

To provide a function to enable a Customer Name and Address to be captured in a Retail Transaction (and to capture it automatically by calling out to an external Customer Database system if we get a Loyalty/Store Card swiped). But this is not mandatory. So, the Despatch Docket requirement is to capture a Customer Name and Address, if it has not already been captured in the Retail transaction, so that it can be printed on the Despatch Docket. We're supposed to report all Customer Names and Addresses in the POSLOG so that the Company back-end marketing systems can use them for mail drops.

4.9.2 Conformance XML Instance Document – Print copy of Despatch Docket

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <ControlTransaction>
         <PrintDispatchDocket>
            <Customer>
               <Name>
                  <Name Location="First">Joe</Name>
                  <Name Location="Last">Smith</Name>
               </Name>
               <Address>
                  <AddressLine>325 E 4th</AddressLine>
                  <City>Mustang</City>
                  <Territory>New Mexico</Territory>
                  <PostalCode>12345</PostalCode>
               </Address>
            </Customer>
```

```
            </PrintDispatchDocket>
        </ControlTransaction>
    </Transaction>
</POSLog>
```

4.9.3 Scenario: “Wild” Party (V3.0)

Scenario Description

A group of people arrive at a restaurant registering with the greeter using the name “Wild” party. When their table is ready the greeter announces “Wild Party of nine”.

4.9.3 Conformance XML Instance Document — “Wild” Party

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>Richard's Deli</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>10006</SequenceNumber>
        <POSLogDateTime>2000-10-25T11:49:00</POSLogDateTime>
        <CustomerOrderTransaction TransactionStatus="Suspended">
            <Foodservice>
                <PartyName>Wild</PartyName>
            </Foodservice>
        </CustomerOrderTransaction>
    </Transaction>
</POSLog>
```

5 RETAIL TRANSACTION

5.1 USE CASE: Item purchase

One or more items are purchased via any one of a number of sales channels. The transaction is entered in via an appropriate application, and is sent using the POS-Log schema to the POS-Log application, which may forward to the transaction to other applications in the enterprise.

5.1.1 Scenario: Order entry, payment and product delivery preformed by one operator at one terminal

Brief Description

Product is entered into the system, payment is made and product delivered as one continuous operation. Payment is made by cash, credit card/debit/gift card, house charge or other. If applicable, a cash or charge “Tip” may be added to the transaction total. When the process is completed, the order is closed and archived and a new order can be placed at the terminal. Taxing rules are determined based on appropriate Taxation parameters (see Volume 3) Inventory usage is determined based on appropriate recipe usage including on-premises packaging.

Scenario Description

Jackson brings a premade ham sandwich to the counter of Speciality Sandwich Shop and pays $4.75.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date & time the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - Unit price for the item being sold.
  - The extended amount (i.e. Unit price * the number of items being sold)

5.1.1 Conformance XML Instance Document – Item Purchase from Shelf

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0" FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>Speciality Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
```

```
      <RetailTransaction>
        <LineItem>
          <!-- Premade ham sandwich -->
          <Sale ItemType="Stock">
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>4.75</ExtendedAmount>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.1.2 Scenario: Item purchase with quantity pricing

Brief Description

Candy bars are priced at $0.59 each or 2 for $.99. This is not a promotion; this is the normal mix-match pricing for the collection of items.

Scenario Description

A customer walks into the Main Street Convenience Store and purchases two mix-match candy bars for $.99.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold, and the quantity that applies to the unit-price.
  - The unit-price of the item
  - The extended amount for the items

5.1.2 Conformance XML Instance Document - Item purchase with quantity pricing

NOTE: Quantity is included in the item with the extended amount showing the total cost of these items

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MinorVersion="0"
MajorVersion="6"
   FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>Main Street Convenience Store</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
```

```
      <OperatorID>John</OperatorID>
      <RetailTransaction>
        <LineItem>
          <!-- Mix-match candy bars -->
          <Sale ItemType="Stock">
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>0.99</ExtendedAmount>
            <Quantity>2</Quantity>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender TenderType="Cash" TypeCode="Sale">
            <Amount>.99</Amount>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.1.3 Scenario: Item purchase of multi-package items

Brief Description

Customer purchases a can of a popular soft drink. The can is scanned into the POS. The UPC code on the can is for both a can and a 6 pack. Some distinction between the single can and the 6-pack must be made.

Scenario Description

Fred walks into a local The Local Deli and purchases a six-pack of soft drinks for $2.79.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items

5.1.3 Conformance XML Instance Document - Item purchase of multi-package items

NOTE: the quantity is for the 6-pack

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0"
```

```
   FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>The Local Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- 6 pack of soft drinks -->
            <Sale ItemType="Stock">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
                  <Qualifier>6Pack</Qualifier>
               </POSIdentity>
               <ExtendedAmount>2.79</ExtendedAmount>
               <Quantity UnitOfMeasureCode="6Pack">1</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender TenderType="Cash" TypeCode="Sale">
               <Amount>2.79</Amount>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.1.4 Scenario: Multiple Operators Operation

In some circumstances, more than one operator attends to a single transaction. In Japan, we observe a few kinds of this type of transactions.

Situation 1:

One familiar pattern is the two person operations in grocery store. There are one or two operators attending single transaction to perform checkout operation. They are called a checker and a cashier. The checker scans items in customer's basket and the cashier does tendering. The operations of both of operators are overlapped, namely, while the checker is scanning the items, the cashier is doing tender operation for the previous customer.

Situation 2:

We see this type of operation also in other segment, such as, a book store. In this case, a few checkers and one cashier operate single terminal. Each checker initiates transaction by scanning items (books). He or she queues transaction to the cashier, once finished scanning and gets money from his or her customer. This operation is applicable because most of customers purchase only one or two books - it means lesser time is required to scan items and one cashier can handle many checkers' transaction successfully. In this scenario, there are multiple checkout lines where each customer

scans their items. At the end there is one cashier who takes the money from the customer.

In both cases, there are up to two operators attending single transaction. But we assume we should not limit the number of operators to do so. That's because we call it as 'Multiple operators operation'.

Situation 3:
This is also the standard operation in drive thru operations for foodservice. There we have the order taker, cashier, and expediter.

Brief Description
Checker launches a transaction by starting to scan items. Cashier finishes the transaction by tendering operation. Not all of transactions are performed by two operators. It depends on the traffic, namely, how many customers do shopping per unit time. In single operator mode, cashier does both of scanning and tendering.

Scenario Description
A car drives to the Order Board. Operator Taro takes the customer order for a combo number 1 with lemonade. The customer drives to the next window and the cashier Hanako takes $6.00 cash for the order. They then drive to the final window where expediter Joe hands them their order.

Data

- Transaction header data including:
  - Operator ids for all of operators attending the transaction (change maxOccurs attribute to unbounded).
  - 'OperatorRole' attribute is introduced into 'OperatorID' type.

5.1.4 Conformance XML Instance Document – Multiple Operators Operation

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MinorVersion="0"
MajorVersion="6"
   FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID WorkerID="e11111" OperatorName="Taro"
OperatorType="Checker">100</OperatorID>
      <OperatorID WorkerID="e22222" OperatorName="Hanako"
OperatorType="Checker">101</OperatorID>
      <OperatorID WorkerID="e33333" OperatorName="Joe"
OperatorType="Cashier">102</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Combo Number 1 -->
            <Sale ItemType="Stock">
```



```
            <POSIdentity>
               <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>4.89</ExtendedAmount>
         </Sale>
         <SequenceNumber>1</SequenceNumber>
      </LineItem>
   </RetailTransaction>
</Transaction>
</POSLog>
```

5.1.5 Scenario: Over-ring Error.

Brief Description

The customer orders a 2 Sandwiches and 1 Drinks from those product groups. The order taker enters the items and totals the sale but discovers (based on the sale total amount) that he accidentally entered 22 Sandwiches. The order taker marks the ticket as an “Over-ring”, saves the receipt, and re-enters the order correctly and tenders it. At a later time, the manager enters an Over-ring transaction that reverses the order. The effect is that the currency value of the over-ring is subtracted from the sales, tax, cash in drawer and other cash related information that was incremented by the sale. Raw product usage is reversed. The dollar value of “Over-rings” is incremented for the operator

5.1.5 Conformance XML Instance Document — Over-ring Retail Transaction

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0"
   FixVersion="0">
   <Transaction>
      <BusinessUnit>
         <UnitID>Highstreet</UnitID>
      </BusinessUnit>
      <WorkstationID>100</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction TypeCode="Transaction" OverringFlag="true">
         <!-- Mistaken 22 sandwiches -->
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>100</POSItemID>
               </POSIdentity>
               <ExtendedAmount>66.00</ExtendedAmount>
               <Quantity>22</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
      <BusinessDayDate>1967-08-13</BusinessDayDate>
```

```
    </Transaction>
</POSLog>
```

5.1.6 Scenario: Super Size Me (Differential Pricing)

Brief Description

NOTE : this is a change in the price of the combo and not a change in price of the individual items. The next scenario changes the price on individual items in the combo and thus changes the price of the combo.

