



## **DESCRIPTION OF ADDITIONAL OPTIONAL SERVICE 2 (AOS2) APPLIED IN FINLAND TO SEPA CREDIT TRANSFER**

### **AOS2: Bundling several invoices and credit notes to one payment**

#### **1. Business justification and current limitations**

##### **1.1. Business justification**

When a beneficiary issues invoices and credit notes, the Originator will make payments for the net amount of the invoices and credit notes in order to settle the credit notes. The number of invoices to be bundled to one payment depends on the amount of the invoices and credit notes. The net amount of a payment needs to be more than zero and the total net amount of the invoices and credit notes must match the payment instructed amount.

For the automated reconciliation of the payment at the Beneficiary the Originator needs to provide adequate remittance information, e.g. the creditor references or other information of the invoices and credit notes, which will be settled by the payment.

Alternative and not recommended options for the Originator is to either send the remittance information by other means, e.g. fax or email, or include the details of invoices and credit notes in a text form in the remittance information of the payment.

Both of these alternative means prevent automated reconciliation (non-STP) at the Beneficiary and/or may cause additional queries and investigations also to the Originator. These manual processes are costly. By utilizing the available ISO 20022 standard end to end STP (straight through processing) will be possible and also ensure better quality of the payments.

##### **1.2. Current limitations when AOS2 is not used**

Structured remittance information data set or unstructured remittance information data set may be used in the ISO 20022 Credit Transfer messages to carry the remittance information. According to the standard, remittance information is not limited by occurrence or by total length. The structured remittance information includes several optional data elements



with rules regarding optional values and/or length. The unstructured remittance information has no specific rules regarding the content or the length.

The SEPA Rulebook for Credit Transfers limits the use of Remittance information as follows

- either structured or unstructured remittance information may be included but not both
- unstructured remittance information may not exceed 140 characters of text in length
- structured remittance information may be used, provided the tags and the data within the 'Structured' element do not exceed 140 characters in length.

## 2. Description of the AOS2

### 2.1. Process

The Originator initiates a payment including one occurrence of unstructured remittance information and several (max 9) occurrences of structured remittance information.

The 1st unstructured remittance information is for non-AOS banks and includes aggregated information on the invoices and credit note bundled to one payment.

Each structured remittance information component includes detailed information of an invoice or a credit note (issued by the same beneficiary) according to the options of the ISO 20022 Customer Payment Initiation standard (pain.001). Each structured remittance information instance reports one invoice or credit note. One of the structured remittance information instances must be a credit note so that this AOS is not used for only normal invoices specification.

*It is recommended that creditor references are used to uniquely identify the invoices and credit notes as this improves quality and automated reconciliation.* For the same reason amounts of the invoices and credit notes must be included in each occurrence of structured remittance information.

*Note, that ISO 11649 International Creditor's Reference is recommended by the European Payments Council SEPA Credit Transfer Rulebook.*



The Beneficiary separates the occurrences of the structured remittance information of the payment and reconciles each occurrence to an invoice or a credit note in his ledger using the creditor references and the amounts.

It is the originator's bank responsibility to inform the originator, that additional occurrence of remittance information elements are not part of the basic scheme and thus not forwarded to each beneficiary.

## 2.2. Implementation of the AOS2 at the Originator

To fulfil the business requirements in the customer to bank process described above, it is recommended

*In the ISO 20022 Customer Payment Initiation message (pain 001.) several occurrences of structured remittance information data set may be included in one credit transfer instruction to specify remittance information of several invoices/credit notes in one payment with following limitation:*

