# Business Payments Coalition (BPC)

# e-Invoice Semantic Model Information Elements

# Request for Industry Comment

Thank you for participating in the Request for Industry Comment. The BPC welcomes your contribution to identifying the most commonly used business processes for e-Invoice exchange in the North American market which will play an important role in the e-Invoice exchange framework. This interactive form includes:

1.0 An overview of the Semantic Model and its components

2.0 Common Business Processes

3.0 Steps for Providing Feedback

4.0 Invoice Information Elements

5.0 Key Questions (for consideration as you conduct your review)

6.0 Information Elements – Request for Comment – Interactive Form

7.0 Additional Suggested Information Elements

8.0 Respondent Profile

9.0 Support

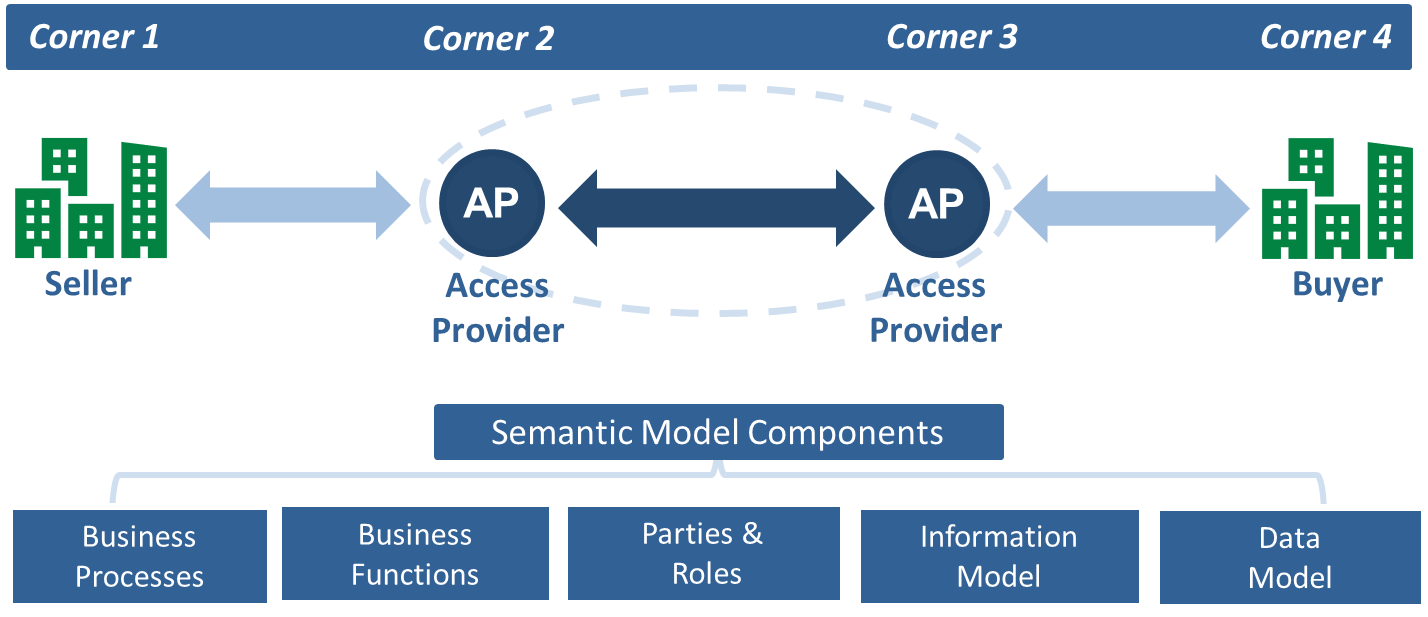
Please review each section below for additional details. All comments should be sent to [business.payments.smb@mpls.frb.org](mailto:business.payments.smb@mpls.frb.org) and are requested by Tuesday, December 1, 2020. Thank you in advance for providing input to the BPC.