Scenario Description

Fred orders a Combo Meal #1, Hamburger, Fries, Drink and wants it Super Sized for $.39

5.1.6 Conformance XML Instance Document — Super Size Me Retail Transaction

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!--Hamburger Combo -->
            <Sale ItemType="ItemCollection">
               <!-- The id of the combo -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <!-- The regular sales unit price for the combo before the change -->
               <RegularSalesUnitPrice>2.99</RegularSalesUnitPrice>
               <!-- Takes into account the change in price because of the super size -->
               <ExtendedAmount>3.38</ExtendedAmount>
               <Combo>
                  <!-- Hamburger -->
                  <Member Action="IsPartOf">
                     <Sale ItemType="Stock">
                        <POSIdentity POSIDType="GTIN">
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>0.00</ExtendedAmount>
                     </Sale>
                     <SequenceNumber>1</SequenceNumber>
                  </Member>
```

```
                <!--Replace Small Drink with Large Drink  -->
                <Member Action="IsPartOf">
                   <!-- Small Drink -->
                   <Sale ItemType="Stock">
                      <!-- The id of the Small Drink -->
                      <POSIdentity POSIDType="GTIN">
                         <POSItemID>01234567890323</POSItemID>
                      </POSIdentity>
                      <ExtendedAmount>0.00</ExtendedAmount>
                      <!-- Large Drink -->
                      <Item Action="Replace">
                         <!-- or POSIdentity -->
                         <ItemID>1234342334</ItemID>
                         <ExtendedAmount>00.000</ExtendedAmount>
                      </Item>
                   </Sale>
                   <SequenceNumber>2</SequenceNumber>
                </Member>
                <!--Tater Tots -->
                <Member Action="IsPartOf">
                   <Sale ItemType="Stock">
                      <POSIdentity POSIDType="GTIN">
                         <POSItemID>01234567890321</POSItemID>
                      </POSIdentity>
                      <ExtendedAmount>0.00</ExtendedAmount>
                   </Sale>
                   <SequenceNumber>3</SequenceNumber>
                </Member>
             </Combo>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
       </LineItem>
       <LineItem>
          <Tender TenderType="Cash">
             <Amount>3.72</Amount>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
       </LineItem>
       <LineItem>
          <!-- Assuming 10% tax -->
          <Tax>
             <Amount>.34</Amount>
          </Tax>
          <SequenceNumber>3</SequenceNumber>
       </LineItem>
    </RetailTransaction>
 </Transaction>
</POSLog>
```

5.1.7 Scenario: Modify - Reduce Size (Differential Pricing)

Brief Description

A combo meal has a set price with selected items. If one wants to replace one of the items with a larger or smaller item, then the price of the combo meal is adjusted accordingly. The combo price is $4.00 which includes a REGULAR drink. Its combo price is 1.19. If one wants to replace that drink with a smaller drink then the price of the combo meal is reduced. For example if the REGULAR drink is replaced by a SMALL drink then the combo price is reduced by 0.20. The combo price is reduced to $3.80 and the price on the drink is reduced by the replacement to $.99. All of the items have PLU numbers, sequence numbers, quantities (usually but perhaps not always = 1), unit prices, extended prices and tax amounts.

The difference between this scenario and the last scenario is the price change for the super size is a change in price of the combo (not any specific item). This scenario changes the price of an item in the combo and therefore the combo price.

Scenario Description

A customer wants to replace the Large Lemonade in the combo with a Small Lemonade. This reduces the price by $.20.

5.1.7 Conformance XML Instance Document — Modify - Reduce Size Retail Transaction

```
<?xml version="1.0" encoding="UTF-8" ?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!--Hamburger Combo -->
            <Sale ItemType="ItemCollection">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <!-- The regular sales unit price for the combo before the change -->
               <RegularSalesUnitPrice>2.99</RegularSalesUnitPrice>
               <!-- Takes into account the change in price because of the replacement -->
               <ExtendedAmount>2.79</ExtendedAmount>
               <Quantity>1</Quantity>
               <Combo>
                  <!-- Hamburger -->
                  <Member Action="IsPartOf">
                     <Sale ItemType="Stock">
```

```
                    <POSIdentity POSIDType="GTIN">
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>0.00</ExtendedAmount>
                    <!--Remove Onions -->
                    <Item Action="Subtract">
                        <ItemID>01234567890987</ItemID>
                        <ExtendedAmount>0.00</ExtendedAmount>
                    </Item>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </Member>
            <!--Replace Large Drink with Small Drink and reduce the price -->
            <Member Action="IsPartOf">
                <!-- Large Drink -->
                <Sale ItemType="Stock">
                    <POSIdentity POSIDType="GTIN">
                        <POSItemID>01234567890323</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>0.00</ExtendedAmount>
                    <!-- Small Drink -->
                    <Item Action="Replace">
                        <!-- or POSIdentity -->
                        <ItemID>1234342334</ItemID>
                        <ExtendedAmount Action="Subtract">.20</ExtendedAmount>
                        <!-- assume 10% tax  -->
                        <Tax Action="Subtract">
                            <Amount>.02</Amount>
                        </Tax>
                    </Item>
                </Sale>
                <SequenceNumber>2</SequenceNumber>
            </Member>
            <!--Tater Tots -->
            <Member Action="IsPartOf">
                <Sale ItemType="Stock">
                    <POSIdentity POSIDType="GTIN">
                        <POSItemID>01234567890321</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>0.00</ExtendedAmount>
                </Sale>
                <SequenceNumber>3</SequenceNumber>
            </Member>
        </Combo>
        <TaxIncludedInPriceFlag>true</TaxIncludedInPriceFlag>
    </Sale>
    <SequenceNumber>1</SequenceNumber>
</LineItem>
<LineItem>
    <Tender TenderType="Cash">
        <Amount>2.79</Amount>
```

```
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <!-- Assuming 10% tax -->
            <Tax TaxType="VAT">
               <Amount>.28</Amount>
            </Tax>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.1.8 Scenario: Mixed Ingredients on Part of the Item

Brief Description

This deals with multiple items being related to part of the item which may or may not change the price. This is typically used in the pizza or sandwich environment.

Scenario Description

A customer orders a pizza with pepperoni and sausage on one half and pineapple and anchovies on the other half.

5.1.8 Conformance XML Instance Document — Mixed Ingredients on Part of the Item

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>HighStreet</UnitID>
        </BusinessUnit>
        <WorkstationID>String</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <OperatorID OperatorType="Cashier" AssociateID="String"
OperatorName="String"
            >String</OperatorID>
        <RetailTransaction>
            <LineItem>
                <Sale>
                    <!-- Pizza -->
                    <POSIdentity>
                        <POSItemID>1234234</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>13.14</ExtendedAmount>
                    <!-- First half of the pizza with pepperoni and sausage -->
                    <Division>
```



