**Explanation for ISO V3 XML Sample for US ACH CTX Payments**

To assist you in better understanding the target XML, below is an ISO v3 XML sample of US ACH CTX payments based upon our mapping specifications for WHEM Low Value (LV) payments. A US ACH CTX (Corporate Trade Exchange) is a low value, overnight payment of funds between corporate entities with the credit going to a corporate account. A CTX allows for up to 9,999 lines of addenda information to flow with the payment to the Creditor. Generally, these addenda are used to reference multiple invoices and their associated payment amounts that are being paid in this single payment instruction, though you can also reference Purchase Order Numbers, text, etc. For example, you are paying 15 invoices to a vendor in a single payment and wish to show how much is being paid on each invoice (e.g. the associated invoice Gross, Discount, Tax, and Net Amounts). CTX addenda information is entered in the Structured section of Remittance Information, where you can enter the individual ‘structured’ components (Gross Amount, Discount Amount, etc.) in a looping fashion by repeating the Structured loop for each new document referenced.

Notes have been added in red along the way to help explain the message content, batching, and various items of interest. Please refer to the POSTAL ADDRESSING tab in our Client Guide for complete addressing combinations available as per ISO CGI recommendations.

Described below is a sample of the properly formatted ISO pain001 v3 message for a US ACH CTX payment. This overall XML Message (file) contains 2 payments to 2 different Creditors within a single batch. The first payment includes 6 Referred Documents; 4 are invoices (CINV) and 2 are Credit Memos (CREN). The attached XML file removes my descriptive text shown in red.

**Note - The Company Identification location is presented under the Debtor, with required tags shaded in yellow. Some of the message content has also been ‘generalized’.**

<?xml version="1.0" encoding="UTF-8" ?> Start of ISO Header declaration. Defines the XML version and character set being supported within the content.

<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> ISO Msg ID and schema location (for syntax and form validations).

<CstmrCdtTrfInitn> Start of this ISO Message of Credit Payments

<GrpHdr> Start of the Group Header declaration for this message

<MsgId>YOUR FILE CONTROL NUMBER001</MsgId> Unique identifier for this message, and should be unique over a period of time.

<CreDtTm>2012-05-03T08:45:51</CreDtTm> Date/Time this message was created by your system

<NbOfTxs>2</NbOfTxs> Number of payments in this overall message (Nbr of <CdtTrfTxInf> groups)

<CtrlSum>2300.00</CtrlSum> Total of all Instructed Amounts in this message across all payments.

<InitgPty>

<Id>

<OrgId>

<Othr>

<Id>YOURJPMID</Id> Your client identifier as assigned by JPM.

</Othr>

</OrgId>

</Id>

</InitgPty>

</GrpHdr> Close of the <GrpHdr> group. Note - all groups and tags use a forward slash to identify the end of the group or tag.

<PmtInf> Start of the 1st batch (<PmtInf> group) for this Debtor and Account. It has 2 payments. Each payment is a separate <CdtTrfTxInf> group.

<PmtInfId>BATCH REF1</PmtInfId>  Unique number for this batch within this message. Can also be unique over a period of time or simply sequential

<PmtMtd>TRF</PmtMtd>  Declaration for an electronic transfer.

<NbOfTxs>2</NbOfTxs> Nbr of payments (<CdtTrfRxInf> groups) within this <PmtInf> group.

<CtrlSum>2300.00</CtrlSum> Total of all Instructed Amounts in this batch (<PmtInf> group).

<PmtTpInf>

<SvcLvl>

<Cd>NURG</Cd>  Service Level Code used for Non-urgent payments.

</SvcLvl>

<LclInstrm>

<Cd>CTX</Cd>  Local Instrument Code used for US ACH CTX payments.

</LclInstrm>

</PmtTpInf>

<ReqdExctnDt>2012-05-18</ReqdExctnDt> Date (Value Date) the payments in this batch will be executed.

<Dbtr>

<Nm>YOUR COMPANY NAME</Nm>Start of info about the Debtor (owner of the Debtor Account below) for this batch.

<PstlAdr>

<Ctry>US</Ctry>

</PstlAdr>

<Id>

<OrgId>

<Othr>

<Id>1122334455</Id> Your JPM Company ID assigned to your Debtor Account for reject/returns reporting.