- *the 1st occurrence is unstructured, limited to 140 characters and is informative for those beneficiaries, who will not receive other occurrences (e.g. customers of non AOS banks)*
- *content of the 1st occurrence is aligned to EACT (European Association of Corporate Treasurers) proposal of formatting of Unstructured Remittance Details (a change request to ISO 20022 Customer Payment Initiation message). The 140 characters may not be sufficient to specify all the invoices and credit notes, but this should not prevent the Originator to bundle the invoices and credit notes and use the 2nd and to max 9 occurrences of structured remittance information*
- *the 2nd and to max 9 occurrences of structured remittance information each max 280 characters in length including tags and data within the 'Structured' element for customers of AOS banks*
- *the content of the 2nd and to max 9 occurrences of structured remittance information includes: the document type (ReferredDocumentType), the amount paid of the invoice/credit note (ReferredDocumentAmount) and the creditor reference (CreditorReferenceInformation) or free text, if the credit note has no creditor reference (AdditionalRemittanceInformation),*
  - *each structured remittance information instance includes only one invoice or credit note*
  - *in pain.001 version 03 the ReferredDocumentType –instance contains only one invoice or credit note number*



- *if the remittance information components are oversized (1st over 140 char, 2nd and following over 280 char) the payment will be rejected by Originator's bank*
- *if there are too many occurrences (over 10) the payment will be rejected by Originator's bank*
  - *AOS cannot be used for over 9 structured invoices but instead a new payment instance should be generated which can of course be done only if there is at least one credit note again to be bundled to a new payment*
- *one invoice's payment is never done with AOS but as a normal SEPA Credit Transfer according to Rulebook*
- *if the sum amount of the invoices (max 8) is less than or equal to the amount of the credit note, the credit note cannot be settled (not validated by the Originator's bank)*
  - *the total aggregated net amount of the invoices and credit notes in the payment must match the payment's instructed amount*
- *valid ReferredDocumentInformation type codes are only CINV and CREN and they are required in all invoice and credit note cases. No other type code values may be used*
  - *please, refer the tables 2.2.1 and 2.2.2 for usage guideline rules*
- *creditor reference is put into CreditorReferenceInformation tag under CreditorReference in pain.001 version 02 or Reference in pain.001 version 03*
  - *please, refer the tables 2.2.1 and 2.2.2 for usage guideline rules*
- *the amounts are considered to have no sign, i.e. the impact to the settlement of the credit note at the Beneficiary will be based on the document type (CREN for credit note). Valid amounts and their usage are listed in the tables 2.2.1 and 2.2.2 for usage guideline rules.*

### **2.2.1. Table for Structured invoice instances usage guideline**

This table describes options and allowed cases how to instruct a structured normal invoice in RemittanceInformation/Structured –element. All other options are not allowed. The table lists both the pain.001 message version 02 and 03 tagging. Table tags are listed under PmtInf/CdtTrfTxInf/RmtInf/Strd.



Case	pain.001.001.02 index and tag	pain.001.001.03 index and tag	Value	Usage
Case 1				<i>Normal Invoice (EUR 200.00) with invoice number</i>
1	2.89 RfrdDocInf/RfrdDocTp/Cd	2.104 RfrdDocInf/Tp/CdOrPrtry/Cd	CINV	Required
1	2.92 RfrdDocInf/RfrdDocNb	2.107 RfrdDocInf/Nb	Invoice number 123456	Recommended
1	2.93 RfrdDocInf/RfrdDocRltdDt	2.108 RfrdDocInf/RltdDt	Invoice date 2010-11-01	Optional
1	2.97 RfrdDocAmt/RmtdAmt	2.119 RfrdDocAmt/RmtdAmt	Invoice amount (remitted) EUR 200.00	RemittedAmount required.
1	2.100 CdtrRefInf	2.120 CdtrRefInf		Not used
1	2.106 Invoicer	2.127 Invoicer		Not used
1	2.107 Invoicee	2.128 Invoicee		Not used
1	2.108 AddtlRmtInf	2.129 AddtlRmtInf	Free text	Optional
Case 2				<i>Normal Invoice (EUR 200.00) with ISO 11649 creditor's reference</i>
2	2.89 RfrdDocInf/RfrdDocTp/Cd	2.104 RfrdDocInf/Tp/CdOrPrtry/Cd	CINV	Required
2	2.92 RfrdDocInf/RfrdDocNb	2.107 RfrdDocInf/Nb		Not used
2	2.93 RfrdDocInf/RfrdDocRltdDt	2.108 RfrdDocInf/RltdDt		Not used
2	2.97 RfrdDocAmt/RmtdAmt	2.119 RfrdDocAmt/RmtdAmt	Invoice amount (remitted) EUR 200.00	RemittedAmount required.
2	2.102 CdtrRefInf/CdtrRefTp/Cd	2.123 CdtrRefInf/Tp/CdOrPrtry/Cd	SCOR	Required
2	2.104 CdtrRefInf/CdtrRefTp/Issr	2.125 CdtrRefInf/Tp/Issr	ISO	Required
2	2.105 CdtRefInf/CdtrRef	2.126 CdtrRefInf/Tp	RF981212	Required