```
                    <Item>
                        <!-- Pepperoni -->
                        <POSIdentity>
                            <POSItemID>asdfsdf</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                    </Item>
                    <Item>
                        <!-- Sausage -->
                        <POSIdentity>
                            <POSItemID>987</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                    </Item>
                </Division>
                <!-- the other half with pineapple and anchovies -->
                <Division>
                    <Item>
                        <!-- pineapple -->
                        <POSIdentity>
                            <POSItemID>456</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                    </Item>
                    <Item>
                        <!-- anchovies-->
                        <POSIdentity>
                            <POSItemID>900</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                    </Item>
                </Division>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
        </LineItem>
    </RetailTransaction>
    <RevenueCenterID>String</RevenueCenterID>
    <TillID>String</TillID>
    <BusinessDayDate>1967-08-13</BusinessDayDate>
  </Transaction>
</POSLog>
```

5.2 USE CASE: Merchandise Hierarchy

5.2.1 Scenario: Item purchase via Merchandise Hierarchy (category)

Brief Description

There is a generic item (merchandise hierarchy) on the menu called, for example, sandwich. The contents for the “sandwich” are changed on a daily basis or by individual order. The back office inventory system needs to be able to track the ingredients on each unique sandwich.

Scenario Description
Richard had The Deli Shop create a sandwich with ham, cheese and wheat bread. The clerk rings this as a sandwich for $4.00. Fred orders a sandwich with turkey, cheese and a Kaiser roll for the same price.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - A department identifier for the item being sold.
  - Which level in the department hierarchy is being used to identify the item.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items being sold.

5.2.1 Conformance XML Instance Document - Item purchase via Merchandise Hierarchy (category)

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>The Deli Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale>
               <MerchandiseHierarchy
Level="Department">sandwich</MerchandiseHierarchy>
               <ExtendedAmount>4.00</ExtendedAmount>
               <Item>
                  <!-- Ham -->
                  <ItemID>1234</ItemID>
                  <ExtendedAmount>0.00</ExtendedAmount>
               </Item>
               <Item>
                  <!-- cheese -->
                  <ItemID>3456</ItemID>
                  <ExtendedAmount>0.00</ExtendedAmount>
               </Item>
               <Item>
                  <!-- wheat bread -->
                  <ItemID>785687</ItemID>
                  <ExtendedAmount>00.00</ExtendedAmount>
```

```
            </Item>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender>
            <Amount>4.00</Amount>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.2.2 Scenario: Menu Item Selection via Merchandise Hierarchy

Brief Description

This scenario describes an operation where the meal has a single price and the customer can select different items for the appetizer, entrée, dessert, etc.

Scenario Description

At Hirano's Dinner Palace, one of the Grand Menu items contains a "rib eye steak", or a "hamburger steak" one of which the customer must choose. The customer can then choose from the side order sub-menu of a "baked potato", or a "salad". If the salad is chosen then there is a salad sub-menu where the sauce of a "salad" either blue cheese or thousand island can be selected.

The Grand Menu Merchandise Hierarchy is a combo including the appropriate merchandise hierarchies of sub-menus. One selects an item within a merchandise hierarchy.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - A department identifier for the item being sold.
  - Which level in the department hierarchy is being used to identify the item.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items being sold.

5.2.2 Conformance XML Instance Document - Menu Item Selection via Merchandise Hierarchy

```
<?xml version="1.0" encoding="UTF-8" ?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
```

```
            <UnitID>Hirano's Dinner Palace</UnitID>
        </BusinessUnit>
        <WorkstationID>POS5</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <OperatorID>Sakami</OperatorID>
        <RetailTransaction>
            <LineItem>
                <!-- The second Grand Menu Merchandise Hierarchy-->
                <Sale ItemType="ItemCollection">
                    <MerchandiseHierarchy ID="2">Grand Menu</MerchandiseHierarchy>
                    <!-- Normally the currency is the default for the location of the store but was
included here for clarity -->
                    <ExtendedAmount Currency="JPY">25000</ExtendedAmount>
                    <!--Select Rib Eye Steak -->
                    <Item>
                        <ItemID>01234567890987</ItemID>
                        <!-- Price is included in the combo meal -->
                        <ExtendedAmount>0.00</ExtendedAmount>
                    </Item>
                    <!-- Side Order Sub Menu -->
                    <Combo>
                        <Member>
                            <Sale>
                                <MerchandiseHierarchy>Side Order Sub
Menu</MerchandiseHierarchy>
                                <!-- Price is included in the combo meal -->
                                <ExtendedAmount>0.00</ExtendedAmount>
                                <!-- Select Salad -->
                                <Item>
                                    <ItemID>578</ItemID>
                                    <!-- Price is included in the combo meal -->
                                    <ExtendedAmount>0.00</ExtendedAmount>
                                    <!-- select the blue cheese Sauce for the Salad -->
                                    <Item>
                                        <ItemID>7689</ItemID>
                                        <!-- Price is included in the combo meal -->
                                        <ExtendedAmount>0.00</ExtendedAmount>
                                    </Item>
                                </Item>
                            </Sale>
                            <SequenceNumber>1</SequenceNumber>
                        </Member>
                    </Combo>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
                <!-- the drink -->
                <Sale>
                    <ItemID>10</ItemID>
                    <ExtendedAmount>1000</ExtendedAmount>
```

```
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender TenderType="Cash">
               <Amount>26000</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.3 USE CASE: Combo Item

For some retailers an item may actually be a Combination of other items, e.g. Hamburger Combo, may comprise a hamburger, fries and a drink.

5.3.1 Scenario: Combo Purchase without Substitution

Brief Description

Customer buys a combo pre-packaged sandwich comprising a Hamburger, Fries and a drink. The POS sells this combo as if it was a single item, and no substitutions are permitted.

There are two scenarios here:

a. A combo where a single combo key is punched in by the clerk and the systems expands the order to a combo
b. A clerk punches in a hamburger, fries and a drink and the systems recognizes it's a combo and applies the appropriate discounts of combo price.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - Unit price for the kit item being sold.
  - The extended amount (i.e. Unit price * the number of items being sold)

5.3.1a Conformance XML Instance Document - Combo Purchase without Substitution

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
```

```
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="ItemCollection">
               <!-- single combo key -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>2.99</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.3.1b Alternative Conformance XML Instance Document - Combo Purchase without Substitution

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="ItemCollection">
               <!-- Combo ID -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>2.99</ExtendedAmount>
               <Combo>
                  <Member>
                     <Sale>
                        <!-- Hamburger -->
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>1.50</ExtendedAmount>
```



```
                </Sale>
              </Member>
              <Member>
                <!-- Fries -->
                <Sale>
                  <POSIdentity>
                    <POSItemID>01234567890323</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>75.00</ExtendedAmount>
                </Sale>
              </Member>
              <Member>
                <Sale>
                  <!-- Drink -->
                  <POSIdentity>
                    <POSItemID>01234567890323</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>.74</ExtendedAmount>
                </Sale>
              </Member>
            </Combo>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.3.2 Scenario: Combo Purchase with Substitution

Brief Description

Customer buys a combo #1 but wants to replace the French fries with a baked potatoe of equal value. The system removes the French fries from the combo and adds the desired baked potato to the combo without an additional charge.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item, after substitutions have been applied.
  - The extended amount (i.e. Unit price * the number of items being sold)
- Substitution data, including:
  - An identifier for the item being removed from the kit item.
  - A count of how many of those items is being removed from the kit item.
  - The monetary amount the item being removed contributes to the kit price.
  - An identifier for the item being added to the kit item.
  - A count of how many of those items is being added to the kit item.

- The monetary amount the item being added is contributing to the kit price.

5.3.2 Conformance XML Instance Document - Combo Purchase With Substitution

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="ItemCollection">
               <!-- Combo #1 ID -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <!-- Combo Price -->
               <ExtendedAmount>5.25</ExtendedAmount>
               <Combo>
                  <Member>
                     <Sale>
                        <!-- Hamburger -->
                        <POSIdentity>
                           <POSItemID>01234567890123</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                     </Sale>
                  </Member>
                  <Member>
                     <Sale>
                        <!-- French Fries -->
                        <POSIdentity>
                           <POSItemID>01234567890323</POSItemID>
                        </POSIdentity>
                        <ExtendedAmount>00.00</ExtendedAmount>
                        <!-- Replace the french fries with the baked potato -->
                        <Item Action="Replace">
                           <POSIdentity>
                              <!-- baked potato -->
                              <POSItemID>3456</POSItemID>
                           </POSIdentity>
                           <ExtendedAmount>00.00</ExtendedAmount>
                        </Item>
                     </Sale>
                  </Member>
```