1.0 Semantic Model

The Semantic Model (Figure 1) supports a four-corner networking model that connects four parties to deliver documents and messages between the sender (corner 1), the sender’s access point (corner 2), the receiver’s access point (corner 3) and the receiver (corner 4[[1]](#footnote-2))

Figure 1

Semantic Model Components



Source: Business Payments Coalition

1.1 Semantic Model Component Descriptions

A description of each Semantic Model component is provided below.

|  |  |
| --- | --- |
| Component | Description |
| Business Processes | * The business processes include scenarios such as invoices that reference contracts and invoices with no reference to purchase orders. The primary function of the semantic model is to define the fundamental information elements required to support the business process for sending and receiving invoices between businesses. |
| Business Functions | * The primary business functions involved in invoice processing include accounting, procurement, receiving, tax reporting, auditing and payment. Secondary business functions adjacent to invoice processing include inventory management, delivery processes, customs clearance, marketing and reporting. |
| Parties & Roles | * A semantic model supports the information required by the two primary parties involved in the Procure-to-Pay process, customers and suppliers, and roles such as buyer, receiver, payor, seller, delivery and payee. |
| Information Model | * Business Terms - Label assigned to a given information element which is used as a primary reference in the semantic model. * Information Rules - Rules associated with each information element to ensure successful message delivery in corners 2 and 3 of a 4-corner model. |
| Data Model | * Data Types - Attribute that specifies the type of data that an object can hold. * Integrity Rules – Rules associated with the condition or constraint for each information element is met. * Structure – The hierarchical structure of the information elements that make up the data model. |

2.0 Business Processes

The five business processes below represent those most commonly used in the North American market and are the focus of this Request for Industry Comment. Note that they are a subset[[2]](#footnote-3) of 13 business processes that are currently under review by the BPC.

1. Invoicing with reference to a blanket or standard purchase order based on a contract
2. Invoicing with reference to a blanket or standard purchase order without a contract
3. Invoicing without reference to a contract or purchase order
4. Credit memo pre-payment
5. Credit memo post-payment

3.0 Steps for Providing Feedback

Steps for providing feedback, descriptions of each field in the Invoice Information Elements table and key questions for consideration as you conduct your review are included below. In addition, the BPC recommends that both business and technical subject matter experts review and jointly provide feedback.

*Please note that feedback is only requested for those information elements that you suggest a change and/or have comments; all other rows in the form should be left blank*.

* Step 1 - Save and retitle this document.
  + Go to File > Save As
  + Select a file location within your PC
  + Enter a name and select Save

## Step 2 – Go to section 6.0 Information Elements – Request for Comment – Interactive Form

* + Review each information element, related information rules, and cardinality, and determine if you suggest a change and/or have comments.
  + In the Suggest a Change column, click on the “Choose an item” dropdown list and select the appropriate item, as applicable.
  + Indicate related feedback in the Comments field, as applicable.
  + Note:
    - *If you suggest the any new information elements for inclusion in the Semantic Model, please add them in section 7.0 Additional Suggested Information Elements.*

4.0 Invoice Information Elements

Below are descriptions of each column in the Information Elements – Request for Comment – Interactive Form.

|  |  |
| --- | --- |
| Column | Description |
| NABT -ID | * The identifier used for cross referencing information elements and business groups in the North American semantic model with other models, such as EN 16931. Identifiers beginning in the 900s indicate additional elements that support the North American model. |
| Information Element | * The data associated with each component of an invoice (e.g. business term, cardinality, or description) that can be defined independent of the syntax.   ***Note****: Elements with a ‘0..n’ or ‘1..n’ designation may exist more than once.* |
| Information Rules | * Rules associated with each information element to ensure successful message delivery in corners 2 and 3 of a 4-corner model. |
| Assigned Cardinality (M or O) | * Mandatory (M) - A core set of information elements that are required. * Optional (O) – A core set of information elements that are not required.   ***Note:*** *Some optional elements are mandatory when another element is present, as noted in the Information Rules.* |
| Suggested Change | * Dropdown options include:   + Information element data not needed   + Information rule has an error or is missing   + Cardinality should change |
| Comments | * Field for providing any additional feedback. |

5.0 Key Questions

Consider the following questions when reviewing and providing feedback on each information element.

* Is the information representative of the invoices that you send/receive to support the business process?
* Is the information rule sufficient to support the business process?
* Are there any information elements not present that should be added to the model to support your business processes?
* Are any of the information elements not a part of your invoicing process?