Case	pain.001.001.02 index and tag	pain.001.001.03 index and tag	Value	Usage
2	2.106 Invoicer	2.127 Invoicer		Not used
2	2.107 Invoicee	2.128 Invoicee		Not used
2	2.108 AddtlRmtInf	2.129 AddtlRmtInf		Not used

### 2.2.2. Table for Structured credit note instances usage guideline

This table describes options and allowed cases how to instruct a structured credit note in RemittanceInformation/Structured –element. All other options are not allowed. The table lists both the pain.001 message version 02 and 03 tagging. Table tags are listed under PmtInf/CdtTrfTxInf/RmtInf/Strd.

Case	pain.001.001.02 index and tag	pain.001.001.03 index and tag	Value	Usage
Case 3				<i>Credit note (EUR -100.00) with invoice number</i>
3	2.89 RfrdDocInf/RfrdDocTp/Cd	2.104 RfrdDocInf/Tp/CdOrPrtry/Cd	CREN	Required
3	2.92 RfrdDocInf/RfrdDocNb	2.107 RfrdDocInf/Nb	Invoice number 123457	Recommended
3	2.93 RfrdDocInf/RfrdDocRltdDt	2.108 RfrdDocInf/RltdDt	Invoice date 2010-11-01	Optional
3	2.98 RfrdDocAmt/CdtNoteAmt	2.112 RfrdDocAmt/CdtNoteAmt	Invoice amount (credit note) EUR 100.00	CreditNoteAmount required.
3	2.100 CdtrRefInf	2.120 CdtrRefInf		Not used
3	2.106 Invoicer	2.127 Invoicer		Not used
3	2.107 Invoicee	2.128 Invoicee		Not used
3	2.108 AddtlRmtInf	2.129 AddtlRmtInf	Free text	Optional
Case 4				<i>Credit note (EUR -100.00) with 11649 creditor's reference</i>



Case	pain.001.001.02 index and tag	pain.001.001.03 index and tag	Value	Usage
4	2.89 RfrdDocInf/RfrdDocTp/Cd	2.104 RfrdDocInf/Tp/CdOrPrtry/Cd	CREN	Required
4	2.92 RfrdDocInf/RfrdDocNb	2.107 RfrdDocInf/Nb		Not used
4	2.93 RfrdDocInf/RfrdDocRltdDt	2.108 RfrdDocInf/RltdDt		Not used
4	2.98 RfrdDocAmt/CdtNoteAmt	2.112 RfrdDocAmt/CdtNoteAmt	Invoice amount (credit note) EUR 100.00	CreditNoteAmount required.
4	2.102 CdtrRefInf/CdtrRefTp/Cd	2.123 CdtrRefInf/Tp/CdOrPrtry/Cd	SCOR	Required
4	2.104 CdtrRefInf/CdtrRefTp/Issr	2.125 CdtrRefInf/Tp/Issr	ISO	Required
4	2.105 CdtrRefInf/CdtrRef	2.126 CdtrRefInf/Tp	RF981212	Required
4	2.106 Invoicer	2.127 Invoicer		Not used
4	2.107 Invoicee	2.128 Invoicee		Not used
4	2.108 AddtlRmtInf	2.129 AddtlRmtInf		Not used