```
                <Member>
                  <Sale>
                    <!-- Drink -->
                    <POSIdentity>
                      <POSItemID>01234567890444</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>00.00</ExtendedAmount>
                  </Sale>
                </Member>
              </Combo>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
          </LineItem>
        </RetailTransaction>
      </Transaction>
</POSLog>
```

5.3.3 Scenario: Foodservice Combo (V2.1)

Brief Description

Customer buys a combination meal and has the onions removed from the hamburger.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the kit item being sold.
  - The number of multiples of the kit item being sold.
  - The normal unit price for the kit item being sold.
  - The actual unit price for the kit item, after substitutions have been applied.
  - The extended amount (i.e. Unit price * the number of items being sold)
- Substitution data, including:
  - An identifier for the item being removed from the kit item.
  - A count of how many of those items is being removed from the kit item.
  - The monetary amount the item being removed contributes to the kit price.
  - An identifier for the item being added to the kit item.
  - A count of how many of those items is being added to the kit item.
  - The monetary amount the item being added is contributing to the kit price.

5.3.3 Conformance XML Instance Document - Foodservice Combo with Onions Removed

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
```

```
</BusinessUnit>
<WorkstationID>POS5</WorkstationID>
<SequenceNumber>4294967295</SequenceNumber>
<OperatorID>John</OperatorID>
<RetailTransaction>
   <LineItem>
      <!--Hamburger Combo -->
      <Sale ItemType="ItemCollection">
         <POSIdentity>
            <POSItemID>01234567890123</POSItemID>
         </POSIdentity>
         <ExtendedAmount>2.99</ExtendedAmount>
         <Combo>
            <Member>
               <Sale>
                  <!-- Hamburger -->
                  <POSIdentity>
                     <POSItemID>01234567890123</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0.00</ExtendedAmount>
                  <Item Action="Subtract">
                     <!--Remove Onions -->
                     <POSIdentity>
                        <POSItemID>01234567890987</POSItemID>
                     </POSIdentity>
                     <ExtendedAmount>0.00</ExtendedAmount>
                  </Item>
               </Sale>
            </Member>
            <!--Large Drink -->
            <Member>
               <Sale>
                  <POSIdentity>
                     <POSItemID>01234567890323</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0.00</ExtendedAmount>
               </Sale>
            </Member>
            <!--Tater Tots -->
            <Member>
               <Sale>
                  <POSIdentity>
                     <POSItemID>01234567890321</POSItemID>
                  </POSIdentity>
                  <ExtendedAmount>0.00</ExtendedAmount>
               </Sale>
            </Member>
         </Combo>
      </Sale>
      <SequenceNumber>1</SequenceNumber>
   </LineItem>
```

```
        <LineItem>
          <Tender>
            <Amount>2.99</Amount>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.4 USE CASE: Manual Price Override

Items can have their prices overridden for a variety of reasons. The scenarios in this use-case show a number of examples, and attempt to show that the form of the resultant XML does not vary very much.

5.4.1 Scenario: Open PLU (Unpriced Item)

Brief Description

Customer purchases an item that is recognized by the POS but does not have a price in the system. Although the cashier will perform a manual price override, it may not require any special approval because the item doesn't have a price in the system.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items
- Price modification data, including:
  - The actual price charged for the items.
  - An indication that the price change was entered manually.
  - The extended amount for the items being sold.

5.4.1 Conformance XML Instance Document - Open PLU (Unpriced Item)

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
```

```
        <LineItem>
          <Sale ItemType="Stock">
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>49.50</ExtendedAmount>
            <RetailPriceModifier MethodCode="PriceOverride">
              <SequenceNumber>1</SequenceNumber>
              <Amount Action="Replace">49.50</Amount>
              <PreviousPrice>0.00</PreviousPrice>
              <ReasonCode>ZeroPrice</ReasonCode>
            </RetailPriceModifier>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.4.2 Scenario: Manager Complimentary

Brief Description

The customer has a problem with their order. The manager gives them a complimentary dinner to make things better.

Scenario Description

The waiter forgot about their order and took 25 minutes to deliver it. The manager gives them the meal for free.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items
- Price modification data, including:
  - The actual price charged for the items.
  - A reason code denoting that the price change is due to incorrect item tag.
  - Approval information identifying the manager who overrode the price.

5.4.2 Conformance XML Instance Document - Manager Complimentary

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
```

```
      <BusinessUnit>
        <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
        <LineItem>
          <Sale>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>0.00</ExtendedAmount>
            <RetailPriceModifier MethodCode="PriceOverride">
              <SequenceNumber>1</SequenceNumber>
              <Amount Action="Subtract">495.00</Amount>
              <PreviousPrice>495.00</PreviousPrice>
              <ReasonCode>ManagerComp</ReasonCode>
              <OperatorBypassApproval>
                <SequenceNumber>1</SequenceNumber>
                <ApproverID>45763</ApproverID>
                <LineApprovalCode>AA</LineApprovalCode>
              </OperatorBypassApproval>
            </RetailPriceModifier>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.5 USE CASE: Employee Training

5.5.1 Scenario: Employee Training

Brief Description

The store is training a new employee and doesn't want the transactions performed during the training session to have any affect on inventory, financials…etc.

Scenario Description

Joe began work today. The store manager put the POS in the training mode so Joe could get acquainted with their Best POS system.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed.
  - A workstation assigned sequence number identifying the transaction.
  - An indication that the transaction is a training or practice transaction.
- Item data, including:
  - An item identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The current unit-price of the item
  - The extended price for the items being sold.

5.5.1 Conformance XML Instance Document - Item Purchase With Employee Training

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/" MajorVersion="6"
MinorVersion="0" FixVersion="0">
   <Transaction TrainingModeFlag="true">
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>Joe</OperatorID>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="Stock">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>12.99</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.6 USE CASE: Gift Certificates

5.6.1 Scenario: Gift Certificate Purchase

Brief Description

For most retailers Gift Certificates, Money Order, Stored Value Card or Voucher are not items, so the sale of a Gift Certificate must explicitly state that the transaction is selling a Gift Certificate rather than an Item.

Scenario Description
Customer goes to a restaurant to purchase $20 in gift certificates for his niece's birthday.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Gift Certificate sale data, including:
  - Identifiers for each gift certificate being sold.
  - The face value of the gift certificates being sold.

5.6.1 Conformance XML Instance Document - Gift Certificate Purchase

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>My Favorite Restaurant</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <GiftCertificate>
               <SerialNumber>223452345</SerialNumber>
               <FaceValue>20.00</FaceValue>
               <GiftCertificateID>12345687</GiftCertificateID>
            </GiftCertificate>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>20.00</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.6.2 Scenario: Giving Gift Certificates as a Charitable Contribution

Brief Description
This is about reducing the price of something to zero; basically writing it off the books.

Scenario Description
The Richard's Deli manager gives a set of Deli Money (Gift Certificates) worth $50.00 to a charitable cause for a raffle. The gift is entered into the POS as a 100% discount.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items
- Price modification data, including:
  - The actual price charged for the items.
  - A reason code denoting that the price change is due to incorrect item tag.
  - Approval information identifying the manager who overrode the price.

5.6.2 Conformance XML Instance Document - Charitable contribution

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <Sale>
               <!-- Deli Money (Gift Certificate) -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>0.00</ExtendedAmount>
               <Quantity>1</Quantity>
               <RetailPriceModifier MethodCode="PriceOverride">
                  <SequenceNumber>1</SequenceNumber>
                  <Amount Action="Subtract">50.00</Amount>
                  <PreviousPrice>50.00</PreviousPrice>
                  <ReasonCode>CharityGift</ReasonCode>
               </RetailPriceModifier>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.7 USE CASE: Miscellaneous

5.7.1 Scenario: Issuing an Official Bill by Customer Request

In Japan, regarding taxation authorities and auditors, businesses use official bills as proof of expenditure for purchased goods and services. Normally, the taxing authority and auditors do not accept receipts, which are judged to be insufficient proof of expenditure, because although the purchased item, purchased date, and store are printed, the company name of the purchaser is not printed. However, of course there are still cases where receipts are used and approved. After an official receipt has been printed from the POS, and the POS operator has filled out the necessary information and sealed it with a stamp, it is handed over to the customer. Later, in the case of a tax authority or auditor inquiry regarding the details of an official bill, using the official bill number, the receipt can be retrieved and the details presented. It is for this purpose, that the amount and official bill number are stored in the PosLog. Setting the official bill number to the receipt number makes detailed data retrieval simple.

Brief description

An operator scans and registers merchandise, then handles payment processing. If an official bill is requested by the customer at the time of payment processing, the operator prints the official bill from the receipt printer. The POS prints the date, amount and completed official bill, leaving the customer name and summary fields blank. After confirming the transaction amount, using a pen, the operator fills out the business name and any other provisions, then hands the receipt over to the customer. In the case of a cash transaction, exceeding a certain amount requires the addition of a revenue stamp. When a receipt is given, the revenue stamp is attached to the receipt, and when an official bill is given, the revenue stamp is attached to the official bill. Credit card transactions do not require the use of a revenue stamp. Payment classification is stored in the receipt transaction data, so the official document operation which stores the payment classification in the PosLog is not necessary.

Data

- BillNo - Stores the official bill's corresponding receipt number as bill number.
- AmountForBill - Stores the amount.

5.7.1 Conformance XML Instance Document - Issuing an Official Bill by Customer Request

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale>
```

```
            <POSIdentity>
               <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>4.89</ExtendedAmount>
         </Sale>
         <SequenceNumber>1</SequenceNumber>
      </LineItem>
      <OfficialBill>
         <BillNumber>4294967295</BillNumber>
         <AmountOfBill>4.89</AmountOfBill>
      </OfficialBill>
   </RetailTransaction>
</Transaction>
</POSLog>
```