## 6.0 Information Elements – Request for Comment – Interactive Form

Please review each information element and provide feedback where applicable.

## Invoice Information

| **NABT- ID** | **Information Element** | **Information**  **Rules** | **Assigned**  **Cardinality** | **Suggested**  **Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| 001 | Invoice Number |  | M | Choose an item. |  |
| 999 | Copy Indicator |  | O | Choose an item. |  |
| 998 | Universally Unique Identifier (UUID) |  | O | Choose an item. |  |
| 002 | Invoice Date |  | M | Choose an item. |  |
| 997 | Invoice Issue Time |  | O | Choose an item. |  |
| 003 | Invoice Type Code | Invoice Type Code value must be Commercial Invoice (380) or Credit Note (381). | M | Choose an item. |  |
| 005 | Invoice Currency Code | Document Currency Code must reflect values from International Organization for Standardization (ISO) 4217 Currency Codes | M | Choose an item. |  |
| 996 | Tax Currency Code | Tax Currency Code must reflect values from International Organization for Standardization (ISO) 4217 Currency Codes | O | Choose an item. |  |
| 009 | Invoice Due Date |  | O | Choose an item. |  |
| 010 | PO Sender/Requester/ Buyer Reference |  | O | Choose an item. |  |
| 011 | Project Reference | Cannot have more than one project reference. | O | Choose an item. |  |
| 012 | Contract Number  **Note:** Mandatory for business process 01. | Cannot have more than one contract number. | O | Choose an item. |  |
| 013 | Purchase Order Number  **Note:** Mandatory for business processes 01 and 02. |  | O | Choose an item. |  |
| 014 | Supplier Order Number |  | O | Choose an item. |  |
| 995 | Date of Order Reference |  | O | Choose an item. |  |
| 015 | Proof of Delivery | Cannot have more than one proof of delivery reference. | O | Choose an item. |  |
| 016 | Advance Shipping Notice (0..n) |  | O | Choose an item. |  |
| 019 | Buyer Accounting Reference |  | O | Choose an item. |  |
| 020 | Payment Terms (0..n) |  | O | Choose an item. |  |
| **NABG -001** | **INVOICE NOTE** (0..n) |  | O | Choose an item. |  |
| 022 | Invoice Note |  | O | Choose an item. |  |
| **NABG-014** | **INVOICING PERIOD** | Cannot have more than one invoicing period. | O | Choose an item. |  |
| 073 | Invoicing Period Start Date | Invoicing Period Start Date or Invoicing Period End Date must exist if Invoicing Period information is provided. | O | Choose an item. |  |
| 074 | Invoicing Period End Date | Invoicing Period End Date cannot be before Invoicing Period Start Date. | O | Choose an item. |  |
| **NABG-002** | **PROCESS CONTROL** |  | M | Choose an item. |  |
| 023 | Business process type | Business process type must reflect a BPC identifier. | M | Choose an item. |  |
| 994 | Session Identifier | Session Identifier must exist exactly once. | M | Choose an item. |  |
| 024 | Specification identifier | Specification identifier must reflect a BPC identifier. | M | Choose an item. |  |
| **NABG-003** | **PRECEDING INVOICE REFERENCE** |  | O | Choose an item. |  |
| 025 | Preceding Invoice Number | Preceding Invoice Number must exist if Preceding Invoice Reference is provided. | O | Choose an item. |  |
| 026 | Preceding Invoice Issue Date |  | O | Choose an item. |  |