### 2.3. Implementation of the AOS2 by the Originator's bank

To fulfil the business requirement described above in the bank to bank space it is agreed:

In the ISO 20022 Interbank Credit Transfer message (pacs.008) several occurrences of structured remittance information data set may be included in one credit transfer instruction to specify remittance information of several invoices/credit notes in one payment with following limitation:

The Originator's bank will forward to other AOS banks the 2nd and to max 9 occurrences of structured remittance information each max 280 characters in length including tags and data within the 'Structured' element as initiated by the Originator.

As not all beneficiary banks are able to receive additional occurrences, the remittance information for non-AOS beneficiary banks will be according to SCT Rulebook and Implementation Guide. In practise this will be the 1st



occurrence of the remittance information of the Credit Transfer transaction max 140 characters as initiated by the Originator.

The ISO 20022 Interbank Return or Reject messages will only include the 1st occurrence of the remittance information of the credit transfer transaction.

#### **2.4. Responsibility of the Originator Bank (as AOS bank)**

The originator bank is responsible for agreeing with the originator on the handling and processing of the remittance information and specially for informing the originator that additional occurrences of remittance information elements are forwarded only to the banks who offer this service (AOS banks).

The originator bank is obliged to validate the content of the remittance information as follows:

- The number of occurrences is max 10
- the maximum length of the 1st occurrence is 140 characters
- the maximum length of the 2nd and the following occurrences are 280 characters as described above in chapter 2.2.
- Otherwise the remittance information needs to be according to ISO 20022 standard and otherwise as stated in the SEPA SCT Rulebook and Implementation Guides.

The originator bank is responsible for forwarding the only the 2nd to max 9th occurrence of remittance information to the beneficiary bank, if the beneficiary bank is an AOS bank. The originator bank is responsible for forwarding only the 1st occurrence of remittance information to the beneficiary bank, if the beneficiary bank is not an AOS bank.

#### **2.5. Responsibility of the Beneficiary Bank (as AOS bank)**

The beneficiary bank is responsible for forwarding all the remittance information to the beneficiary unless otherwise agreed with the customer. The beneficiary bank is not obliged to validate the content of the remittance information.



### 3. Adherence to the AOS

Adherence to the AOS is done according to the instructions to be provided by the SEEBACH banks.

### 4. For non-AOS Participant

For the non-AOS participants the remittance information will be according to the SCT Rulebook and the Implementation Guide.

### 5. Example

The following example describes a remittance information element of a credit transfer transaction, where the payment includes two invoices and two credit notes. The amount of the credit transfer transaction is the net amount (EUR 2000.00) of the invoices and the credit notes.

- The first invoice has an invoice number "123456" and amount EUR 2000.00
- The second invoice is a credit note with ISO 11649 reference "RF08 1234 4" and amount EUR 100.00-
- The third invoice has ISO 11649 reference "RF82 4321 6" and amount EUR 150.00
- The fourth invoice is a credit note with invoice number "654321" and amount EUR 50.00-

#### 5.1. Implementation at the Originator

The 1st occurrence of the remittance information would be unstructured and limited to 140 characters and the content and element codes would be according to the EACT proposal (referred to in chapter 2.2)

Anticipated content and element codes:

RFS is the code for the standard (proposal) ISO11649 RF Creditor Reference issued by the beneficiary customer. RFS is the code for other creditor references. CINV and CREN are codes for invoice numbers. Amount paid, signed. The amount needs only to be specified if deviating from invoice/credit note amount.