5.7.2 Scenario: Multi-Company Environment

Brief Description

A company group might have many branches in the supply chain world that deal with different parts of the process, such as a retail business, a logistics business and possibly others. Taking this slightly further there can be separate retail businesses that are part of the same group but have their own identity.

For example, XXX Group has four retail businesses: computers, mobile phones, general electrical goods and white goods like fridges, freezers etc. Each has their own separate identity.

As tends to happen, the business can gain these arms by buying other existing businesses. In this way the business can acquire multiple retail outlets that share the same store numbers as existing stores in other parts of the business. (e.g. White Goods store 001 and Computers store 001). We have customers in this situation.

The existing ARTS XML model seems to identify retail transactions by store code; in our data model this is not sufficient, the code of the company that the store belongs to has to form part of the business key to the data as well.

5.7.2 Conformance XML Instance Document – Multi-Company Environment

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>001</UnitID>
      </BusinessUnit>
      <OrganizationHierarchy Level="OperatingCompany">Speciality
Fish</OrganizationHierarchy>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
```

```
            <Sale ItemType="Stock">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.89</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.7.3 Scenario: Multi-Concept Environment

Brief Description

Some companies have brought multi-concepts into a single store, for example, a hamburger concept and a fish concept under a single roof; or a convenience store which brought in a sandwich store in the same building.

Scenario Description

Joe's Fish Store, co-located with the Big Hamburger Shop, sold a fish combo meal for $4.89. Both concepts are owned by the same corporation.

5.7.3 Conformance XML Instance Document – Multi-Concept Environment

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>001</UnitID>
      </BusinessUnit>
      <OrganizationHierarchy Level="Concept">Joe's Fish
Store</OrganizationHierarchy>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="Stock">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.89</ExtendedAmount>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.7.4 Scenario: Sales Entry Including the Non-Merchandise Sales

The sales total on the receipt is shown in Total class, however, the amount of non - merchandise sales should be consolidated. The non-merchandise sales such as delivery cost and packing cost is the sales of items of which attribute differs from that of ordinary goods.

Also the number of purchased items should be shown on each receipt, which will be used in the application analyzing the sales trend for each receipt.

Brief Description

The operator registers non-merchandises such as delivery cost and packing cost. The sales total of these items are calculated as the item of which attribute differs from that of ordinary goods. The data is stored into the POSLog, transferred to the host system, and consolidated as “non-merchandise sales” in the accounting system separated from “item sales”.

Scenario Description

Jay’s catering service charges for the containers and sterno bottles used for heating the food.

Data

- The entities below require **enumerations** which indicate the non-merchandise sales total and the number of purchased items.
  - TOTAL
  - RetailTransactionTotalTypeEnumeration: "TransactionNonSalesAmount"
  - RetailTransactionTotalTypeEnumeration: "TransactionPurchaseQuantity"

5.7.4 Conformance XML Instance Document – Sales Entry Including the Non-Merchandise Sales

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.89</ExtendedAmount>
               <Quantity>3</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
```



```
            <Sale>
               <ItemID>DC0001</ItemID>
               <ExtendedAmount>10.00</ExtendedAmount>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>4.89</Amount>
            </Tender>
            <SequenceNumber>3</SequenceNumber>
         </LineItem>
         <Total TotalType="TransactionGrandAmount">14.89</Total>
         <Total TotalType="TransactionNonSalesAmount">10.00</Total>
         <Total TotalType="TransactionPurchaseQuantity">2</Total>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.7.5 Scenario: Print Receipt Image

Brief Description

Customer opens a tab in a Scottish/British/Irish pub. Customer initiates a payment transaction by inserting EMV 4.0.1 compliant identification card into reader. The EMV card is validated and the card holder authenticated using a PIN. A loyalty identification card can (optional) be inserted and validated. The payment transaction (tender) is authorised and a fuelling and tender transaction initiated. Customer selects a fuel grade and fills his vehicle. Fuelling transaction is terminated, retrieved and matched with the associated payment transaction (tender). The completed retail transaction is passed to the Sales/Stock recording system, Sales History and Payment recording systems.

Data

Transaction header data, including attributes EMVDebugFlag and VATReceiptFlag
- Identifiers for store, workstation, till, currency code and operator performing sale .. in this case set to "Unattended".

Retail Transaction header data including attribute version identification of POSLog

- contains *one and only one* FuelSale LineItem - which defines the fuelling transaction
- contains *one and only one* Tender LineItem - which defines the payment transaction
- contains *one and only one* ReceiptImage LineItem - necessary to reprint **EXACT** copy of local receipt

FuelSale - ServicePointID (Identifier of FuellingPoint) name and type are attributes. In this case type is "FuelDispenser" and Name is "Pump1". This allows for future where a customer operated POS with car valet, lubricant or other vending machines.
FuelSale - NozzleID (identifier of nozzle from where grade was delivered)
FuelSale - TankID (identifier of tank which stored the fuel grade delivered - to enable sales by storage location (tank)
Note if the ItemType=Blend; there are two+ <TankID> elements with BlendRatio, e.g. by default BlendRatio=100
<TankID BlendRatio=40>1</TankID>
<TankID BlendRatio=60>3</TankID>

This would mean the SalesVolume is proportioned 40% to Tank 1 and 60% to Tank 3.

Tender - Additional attributes defined in example provided. Necessary for EMV accreditation

Tender/EMVDebug - Additional Tender Attributes mandated by EMV

Tender/FleetData - Additional data required for Fleet Information.

This is not yet implemented and the example should be considered draft. It is incomplete. Will be matched with ISO8583Oil data fields. It is assumed Fleet data elements VehicleID and DriverID have attribute Type associated.

5.7.5 **Conformance XML Instance Document - Print Receipt Image**

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction EMVDebugFlag="true" VATReceiptFlag="true">
      <BusinessUnit>
         <UnitID Name="The Scottish Pub">100</UnitID>
         <Address PrimaryFlag="true" AddressType="Work">
            <AddressLine TypeCode="Street">160-168 Plumstead Common
Road</AddressLine>
            <City>London</City>
         </Address>
         <Telephone PrimaryFlag="true" TypeCode="Work">
            <AreaCode>020</AreaCode>
            <LocalNumber>020 8317 6570</LocalNumber>
         </Telephone>
      </BusinessUnit>
      <WorkstationID>pos1</WorkstationID>
      <SequenceNumber>1123412341234123</SequenceNumber>
      <TrailerText>
         <Text>THANK YOU FOR CALLING</Text>
      </TrailerText>
      <VATRegistrationNumber>235 7632 55</VATRegistrationNumber>
      <ReceiptNumber>0215</ReceiptNumber>
      <ReceiptImage>
         <ReceiptLine>The Scottish Pub</ReceiptLine>
         <ReceiptLine>160-168 Plumstead Common Road, London</ReceiptLine>
         <ReceiptLine/>
         <ReceiptLine>Sales Receipt</ReceiptLine>
         <ReceiptLine/>
         <ReceiptLine>Trans No: 90215 15:18 16-Jun-2005</ReceiptLine>
         <ReceiptLine/>
         <ReceiptLine>Fill. Pos. Product Litres Value</ReceiptLine>
         <ReceiptLine>3 Beers 14.25 Ł10.00</ReceiptLine>
         <ReceiptLine/>
```