<SchmeNm>

<Prtry>JPMCOID</Prtry> Value that qualifies the <Id> (your JPM Company ID) entered above.

</SchmeNm>

</Othr>

</OrgId>

</Id>

</Dbtr>

<DbtrAcct> Start of the group that holds the Debtor’s Account number.

<Id>

<Othr>

<Id>4123456789</Id> Account Number to be debited for the payments in this batch.

</Othr>

</Id>

<Ccy>USD</Ccy>

</DbtrAcct>

<DbtrAgt> Group info of JPM branch that holds the Debtor Account.

<FinInstnId>

<BIC>CHASUS33</BIC>  JPM’s NYC BIC where the Debtor Account is held.

<ClrSysMmbId>

<MmbId>021000021</MmbId>  JPM’s NYC FED ABA number where the Debtor Account is held.

</ClrSysMmbId>

<PstlAdr>

<Ctry>US</Ctry>

</PstlAdr>

</FinInstnId>

</DbtrAgt>

<CdtTrfTxInf> Start of 1st payment in this batch.

<PmtId>

<InstrId>YOUR SYSTEM INSTRUCTION ID PMT1</InstrId> Unique Number by your generating system to this payment. Does not

travel with payment.

<EndToEndId>YOUR PAYMENT REFERENCE NBR1</EndToEndId> Unique Number by your generating system to this payment

that does travel with payment!

</PmtId>

<Amt>

<InstdAmt Ccy="USD">1250.00</InstdAmt>  Amount to be credited to the Creditor’s Account and debited to your Debtor Account.

Must be USD currency!

</Amt>

<CdtrAgt> The Creditor’s Bank where the Creditor’s (Beneficiary) Account is held. This bank will receive the funds for this payment.

<FinInstnId>

<ClrSysMmbId>

<MmbId>322070019 </MmbId>  For US ACH payments, the 9 digit FED ABA for the Creditor’s Agent Is required.

</ClrSysMmbId>

<Nm>CITIBANK NA</Nm>

<PstlAdr>

<TwnNm>LOS ANGELES</TwnNm>

<CtrySubDvsn>CA</CtrySubDvsn>

<Ctry>US</Ctry>

</PstlAdr>

</FinInstnId>

</CdtrAgt>

<Cdtr>

<Nm>CHARLES STUART</Nm>

<PstlAdr>

<Ctry>US</Ctry>

<AdrLine>14 MAIN STREET</AdrLine> Creditor's address present in ‘unstructured’ or random text format. 1 of 3 suggested

addressing options.

<AdrLine>SUITE 141</AdrLine>

<AdrLine>LOS ANGELES, CA</AdrLine>

</PstlAdr>

<Id>

<OrgId>

<Othr>

<Id>VENDOR 123456</Id> Creditor's Vendor Number on your system.

<SchmeNm>

<Cd>CHID</Cd> Value that qualifies the Vendor Number above (Customer identifier).

</SchmeNm>

</Othr>

</OrgId>

</Id>

</Cdtr>

<CdtrAcct>

<Id>

<Othr>

<Id>987654321</Id> The Creditor Agent account that will receive (be credited) the funds for this payment. </Othr>

</Id>

<Tp>

<Cd>CASH</Cd>Type of Account to be credited; "CASH" for Demand Deposit or "SVGS' for Savings Account.

</Tp>

</CdtrAcct>

<RmtInf>

<Ustrd>REMITTANCE - UP TO 75 CHARACTERS PER PAYMENT ALLOWED</Ustrd> Remittance text that travels with this

payment to the Creditor Agent. Note US ACH text limit per payment.

<Strd>  Start of Structured information (Document Number, Document Amts, etc.). Can loop for addt’l documents.

<RfrdDocInf> Start of group that provides Document Reference information that travels with the payment.

<Tp>

<CdOrPrtry>

<Cd>CINV</Cd> The Document Type code for a Commercial Invoice. Amounts below have

implied signs.

</CdOrPrtry>

</Tp>

<Nb>INV100001</Nb> The Document Number.

<RltdDt>2012-03-11</RltdDt> The Document Date.

</RfrdDocInf>

<RfrdDocAmt>Start of group that provides Amount details for the Referenced document above. Travels with the pmt.