## Supplier – Seller / Accounts Receivable

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-004** | **SUPPLIER - SELLER** |  | M | Choose an item. |  |
| 027 | Supplier - Seller Name | Seller name must exist exactly once. | M | Choose an item. |  |
| 028 | Supplier - Seller trading name | Cannot have more than one Supplier - Seller Trading Name. | O | Choose an item. |  |
| 029 | Supplier - Seller identifier | Cannot have more than one Supplier - Seller Identifier. | O | Choose an item. |  |
| 029 - 1 | Scheme identifier | Scheme Identifier must exist if Supplier - Seller Identifier is provided. | O | Choose an item. |  |
| 030 | Supplier - Seller legal registration identifier (DUNS, LEIs, GS1, etc.) | Cannot have more than one Supplier - Seller legal registration identifier.  Supplier - Seller Identifier or Supplier - Seller legal registration identifier must exist. | O | Choose an item. |  |
| 030 - 1 | Scheme identifier | Scheme Identifier must exist if Supplier - Seller Legal Registration Identifier is provided. | O | Choose an item. |  |
| 034 | Supplier - Seller electronic address |  | O | Choose an item. |  |
| 034 - 1 | Scheme identifier | Supplier - Seller electronic address scheme identifier must exist if Supplier - Seller electronic address is provided. | O | Choose an item. |  |
| **NABG-005** | **SUPPLIER - SELLER POSTAL ADDRESS** | Supplier - Seller Postal Address must exist exactly once. | M | Choose an item. |  |
| 035 | Supplier - Seller Address Line (0..n) |  | O | Choose an item. |  |
| 037 | Supplier - Seller city |  | O | Choose an item. |  |
| 038 | Supplier - Seller post code |  | O | Choose an item. |  |
| 039 | Supplier - Seller country subdivision |  | O | Choose an item. |  |
| 040 | Supplier - Seller country code | Supplier - Seller Country Code must reflect value from International Organization for Standardization (ISO) ISO 3166-Country Codes | M | Choose an item. |  |
| **NABG-006** | **SUPPLIER - SELLER CONTACT** |  | O | Choose an item. |  |
| 041 | Supplier - Seller Contact Name |  | O | Choose an item. |  |
| 042 | Supplier - Seller Contact Telephone Number |  | O | Choose an item. |  |
| 043 | Supplier - Seller Contact Email Address |  | O | Choose an item. |  |
| 990 | Supplier - Seller Job title/Role |  | O | Choose an item. |  |
| 989 | Supplier - Seller Department code |  | O | Choose an item. |  |
| 988 | Supplier - Seller Note (0..n) |  | O | Choose an item. |  |
| **NABG-010** | **SUPPLIER - ACCOUNTS RECEIVABLE** | Supplier - Accounts Receivable must exist exactly once. | M | Choose an item. |  |
| 059 | Supplier - Accounts Receivable Name | Supplier - Accounts Receivable Name must exist exactly once. | M | Choose an item. |  |
| 060 | Supplier - Accounts Receivable Identifier | Cannot have more than one Supplier - Accounts Receivable Identifier. | O | Choose an item. |  |
| 060 - 1 | Scheme Identifier | Scheme Identifier must exist if Supplier - Accounts Receivable Identifier is provided. | O | Choose an item. |  |
| 061 | Supplier - Accounts Receivable Legal Registration Identifier | Cannot have more than one Supplier - Accounts Receivable Legal Registration Identifier. | O | Choose an item. |  |
| 061 - 1 | Scheme Identifier | Scheme Identifier must exist if Supplier - Accounts Receivable Legal Registration Identifier is provided. | O | Choose an item. |  |
| **NABG- 999** | **SUPPLIER - ACCOUNTS RECEIVABLE POSTAL ADDRESS** | Supplier - Accounts Receivable Postal Address must exist exactly once. | M | Choose an item. |  |
| 987 | Supplier - Accounts Receivable Address Line (0..n) |  | O | Choose an item. |  |
| 986 | Supplier - Accounts Receivable City |  | O | Choose an item. |  |
| 985 | Supplier - Accounts Receivable Post Code |  | O | Choose an item. |  |
| 984 | Supplier - Accounts Receivable Country Subdivision |  | O | Choose an item. |  |
| 983 | Supplier - Accounts Receivable Country Code | Supplier - Accounts Receivable Contact Country Code must exist exactly once. | M | Choose an item. |  |
| **NABG- 998** | **SUPPLIER - ACCOUNTS RECEIVABLE CONTACT** |  | O | Choose an item. |  |
| 982 | Supplier - Accounts Receivable Contact Name |  | O | Choose an item. |  |
| 981 | Supplier - Accounts Receivable Contact Telephone Number |  | O | Choose an item. |  |
| 980 | Supplier - Accounts Receivable Contact Email Address |  | O | Choose an item. |  |