```
        <ReceiptLine>Nett Price Ł8.40</ReceiptLine>
        <ReceiptLine> </ReceiptLine>
        <ReceiptLine>Sale Total Ł10.00</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine/>
        <ReceiptLine>Please Retain This Copy For Your Records</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>Tear Here For VAT Receipt</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>VAT Receipt</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>The Scottish Pub</ReceiptLine>
        <ReceiptLine>160-168 Plumstead Common Road, London</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>Trans No: 90215 15:18 16-Jun-2005</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>Fill. Pos. Product Litres Value</ReceiptLine>
        <ReceiptLine>3 Beers 14.25 Ł10.00</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>Nett Price Ł8.40</ReceiptLine>
        <ReceiptLine> </ReceiptLine>
        <ReceiptLine>Sale Total Ł10.00</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>Vat % Inclusive Exclusive VAT</ReceiptLine>
        <ReceiptLine>B 19 Ł10.00 Ł8.40 Ł1.60</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>VAT Reg. No.: 235 7632 55</ReceiptLine>
        <ReceiptLine/>
        <ReceiptLine>THANK YOU FOR CALLING</ReceiptLine>
      </ReceiptImage>
      <RetailTransaction>
        <LineItem>
          <Sale>
            <POSIdentity>
              <POSItemID>1234</POSItemID>
            </POSIdentity>
            <ExtendedAmount>8.40</ExtendedAmount>
            <Quantity>3</Quantity>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender TenderType="CreditDebit" TypeCode="Sale">
            <Amount>10.00</Amount>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.8 USE CASE: Coupons

5.8.1 Scenario: Customer Tenders Purchase with Pre-Tax In-Store Coupon and Cash

Brief Description

Customer selects one or more items and purchases them with in part with an in-store coupon and the remaining with cash. The in-store coupons are pre-tax, therefore they are treated as a discount.

Scenario Description

Richard's Deli is running an in-store coupon for 10% off the purchase of red herring in the store.

Data

- In-Store Coupon is a pre-tax discount
- Tender Type = Cash
- Type = Sale
- Tender Amount
- Data Hierarchy Diagram

5.8.1 Conformance XML Instance Document - Tender with Pre-Tax In-Store Coupon and Cash

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Tender of sale with Cash and a StoreCoupon -->
<!--  Note: StoreCoupon is recorded as RetailPriceModifer rather  -->
<!--        than TenderLineItem.  (Because StoreCoupon reduces    -->
<!--        tax liability for the store)                          -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Richard's Deli</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <RetailTransaction>
         <LineItem>
            <Sale>
               <!-- Red Herring -->
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>10.99</ExtendedAmount>
               <RetailPriceModifier MethodCode="Promotion">
                  <SequenceNumber>1</SequenceNumber>
                  <Amount Action="Replace">10.99</Amount>
                  <ReasonCode>Coupon</ReasonCode>
               </RetailPriceModifier>
            </Sale>
```

```
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Tender>
               <Amount>10.99</Amount>
            </Tender>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.8.2 Scenario: Customer Tenders Purchase with Post-Tax Manufacturer's Coupon and Cash

Brief Description

Customer selects one or more items and purchases them with a manufacturer's coupon and cash. The manufacturer's coupon is tendered after tax is calculated.

Scenario Description

The Homemade Ice Cream Company published in the newspaper a coupon worth $1.00 off the purchase of a gallon of their ice cream. Uncle Sam, while watching his nieces, purchased a gallon of the ice cream from His Favorite Ice Cream Parlor.

Data

- Tender Type = Coupon
- Type = Sale
- Coupon Tender Amount
- Coupon Information
- Coupon Type
- Label
- Expiration Date
- Tender Type = Cash
- Tender Amount

5.8.2 Conformance XML Instance Document - Tender with Manufacturer's Coupon and Cash

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Tender of sale with Cash and a ManufacturerCoupon       -->
<!--  Note: ManufacturerCoupon is recorded as TenderLineItem -->
<!--        (Because retailer redeems Manufacturer Coupons   -->
<!--         which raises the Store's tax liability)         -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Home Made Ice Cream company</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
```

```
      <RetailTransaction>
        <LineItem>
          <Sale>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>10.63</ExtendedAmount>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender TenderType="ManufacturerCoupon">
            <Amount>1.00</Amount>
            <Coupon>
              <Quantity>1</Quantity>
              <PrimaryLabel/>
              <ManufacturerID/>
              <FamilyCode/>
              <ExpirationDate>2003-12-31</ExpirationDate>
            </Coupon>
          </Tender>
          <SequenceNumber>2</SequenceNumber>
        </LineItem>
        <LineItem>
          <Tender>
            <Amount>9.63</Amount>
          </Tender>
          <SequenceNumber>3</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.9 USE CASE: Rain Check

5.9.1 Scenario: Issue a Rain Check with Customer Identification

Brief Description

Customer wants to purchase an item that is temporarily out-of-stock. Customer gives contact details & receives a “rain-check” receipt guaranteeing the price of the item when it is next available.

Scenario Description

Stuart went into The Kiwi Ice Cream Parlor to purchase their new special Shaggy Hair Soda. However they were out and they were expecting a new shipment next week. They took his name, phone number and issued him a rain check to get the drink at their special introductory price.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction

- Out-of-Stock Item data, including:
  - An identifier for the item.
  - The number of items requested.
  - Unit price for the item.
- Customer data, including:
  - Name
  - Address
  - Telephone Numbers

5.9.1 Conformance XML Instance Document – Issue a Rain Check

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Attempted Item Purchase with rain-check  -->
<!-- Note: RainCheck item type.                        -->
<!--       Addition of Customer in RainCheck item      -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <RainCheck>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>23.95</ExtendedAmount>
               <Quantity>1</Quantity>
               <Customer>
                  <Name>
                     <Name Location="First">Stuart</Name>
                     <Name Location="Last">McGrigor</Name>
                  </Name>
                  <Address>
                     <AddressLine>325 7th St. NW.</AddressLine>
                     <AddressLine>Suite 1100</AddressLine>
                     <City>Washington</City>
                     <Territory>D.C.</Territory>
                  </Address>
                  <TelephoneNumber>
                     <AreaCode>202</AreaCode>
                     <LocalNumber>5555957</LocalNumber>
                     <ITUCountryCode>1</ITUCountryCode>
                  </TelephoneNumber>
```

```
            </Customer>
          </RainCheck>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.9.2 Scenario: Purchase Item with a Rain Check

Brief Description

Customer purchases an item, and has a rain-check receipt, guaranteeing the item at a lower price than the POS looks up. (Similar to using a coupon)

Scenario Description

The Kiwi Ice Cream Parlor received a shipment of their new special Shaggy Hair Soda. They contacted Stuart. He came in to redeem the rain check.at the special introductory price (now expired).

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - The unit-price of the item
  - The extended amount for the items
- Price modification data, including:
  - The actual price charged for the items.
  - A reason code denoting that the price change is due to a rain-check.
  - Approval information identifying the manager who overrode the price.

5.9.2 Conformance XML Instance Document – Purchase Item with Rain Check

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase with Manual Price Override Flow: Honoring previous
RainCheck -->
<!-- Note:  RetailPriceModifier with RainCheck reason code.                    -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Kiwi Ice Cream Parlor</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
```

```
        <LineItem>
          <!-- Shaggy Hair Soda -->
          <Sale ItemType="Stock">
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>20.00</ExtendedAmount>
            <Quantity>1</Quantity>
            <RetailPriceModifier MethodCode="PriceOverride">
              <SequenceNumber>1</SequenceNumber>
              <Amount Action="Replace">20.00</Amount>
              <PreviousPrice>30.00</PreviousPrice>
              <ReasonCode>RainCheck</ReasonCode>
            </RetailPriceModifier>
          </Sale>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

5.10USE CASE: WEIGHED SALES

5.10.1 Scenario: Item purchase by random weight

Brief Description

Customer purchases an item from the delicatessen, which is sold by weight.