<DuePyblAmt Ccy="USD">102.00</DuePyblAmt> Gross Amount for the Referenced document.

<DscntApldAmt Ccy="USD">2.00</DscntApldAmt> Discount Amount for the Referenced document. Must include

even if zeroes.

<TaxAmt Ccy="USD">0.00</TaxAmt> Tax Amount for the Referenced document. Optional and not passed to US

low value clearing.

<RmtdAmt Ccy="USD">100.00</RmtdAmt>  Net Amount for the Referenced document. All <RmtdAmt> must

add up to the <InstdAmt> for this payment.

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>  X12 (REF01) qualifier for <Ref> below. Defaults to ‘PO’ (Purchase Order) if

left blank and <Ref> is valued. Sent as X12 REF segment with <Ref> below.

Only 1 Creditor Reference is allowed per <Strd> loop.

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>  REF02 value associated to X12 qualifier above. Sent as X12 REF segment with

<Prtry> value above. Only 1 Creditor Reference is allowed per <Strd> loop.

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

 Additional text for this document that travels as an NTE segment with payment.

</Strd>  End of Structured information for 1st Referenced Document.

<Strd>  Start of Structured information for 2nd Referenced Document.

<RfrdDocInf>

<Tp>

<CdOrPrtry>

<Cd>CINV</Cd>

</CdOrPrtry>

</Tp>

<Nb>INV100002</Nb>  2nd Referenced Document Number.

<RltdDt>2012-03-12</RltdDt>  2nd Referenced Document Date.

</RfrdDocInf>

<RfrdDocAmt>

<DuePyblAmt Ccy="USD">204.00</DuePyblAmt>  2nd Referenced Document Amounts.

<DscntApldAmt Ccy="USD">4.00</DscntApldAmt>

<TaxAmt Ccy="USD">0.00</TaxAmt>

<RmtdAmt Ccy="USD">200.00</RmtdAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>  End of Structured information for 2nd Referenced Document.

<Strd>  Start of Structured information for 3rd Referenced Document.

<RfrdDocInf>

<Tp>

<CdOrPrtry>

<Cd>CREN</Cd>  Code for Credit Note (Memo). Amounts below have implied signs.

</CdOrPrtry>

</Tp>

<Nb>CRMEM00003</Nb>

<RltdDt>2012-03-13</RltdDt>

</RfrdDocInf>

<RfrdDocAmt>

<DuePyblAmt Ccy="USD">51.00</DuePyblAmt>

<DscntApldAmt Ccy="USD">1.00</DscntApldAmt>

<CdtNoteAmt Ccy="USD">50.00</CdtNoteAmt>

<TaxAmt Ccy="USD">0.00</TaxAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>  End of Structured information for 3rd Referenced Document.

<Strd>  Start of Structured information for 4th Referenced Document.

<RfrdDocInf>

<Tp>

<CdOrPrtry>

<Cd>CREN</Cd>

</CdOrPrtry>

</Tp>

<Nb>CRMEM00004</Nb>

<RltdDt>2012-03-14</RltdDt>

</RfrdDocInf>

<RfrdDocAmt>

<DuePyblAmt Ccy="USD">104.00</DuePyblAmt>

<DscntApldAmt Ccy="USD">4.00</DscntApldAmt>

<CdtNoteAmt Ccy="USD">100.00</CdtNoteAmt>

<TaxAmt Ccy="USD">0.00</TaxAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>  End of Structured information for 4th Referenced Document.

<Strd>  Start of Structured information for 5th Referenced Document.

<RfrdDocInf>

<Tp>

<CdOrPrtry>

<Cd>CINV</Cd>

</CdOrPrtry>

</Tp>

<Nb>INV100005</Nb>

<RltdDt>2012-03-15</RltdDt>

</RfrdDocInf>

<RfrdDocAmt>

<DuePyblAmt Ccy="USD">500.00</DuePyblAmt>

<DscntApldAmt Ccy="USD">0.00</DscntApldAmt>

<TaxAmt Ccy="USD">0.00</TaxAmt>

<RmtdAmt Ccy="USD">500.00</RmtdAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>  End of Structured information for 5th Referenced Document.

<Strd>  Start of Structured information for 6th Referenced Document.