## Customer – Accounts Payable / Buyer

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-007** | **CUSTOMER - ACCOUNTS PAYABLE** | Customer - Accounts Payable must exist exactly once. | M | Choose an item. |  |
| 044 | Customer - Accounts Payable Name | Customer - Accounts Payable Name must exist exactly once. | M | Choose an item. |  |
| 045 | Customer - Accounts Payable Trading Name | Cannot have more than one Customer - Accounts Payable Trading Name. | O | Choose an item. |  |
| 046 | Customer - Accounts Payable identifier (0..n) |  | O | Choose an item. |  |
| 046 - 1 | Scheme Identifier |  | O | Choose an item. |  |
| 047 | Customer - Accounts Payable Legal Registration Identifier | Cannot have more than one Customer - Accounts Payable Legal Registration Identifier. | O | Choose an item. |  |
| 047 - 1 | Scheme Identifier |  | O | Choose an item. |  |
| 049 | Customer - Accounts Payable Electronic Address |  | O | Choose an item. |  |
| 049-1 | Scheme identifier | Customer - Accounts Payable Electronic Address Scheme Identifier must exist exactly once. | O | Choose an item. |  |
| **NABG-008** | **CUSTOMER - ACCOUNTS PAYABLE POSTAL ADDRESS** |  | O | Choose an item. |  |
| 050 | Customer - Accounts Payable Address Line (0..n) |  | O | Choose an item. |  |
| 052 | Customer - Accounts Payable city |  | O | Choose an item. |  |
| 053 | Customer - Accounts Payable post code |  | O | Choose an item. |  |
| 054 | Customer - Accounts Payable Country Subdivision |  | O | Choose an item. |  |
| 055 | Customer - Accounts Payable Country code | Customer - Accounts Payable Country Code must reflect value from International Organization for Standardization (ISO) ISO 3166-Country Codes | O | Choose an item. |  |
| **NABG-009** | **CUSTOMER - ACCOUNTS PAYABLE CONTACT** |  | O | Choose an item. |  |
| 056 | Customer - Accounts Payable Contact Name |  | O | Choose an item. |  |
| 057 | Customer - Accounts Payable contact telephone number |  | O | Choose an item. |  |
| 058 | Customer - Accounts Payable contact email address |  | O | Choose an item. |  |
| **NABG-997** | **CUSTOMER - BUYER** |  | O | Choose an item. |  |
| 979 | Customer- Buyer Name | Customer - Buyer Name must exist exactly once. | O | Choose an item. |  |
| 978 | Customer- Buyer trading name | Cannot have more than one Customer - Buyer Trading Name | O | Choose an item. |  |
| 977 | Customer- Buyer identifier | Cannot have more than one Customer - Buyer Identifier | O | Choose an item. |  |
| 976 | Scheme identifier | Scheme Identifier must exist if Customer - Buyer Identifier is provided. | O | Choose an item. |  |
| 975 | Customer - Buyer legal registration identifier | Cannot have more than one Customer - Buyer legal registration identifier | O | Choose an item. |  |
| 974 | Scheme identifier | Scheme Identifier must exist if Customer - Buyer Legal Registration Identifier is provided. | O | Choose an item. |  |
| **NABG-996** | **CUSTOMER - BUYER POSTAL ADDRESS** |  | O | Choose an item. |  |
| 973 | Customer - Buyer Address Line (0..n) |  | O | Choose an item. |  |
| 972 | Customer - Buyer city |  | O | Choose an item. |  |
| 971 | Customer - Buyer post code |  | O | Choose an item. |  |
| 970 | Customer - Buyer country subdivision |  | O | Choose an item. |  |
| 969 | Customer - Buyer Country Code |  | O | Choose an item. |  |
| **NABG -995** | **CUSTOMER - BUYER CONTACT** |  | O | Choose an item. |  |
| 968 | Customer - Buyer Contact Name |  | O | Choose an item. |  |
| 967 | Customer - Buyer contact telephone number |  | O | Choose an item. |  |
| 966 | Customer - Buyer Contact Email Address |  | O | Choose an item. |  |
| 965 | Customer - Buyer Job title/Role |  | O | Choose an item. |  |
| 964 | Customer - Buyer Department code |  | O | Choose an item. |  |
| 963 | Customer - Buyer Note (0..n) |  | O | Choose an item. |  |