Scenario Description

Barbara purchased 10 pounds of smoked turkey from Richard's Deli.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the item being sold.
  - The amount of the item being sold.
  - The units of measure that the weight is expressed in.
  - Price per unit of measure being charged for the item.
  - The extended amount (i.e. Price per unit * Amount of item)

5.10.1 Conformance XML Instance Document - Item Purchase by Random Weight

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase by Weight                -->
<!-- Note: Addition of @Units and @UnitOfMeasureCode -->
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
```

```
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <Sale ItemType="Stock">
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>2.722</ExtendedAmount>
               <Quantity Units="1.67" UnitOfMeasureCode="Kg">1</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.10.2 Scenario: Sold by Weight with Tare Removed

Brief Description

Customer buys a bunch of beans sold in a box. The weight of the box needs to be removed from the weight of the beans.

Data

- The weight of the beans
- The price by weight
- The weight of the box

5.10.2 Conformance XML Instance Document - Sold by Weight with Tare Removed

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <POSLogDateTime>2001-08-13T08:05:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
```

```
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>4.89</ExtendedAmount>
               <!-- The weight of the item -->
               <Quantity UnitOfMeasureCode="LBR">100</Quantity>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <LineItem>
            <Sale ItemType="Tare">
               <POSIdentity>
                  <POSItemID>1234</POSItemID>
               </POSIdentity>
               <ExtendedAmount Action="Subtract">1.00</ExtendedAmount>
               <!-- The weight of the tare -->
               <Quantity UnitOfMeasureCode="LBR">10</Quantity>
               <!-- Links to the item to which this tare applies -->
               <ItemLink>1</ItemLink>
            </Sale>
            <SequenceNumber>2</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.11USE CASE: Mix & Match

There are two variations to Mix & Match.

Variation 1: Price Rule

Mix & Match is a discount process as a part of promotion. When the specific combinations of items are purchased, they are specially discounted by Mix & Match. Most Japanese retail sellers discount each item applied to Mix & Match. Also the situation applicable to Mix & Match is recorded into the POSLog, which will be used for analyzing the effect of Mix & Match.

Variation 2: Normal Price

The price is the normal price for the combination of items. The price for the items is fixed.

5.11.1 Scenario: Transaction Aplicable to Mix & Match Price Rule

Brief Description

The operator scans items, registers them, and performs a subtotal operation. The POS terminal checks if Mix & Match is applicable, if so, Mix & Match operation is performed automatically. The two types of the applications check the condition of Mix & Match. One checks so at each item entry, and the other does at the subtotal. The difference between these applications is beyond the scope of this document. The POS terminal stores the completed Mix & Match information into the POSLog. The deduction information divided by item is also stored in the POSLog.

Example

Applicable item	Unit price
Tofu	100
Miso	250

Programmed Mix & Match

Promotion name	Tofu Miso Soup
Mix & Match ID	1
Condition	When purchasing both Tofu and Miso, the amount total 350 yen is reduced to 300 yen.

Purchasing two packs of Tofu and one Miso satisfies the condition of Mix & Match.

Deduction information

No.	Item	Price	Deduction		Amount
1	Tofu	100			100
2	Tofu	100	-14	= 50 x 100 / (100 + 250)	86
3	Miso	250	-36	= 50 x 250 / (100 + 250)	214
				Total	400

Completed Mix & Match information

Completed Mix & Match	
ID	1
Amount	350
Deduction	50

The information above will be stored into the POSLog. The information on the left is Deduction information, and that on the right is Completed Mix & Match information.

Data

The Mix & Match information is composed of Deduction information and Completed Mix & Match information.

- RetailTransactionItem
  - This data indicates Deduction information.
- POSLogRetailTransaction
  - This data indicates Completed Mix & Match information.

5.11.1 Conformance XML Instance Document – Transaction Applicable to Mix & Match

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>RetailStoreID</UnitID>
      </BusinessUnit>
      <WorkstationID>WorkstationID</WorkstationID>
```

```
<SequenceNumber>2839182</SequenceNumber>
<RetailTransaction>
   <LineItem>
      <Sale>
         <POSIdentity>
            <POSItemID>1928391829</POSItemID>
         </POSIdentity>
         <ExtendedAmount>100</ExtendedAmount>
      </Sale>
      <SequenceNumber>1</SequenceNumber>
   </LineItem>
   <LineItem>
      <Sale>
         <POSIdentity>
            <POSItemID>1928391829</POSItemID>
         </POSIdentity>
         <ExtendedAmount>86</ExtendedAmount>
         <RetailPriceModifier MethodCode="Promotion">
            <SequenceNumber>1</SequenceNumber>
            <Amount Action="Subtract">14</Amount>
            <PreviousPrice>100</PreviousPrice>
            <PriceDerivationRule>
               <PriceDerivationRuleID>1</PriceDerivationRuleID>
            </PriceDerivationRule>
         </RetailPriceModifier>
      </Sale>
      <SequenceNumber>2</SequenceNumber>
   </LineItem>
   <LineItem>
      <Sale>
         <POSIdentity>
            <POSItemID>1829381928</POSItemID>
         </POSIdentity>
         <ExtendedAmount>214</ExtendedAmount>
         <RetailPriceModifier MethodCode="Promotion">
            <SequenceNumber>1</SequenceNumber>
            <Amount Action="Subtract">36</Amount>
            <PreviousPrice>250</PreviousPrice>
            <PriceDerivationRule>
               <PriceDerivationRuleID>1</PriceDerivationRuleID>
            </PriceDerivationRule>
         </RetailPriceModifier>
      </Sale>
      <SequenceNumber>3</SequenceNumber>
   </LineItem>
   <PriceDerivationResult MethodCode="Promotion">
      <SequenceNumber>1</SequenceNumber>
      <Amount Action="Subtract">50</Amount>
      <PreviousPrice>350</PreviousPrice>
      <PriceDerivationRule>
         <PriceDerivationRuleID>1</PriceDerivationRuleID>
```

```
            </PriceDerivationRule>
         </PriceDerivationResult>
      </RetailTransaction>
      <BusinessDayDate>2004-01-21</BusinessDayDate>
   </Transaction>
</POSLog>
```

5.11.2 Scenario: Mix-Match Normal Price

Brief Description

Candy bars are normally $.59 each but you can buy 2 for $.99. This is not a promotion. This can be the normal pricing for the collection of items, i.e. the store may always price the items at 2 for one price.

Data

- POS Item Identity which identifies this as a mix match price
- Kit which allows multiple different candy bars to be related to one normal price

5.11.2 Conformance XML Instance Document –Mix-Match Normal Price

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>HighStreet</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <Sale>
               <POSIdentity>
                  <!-- the company assigned number indicates this is a mix-match normal
pricing -->
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <!-- mix-match normal price for kit -->
               <ExtendedAmount>.99</ExtendedAmount>
               <Kit>
                  <Member>
                     <Sale>
                        <POSIdentity>
                           <!-- id for one of the candy bars -->
                           <POSItemID>21341234</POSItemID>
                        </POSIdentity>
                        <!-- normal single price for candy bar -->
                        <ExtendedAmount>.59</ExtendedAmount>
                     </Sale>
```

```
                </Member>
                <Member>
                  <Sale>
                    <POSIdentity>
                      <!-- id for the other candy bar -->
                      <POSItemID>431432</POSItemID>
                    </POSIdentity>
                    <!-- normal single price for candy bar -->
                    <ExtendedAmount>.59</ExtendedAmount>
                  </Sale>
                </Member>
              </Kit>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
          </LineItem>
        </RetailTransaction>
    </Transaction>
</POSLog>
```

5.12USE CASE: Associate Discounts

5.12.1 Scenario: Sale to Store Manager

Brief Description

A sale to a Store Manager (“Manager Meal”) has a Percentage discounts with tax discount applied to it if eaten in.

Scenario Description

A store manager orders an entree, drink and dessert from those product groups. The order is given a 100% discount (free) and tax is applied to the post-discount amount of the sale if eaten in. The “taxable amount” for use at Order Processing time for the sale if totaled as Eat In is reduced by the amount of the discount e.g. there is no tax on the sale.