### 5.1.1 AOS2 Sample in pain.001.001.02

```
-----
<CdtTrfTxInf>
  <PmtId>
    <InstrId>InstrId1</InstrId>
    <EndToEndId>EndToEndId1</EndToEndId>
  </PmtId>
  <Amt>
    <InstdAmt Ccy="EUR">2000.00</InstdAmt>
  </Amt>
-----

<RmtInf>
  <!-- 1st. instance -->
  <Ustrd>CINV/123456/EUR2000.00/RFS/RF0812344/EUR100.00-
/RFS/RF8243216/EUR150.00/CREN/654321/EUR50.00-</Ustrd>
  <!-- 2nd instance/1st invoice (normal invoice with number 123456, 2000.00 EUR) -->
  <Strd>
    <RfrdDocInf>
      <RfrdDocTp>
        <Cd>CINV</Cd>
      </RfrdDocTp>
      <RfrdDocNb>123456</RfrdDocNb>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">2000.00</RmtdAmt>
    </RfrdDocAmt>
  </Strd>
  <!-- 3rd instance/2nd invoice (credit note with ISO 11659 reference RF0812344, -100 EUR) -->
  <Strd>
    <RfrdDocInf>
      <RfrdDocTp>
        <Cd>CREN</Cd>
      </RfrdDocTp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <CdtNoteAmt Ccy="EUR">100.00</CdtNoteAmt>
    </RfrdDocAmt>
    <CdtrRefInf>
      <CdtrRefTp>
        <Cd>SCOR</Cd>
        <Issr>ISO</Issr>
      </CdtrRefTp>
      <CdtrRef>RF0812344</CdtrRef>
    </CdtrRefInf>
  </Strd>
  <!-- 4th instance/3rd invoice (normal invoice with ISO 11659 reference RF8243216, 150 EUR) -->
  <Strd>
    <RfrdDocInf>
      <RfrdDocTp>
        <Cd>CINV</Cd>
      </RfrdDocTp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">150.00</RmtdAmt>
    </RfrdDocAmt>
  </Strd>
-->
```



```
<CtrRefInf>
  <CtrRefTp>
    <Cd>SCOR</Cd>
    <Issr>ISO</Issr>
  </CtrRefTp>
  <CtrRef>RF8243216</CtrRef>
</CtrRefInf>
</Strd>
<!-- 5th. instance/4th invoice (credit note with invoice number 654321, -50 EUR) -->
<Strd>
  <RfrdDocInf>
    <RfrdDocTp>
      <Cd>CREN</Cd>
    </RfrdDocTp>
    <RfrdDocNb>654321</RfrdDocNb>
  </RfrdDocInf>
  <RfrdDocAmt>
    <CdtNoteAmt Ccy="EUR">50.00</CdtNoteAmt>
  </RfrdDocAmt>
</Strd>
</RmtInf>
```