## Delivery Information (Header and Line Level)

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-13** | **DELIVERY INFORMATION**  *Note: This information is repeated at the line level* | Cannot have more than one set of Delivery Information. | O | Choose an item. |  |
| 962 | Delivery Reference Number |  | O | Choose an item. |  |
| 070 | Deliver to party name | Cannot have more than one Deliver to party name | O | Choose an item. |  |
| 071 | Deliver to location identifier |  | O | Choose an item. |  |
| 071-1 | Scheme identifier |  | O | Choose an item. |  |
| 961 | Requested Delivery Date |  | O | Choose an item. |  |
| 072 | Actual delivery date |  | O | Choose an item. |  |
| 960 | Shipping Number |  | O | Choose an item. |  |
| 934 | Proof of Receipt Identifier |  | O | Choose an item. |  |
| 933 | Proof of Receipt Document |  | O | Choose an item. |  |
| **NABG-15** | **DELIVER TO ADDRESS** |  | O | Choose an item. |  |
| 975 | Deliver to Address Line |  | O | Choose an item. |  |
| 077 | Deliver to City |  | O | Choose an item. |  |
| 078 | Deliver to Post Code |  | O | Choose an item. |  |
| 079 | Deliver to Country Subdivision |  | O | Choose an item. |  |
| 080 | Deliver to Country Code | Deliver to Country Code must reflect value from International Organization for Standardization (ISO) ISO 3166-Country Codes | O | Choose an item. |  |

## Payment Instructions

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- |
| **NABG-16** | **PAYMENT INSTRUCTIONS** | Cannot be more than one Payment Instructions | O | | Choose an item. |  |
| 081 | Payment Method Type Code | Payment Method Type Code must reflect value from United Nations Economic Commission for Europe (UNECE) – (UNTDID) – D.18A – Usage of Element 4461: (Payments means, coded) or ISO 20022 Payment Means | O | | Choose an item. |  |
| 959 | Scheme identifier |  | O | | Choose an item. |  |
| 082 | Payment Method Text | Cannot have more than one payment method text entry. | O | | Choose an item. |  |
| 083 | Remittance Requirement Information | Cannot have more than one remittance requirement information entry. | O | | Choose an item. |  |
| **NABG-17** | **CREDIT TRANSFER** |  | O | | Choose an item. |  |
| 084 | Payment Account Identifier | Payment Account Identifier must exist exactly once if Credit Transfer information is provided. | M | | Choose an item. |  |
| 085 | Payment Account Name |  | O | | Choose an item. |  |
| 086 | Payment Service Provider Identifier |  | O | Choose an item. | |  |
| **NABG-18** | **PAYMENT CARD INFORMATION** |  | O | Choose an item. | |  |
| 087 | Payment Card Primary Account Number | Payment card primary account number must exist exactly once if Payment Card Information is provided. | O | Choose an item. | |  |
| 088 | Payment Card Holder Name |  | O | Choose an item. | |  |
| **NABG-19** | **DIRECT BANKING INFORMATION** |  | O | Choose an item. | |  |
| 089 | Mandate Reference Identifier |  | O | Choose an item. | |  |
| 090 | Bank Assigned Creditor Identifier | Cannot have more than one Bank Assigned Creditor Identifier. | O | Choose an item. | |  |
| 091 | Debited Account Identifier |  | O | Choose an item. | |  |