<RfrdDocInf>

<Tp>

<CdOrPrtry>

<Cd>CINV</Cd>

</CdOrPrtry>

</Tp>

<Nb>INV100006</Nb>

<RltdDt>2012-03-16</RltdDt>

</RfrdDocInf>

<RfrdDocAmt>

<DuePyblAmt Ccy="USD">606.00</DuePyblAmt>

<DscntApldAmt Ccy="USD">6.00</DscntApldAmt>

<TaxAmt Ccy="USD">0.00</TaxAmt>

<RmtdAmt Ccy="USD">600.00</RmtdAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>  End of Structured information for 6th Referenced Document.

</RmtInf>  End of Remittance Information for 1st payment.

</CdtTrfTxInf>  End of 1st payment in the batch.

<CdtTrfTxInf> Start of the 2nd payment for this batch.

<PmtId>

<InstrId>YOUR SYSTEM INSTRUCTION ID PMT2</InstrId>

<EndToEndId>YOUR PAYMENT REFERENCE NBR2</EndToEndId>

</PmtId>

<Amt>

<InstdAmt Ccy="USD">1050.00</InstdAmt> Amount to be credited  to the Creditor Acct for 2nd  payment.

</Amt>

<CdtrAgt>

<FinInstnId>

<ClrSysMmbId>

<MmbId>121000248 </MmbId>

</ClrSysMmbId>

<Nm>WELLS FARGO BANK NA</Nm>

<PstlAdr>

<TwnNm>LOS ANGELES</TwnNm>

<CtrySubDvsn>CA</CtrySubDvsn>

<Ctry>US</Ctry>

</PstlAdr>

</FinInstnId>

</CdtrAgt>

<Cdtr>  The Creditor for the 2nd payment in this batch.

<Nm>ACCOUNTS PAYABLE VENDOR1</Nm>

<PstlAdr>

<Ctry>US</Ctry>

<AdrLine>TECHNOLOGY PARK</AdrLine> Creditor's address present in ‘Unstructured’, random text format. Note

Non-use of ‘Structured’ tags such as <StrNm>.

<AdrLine>BUILDING 12</AdrLine>

<AdrLine>LOS ANGELES, CA</AdrLine>

</PstlAdr>

</Cdtr>

<CdtrAcct>

<Id>

<Othr>

<Id>1234123111</Id>  The Creditor’s Account Number at the Creditor Agent for the 2nd payment in this batch.

</Othr>

</Id>

<Tp>

<Cd>SVGS</Cd>Type of Account to be credited; "CASH" for Demand Deposit or "SVGS' for Savings Account.

</Tp>

</CdtrAcct>

<RmtInf>

<Ustrd>REMITTANCE - UP TO 75 CHARACTERS PER PAYMENT ALLOWED</Ustrd>  Text for 2nd payment in this batch.

<Strd>

<RfrdDocInf>  Document Reference for 2nd payment in this batch

<Tp>

<CdOrPrtry>

<Cd>CINV</Cd>

</CdOrPrtry>

</Tp>

<Nb>M52671723T</Nb>

<RltdDt>2012-04-11</RltdDt>

</RfrdDocInf>

<RfrdDocAmt>  Document Amounts

<DuePyblAmt Ccy="USD">1000.00</DuePyblAmt>

<DscntApldAmt Ccy="USD">20.00</DscntApldAmt>

<TaxAmt Ccy="USD">70.00</TaxAmt>

<RmtdAmt Ccy="USD">1050.00</RmtdAmt>

</RfrdDocAmt>

<CdtrRefInf>

<Tp>

<CdOrPrtry>

<Prtry>PO</Prtry>

</CdOrPrtry>

</Tp>

<Ref>PO REFERENCE</Ref>

</CdtrRefInf>

<AddtlRmtInf>ADDTL REFERENCE UP TO 140 CHARACTERS PER DOCUMENT SENT AS NTE SEGMENT</AddtlRmtInf>

</Strd>

</RmtInf> End of the Remittance Information for 2nd payment for this batch.

</CdtTrfTxInf> End of the 2nd payment for this batch.

</PmtInf> End of this batch.

</CstmrCdtTrfInitn> End of this ISO Message of Credit Payments

</Document> End of overall Document declaration (the complete content for this file).