5.12.1 Conformance XML Instance Document – Sale to Store Manager

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Speciality Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Premade ham sandwich -->
```

```
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>0.00</ExtendedAmount>
               <RetailPriceModifier DiscountBenefit="Manager">
                  <SequenceNumber>1</SequenceNumber>
                  <Percent Action="Subtract">100</Percent>
                  <PreviousPrice>4.75</PreviousPrice>
               </RetailPriceModifier>
            </Sale>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.12.2 Scenario: Sale to Store Associate

Brief Description

A sale to a Store Associate (“Employee Meal”) has a percentage discounts with no tax discount applied if eaten in or carried out.

Scenario Description

A store associate orders a Sandwich, Side Item and Drink from those product groups. The order is given a 50% discount and tax is applied to the pre-discount amount of the sale if eaten in. The “taxable amount” for use at Order Processing time for the sale if the order is totaled as Eat-In, is not reduced by the discount amount. The “taxable amount” for use at Order Processing time for the sale if it is totaled as Carry Out is not reduced by the discount amount.

5.12.2 Conformance XML Instance Document – Sale to Store Associate

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Speciality Sandwich Shop</UnitID>
      </BusinessUnit>
      <WorkstationID>POS5</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <!-- Premade ham sandwich -->
            <Sale>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
```

```
            <ExtendedAmount>2.50</ExtendedAmount>
            <RetailPriceModifier DiscountBenefit="Worker">
               <SequenceNumber>1</SequenceNumber>
               <Percent Action="Subtract">50</Percent>
               <PreviousPrice>5.00</PreviousPrice>
            </RetailPriceModifier>
         </Sale>
         <SequenceNumber>1</SequenceNumber>
      </LineItem>
   </RetailTransaction>
</Transaction>
</POSLog>
```

5.13USE CASE: DELIVERY

5.13.1 Scenario: Item purchase for delivery from store

Brief Description

Scenario Description

Customer orders 3 pizzas from the Local Pizzeria to be delivered to his office.

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator capturing the transaction.
  - The date the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
  - Unit price for the item being sold.
  - The extended amount (i.e. Unit price * the number of items being sold)
- Delivery information for the transaction, or for each individual item purchased, including:
  - Name & Address for delivery
  - Preferred delivery method
  - Preferred delivery date & time

5.13.1a Conformance XML Instance Document – Item Purchase for Delivery from Store

NOTE: Delivery is at the transaction level – saying all the items on this transaction go to this destination

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Local Pizzeria</UnitID>
      </BusinessUnit>
      <WorkstationID>Register 2</WorkstationID>
```

```
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
            <SaleForDelivery>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ExtendedAmount>25.00</ExtendedAmount>
               <Quantity>3</Quantity>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
         <Delivery>
            <Name>
               <Name Location="Last">Jones</Name>
            </Name>
            <Address>
               <AddressLine>325 7th St. NW.</AddressLine>
               <City>Washington</City>
               <Territory>D.C.</Territory>
            </Address>
            <TelephoneNumber>
               <AreaCode>610</AreaCode>
               <LocalNumber>555-4793</LocalNumber>
            </TelephoneNumber>
         </Delivery>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.13.1b Sample XML Instance Document – Item Purchase for Line Item Delivery from Store

NOTE: Delivery is at the item level – saying this item is going to this destination
Shows how to provide alternate destinations for individual line items.

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Locao Pizzeria</UnitID>
      </BusinessUnit>
      <WorkstationID>Register 2</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
         <LineItem>
```



```
            <SaleForDelivery>
               <POSIdentity>
                  <POSItemID>01234567890123</POSItemID>
               </POSIdentity>
               <ActualSalesUnitPrice>163.00</ActualSalesUnitPrice>
               <ExtendedAmount>25.00</ExtendedAmount>
               <Quantity>3</Quantity>
               <Delivery>
                  <Name>
                     <Name Location="Last">Jones</Name>
                  </Name>
                  <Address>
                     <AddressLine>325 7th St. NW.</AddressLine>
                     <AddressLine>Suite 1100</AddressLine>
                     <City>Washington</City>
                     <Territory>D.C.</Territory>
                  </Address>
                  <TelephoneNumber>
                     <AreaCode>610</AreaCode>
                     <LocalNumber>555-4793</LocalNumber>
                  </TelephoneNumber>
               </Delivery>
            </SaleForDelivery>
            <SequenceNumber>1</SequenceNumber>
         </LineItem>
      </RetailTransaction>
   </Transaction>
</POSLog>
```

5.13.2 Scenario: Shipping Charges

Brief Description

In some situations, a gratuity is automatically charged for delivery.

Scenario Description

Mr. Jones orders 10 pizzas for a surprise birthday to be delivered to his office.

5.13.2 Conformance XML Instance Document - Shipping Charges

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
   MajorVersion="6" MinorVersion="0" FixVersion="0"
   xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
   <Transaction>
      <BusinessUnit>
         <UnitID>Local Pizzeria</UnitID>
      </BusinessUnit>
      <WorkstationID>Register 2</WorkstationID>
      <SequenceNumber>4294967295</SequenceNumber>
```

```
      <POSLogDateTime>2001-08-13T08:05:00</POSLogDateTime>
      <OperatorID>John</OperatorID>
      <RetailTransaction>
        <LineItem>
          <SaleForDelivery>
            <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
            </POSIdentity>
            <ExtendedAmount>55.00</ExtendedAmount>
            <Quantity>10</Quantity>
            <Delivery>
              <Name>
                <Name Location="Last">Jones</Name>
              </Name>
              <Address>
                <AddressLine>325 7th St. NW.</AddressLine>
                <AddressLine>Suite 1100</AddressLine>
                <City>Washington</City>
                <Territory>D.C.</Territory>
              </Address>
              <TelephoneNumber>
                <AreaCode>610</AreaCode>
                <LocalNumber>555-4793</LocalNumber>
              </TelephoneNumber>
              <ShippingFee>8.00</ShippingFee>
            </Delivery>
          </SaleForDelivery>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
      </RetailTransaction>
    </Transaction>
</POSLog>
```

(Delivery charges should be captured and also gratuity is automatically calculated and added to the total amount)

5.14USE CASE: Merchandise for Store Use

5.14.1 Scenario: Employee Takes an Item from the Shelf for Use in the Store

Brief Description

An employee takes an item (such as cleaning supplies for a deli in a grocery store or paper goods in a mass merchandising store) off the shelf to use in the store. The store charges the purchase against the store account (or GL account).

Data

- Transaction header data, including:
  - Identifiers for Store, Workstation, & Operator performing the transaction.
  - The date & time the transaction was performed
  - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
  - An identifier for the item being sold.

- The number of multiples of the item being sold.
- Unit price for the item being sold.
- The extended amount (i.e. Unit price * the number of items being sold)

- The Tender Information
  - Store Account Number
  - Amount of the Sale

5.14.1 Conformance XML Instance Document - Merchandise for Store Use

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
    MajorVersion="6" MinorVersion="0" FixVersion="0"
    xmlns="http://www.nrf-arts.org/IXRetail/namespace/">
    <Transaction>
        <BusinessUnit>
            <UnitID>The Sandwich Plac</UnitID>
        </BusinessUnit>
        <WorkstationID>001</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <OperatorID>John</OperatorID>
        <RetailTransaction>
            <LineItem>
                <!--large bottle of cola for staff -->
                <Sale ItemType="Stock">
                    <POSIdentity>
                        <POSItemID>123456789123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>1.99</ExtendedAmount>
                    <Quantity>1</Quantity>
                </Sale>
                <SequenceNumber>1</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tender TenderType="HouseAccount" TypeCode="Sale">
                    <Amount>1.99</Amount>
                    <StoreAccount>
                        <AccountID>1234</AccountID>
                    </StoreAccount>
                </Tender>
                <SequenceNumber>2</SequenceNumber>
            </LineItem>
            <Reason>String</Reason>
            <ReceiptDateTime>2001-12-17T09:30:47.0Z</ReceiptDateTime>
        </RetailTransaction>
        <BusinessDayDate>2006-08-13</BusinessDayDate>
    </Transaction>
</POSLog>
```

6 DOCUMENT HISTORY

7 VERSION HISTORY

Version 1.0
Overview
New Features

Sections	Description of Change
	-

Minor fixes

Deprecation

Sections	Description of Change
	-

Compatibility/Dependencies Issues
Previous Document

8 GLOSSARY

Term	Definition