### 5.1.2 AOS2 Sample in pain.001.001.03

```
-----
<CdtTrfTxInf>
  <PmtId>
    <InstrId>InstrId1</InstrId>
    <EndToEndId>EndToEndId1</EndToEndId>
  </PmtId>
  <Amt>
    <InstdAmt Ccy="EUR">2000.00</InstdAmt>
  </Amt>
-----
<RmtInf>
  <!-- 1st. instance -->
  <Ustrd>CINV/123456/EUR2000.00/RFS/RF0812344/EUR100.00-
/RFS/RF8243216/EUR150.00/CREN/654321/EUR50.00-</Ustrd>
  <!-- 2nd instance/1st invoice (normal invoice with number 123456, 2000.00 EUR) -->
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CINV</Cd>
        </CdOrPrtry>
      </Tp>
      <Nb>123456</Nb>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">2000.00</RmtdAmt>
    </RfrdDocAmt>
  </Strd>
  <!-- 3rd instance/2nd invoice (credit note with ISO 11659 reference RF0812344, -100 EUR) -->
  <Strd>
    <RfrdDocInf>
      <Tp>
```



```

        <CdOrPrtry>
          <Cd>CREN</Cd>
        </CdOrPrtry>
      </Tp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <CdtNoteAmt Ccy="EUR">100.00</CdtNoteAmt>
    </RfrdDocAmt>
    <CtrRefInf>
      <Tp>
        <CdOrPrtry>
          <Cd>SCOR</Cd>
        </CdOrPrtry>
        <Issr>ISO</Issr>
      </Tp>
      <Ref>RF0812344</Ref>
    </CtrRefInf>
  </Strd>
  <!-- 4th instance/3rd invoice (normal invoice with ISO 11659 reference RF8243216, 150 EUR)
-->
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CINV</Cd>
        </CdOrPrtry>
      </Tp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">150.00</RmtdAmt>
    </RfrdDocAmt>
    <CtrRefInf>
      <Tp>
        <CdOrPrtry>
          <Cd>SCOR</Cd>
        </CdOrPrtry>
        <Issr>ISO</Issr>
      </Tp>
      <Ref>RF8243216</Ref>
    </CtrRefInf>
  </Strd>
  <!-- 5th. instance/4th invoice (credit note with invoice number 654321, -50 EUR) -->
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CREN</Cd>
        </CdOrPrtry>
      </Tp>
      <Nb>654321</Nb>
    </RfrdDocInf>
    <RfrdDocAmt>
      <CdtNoteAmt Ccy="EUR">50.00</CdtNoteAmt>
    </RfrdDocAmt>
  </Strd>
</RmtInf>
```



## 5.2. Implementation at the originator's bank

### 5.2.1. The beneficiary's bank is an AOS bank

Only the 2<sup>nd</sup> - 5<sup>th</sup> occurrences of the remittance information are forwarded to the AOS-Beneficiary banks. Sample in ISO 20022 version 03.

```
<RmtInf>
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CINV</Cd>
        </CdOrPrtry>
      </Tp>
      <Nb>123456</Nb>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">2000.00</RmtdAmt>
    </RfrdDocAmt>
  </Strd>
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CREN</Cd>
        </CdOrPrtry>
      </Tp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <CdtNoteAmt Ccy="EUR">100.00</CdtNoteAmt>
    </RfrdDocAmt>
    <CdtrRefInf>
      <Tp>
        <CdOrPrtry>
          <Cd>SCOR</Cd>
        </CdOrPrtry>
        <Issr>ISO</Issr>
      </Tp>
      <Ref>RF0812344</Ref>
    </CdtrRefInf>
  </Strd>
  <Strd>
    <RfrdDocInf>
      <Tp>
        <CdOrPrtry>
          <Cd>CINV</Cd>
        </CdOrPrtry>
      </Tp>
    </RfrdDocInf>
    <RfrdDocAmt>
      <RmtdAmt Ccy="EUR">150.00</RmtdAmt>
    </RfrdDocAmt>
    <CdtrRefInf>
      <Tp>
        <CdOrPrtry>
```



```
<Cd>SCOR</Cd>
</CdOrPrtry>
<Issr>ISO</Issr>
</Tp>
<Ref>RF8243216</Ref>
</CdtrRefInf>
</Strd>
<Strd>
<RfrdDocInf>
<Tp>
<CdOrPrtry>
<Cd>CREN</Cd>
</CdOrPrtry>
</Tp>
<Nb>654321</Nb>
</RfrdDocInf>
<RfrdDocAmt>
<CdtNoteAmt Ccy="EUR">50.00</CdtNoteAmt>
</RfrdDocAmt>
</Strd>
</RmtInf>
```

### 5.2.2. The beneficiary's bank is not an AOS bank

Only the 1<sup>st</sup> occurrence of the remittance information is forwarded to the non-AOS Beneficiary bank.

```
<RmtInf>
<Ustrd>CINV/123456/EUR2000.00/RFS/RF0812344/EUR100.00-
/RFS/RF8243216/EUR150.00/CREN/654321/EUR50.00-</Ustrd>
</RmtInf>
```