## Charges and Discounts

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-020** | **DOCUMENT LEVEL DISCOUNTS (0..n)** |  | O | Choose an item. |  |
| 092 | Document level discount amount | Document level discount amount is must exist if Document Level Discount information is provided. | M | Choose an item. |  |
| 093 | Document level discount base amount |  | O | Choose an item. |  |
| 094 | Document level discount percentage |  | O | Choose an item. |  |
| 095 | Document level discount tax category code | Document level discount tax category code must reflect values from United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 16B – Duty or tax or fee category code (Subset of UNCL5305) | O | Choose an item. |  |
| 096 | Document level discount tax rate | Cannot have more than one Document level discount tax rate | O | Choose an item. |  |
| 097 | Document level discount reason (0..n) | Charge Reason or Charge Reason Code must exist if Document level discounts information is provided. | O | Choose an item. |  |
| 098 | Document level discount reason code | Document level discount reason code must reflect value from United Nations Economic Commission for Europe (UNECE) -(UNTDID) D. 18A – Usage of Element 5189 (Charge/allowance description, coded. | O | Choose an item. |  |
| **NABG-021** | **DOCUMENT LEVEL CHARGES (0..n)** |  | O | Choose an item. |  |
| 099 | Document level charge amount | Document level charge amount is must exist if Document Level Charges information is provided. | O | Choose an item. |  |
| 100 | Document level charge base amount |  | O | Choose an item. |  |
| 101 | Document level charge percentage |  | O | Choose an item. |  |
| 102 | Document level charge tax category code | Document level charge tax category code value must reflect United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 16B – Duty or tax or fee category code (Subset of UNCL5305). | O | Choose an item. |  |
| 103 | Document level charge tax rate |  | O | Choose an item. |  |
| 104 | Document level charge reason (0..n) |  | O | Choose an item. |  |
| 105 | Document level charge reason code |  | O | Choose an item. |  |
| **NABG-027** | **INVOICE LINE AND CREDIT NOTE LINE DISCOUNTS (0..n))** |  | O | Choose an item. |  |
| 136 | Invoice line and Credit Note line discount amount |  | M | Choose an item. |  |
| 137 | Invoice line and Credit Note line discount base amount |  | O | Choose an item. |  |
| 138 | Invoice line and Credit Note line discount percentage |  | O | Choose an item. |  |
| 139 | Invoice line and Credit Note line discount reason | Invoice line discount reason or Invoice Line Discount Reason Code must exist if Invoice Line and Credit Note Line discounts information is provided. | O | Choose an item. |  |
| 140 | Invoice line and Credit Note line discount reason code | Invoice line discount reason code must reflect values from United Nations Economic Commission for Europe (UNECE) -(UNTDID) D. 18A – Usage of Element 5189 (Charge/allowance description, coded) | O | Choose an item. |  |
| **NABG-028** | **INVOICE LINE AND CREDIT NOTE LINE CHARGES (0..n))** |  | O | Choose an item. |  |
| 141 | Invoice line and Credit Note line charge amount |  | M | Choose an item. |  |
| 142 | Invoice line and Credit Note line charge base amount |  | O | Choose an item. |  |
| 143 | Invoice line and Credit Note line charge percentage |  | O | Choose an item. |  |
| 144 | Invoice line and Credit Note line charge reason | Invoice line charge reason or Invoice line charge reason code must exist if Invoice Line and Credit Note Line Charges information is provided. | O | Choose an item. |  |
| 145 | Invoice line and Credit Note line charge reason code | Invoice line charge reason code Must reflect values from United Nations Economic Commission for Europe (UNECE) - (UNTDID) – D.18A – Element 7161 (Special service description code) | O | Choose an item. |  |

## Document Totals

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| 106 | Sum of Invoice line net amount | Sum of invoice line net amount must exist exactly once. | M | Choose an item. |  |
| 107 | Sum of discounts on document level | Total Invoice Discount Amount must equal the sum of document level allowance amounts. | O | Choose an item. |  |
| 108 | Sum of charges on document level | Total Invoice Charge Amount must equal the sum of document level charge amounts. | O | Choose an item. |  |
| 109 | Invoice total without tax | Invoice total without tax must equal the sum of invoice line net amount minus the sum of Total Invoice Discount Amount and Total Invoice Charge Amount. | M | Choose an item. |  |
| 110 | Invoice total tax amount | Invoice total tax amount must equal Tax Category Amount. | O | Choose an item. |  |
| 111 | Invoice total tax amount in accounting currency |  | O | Choose an item. |  |
| 112 | Invoice total amount with tax | Invoice total amount with tax must equal Invoice Total without Tax plus Invoice total tax amount. | O | Choose an item. |  |
| 113 | Pre-paid amount |  | O | Choose an item. |  |
| 114 | Rounding Amount |  | O | Choose an item. |  |
| 115 | Amount due for payment |  | M | Choose an item. |  |

## Tax Breakdown

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-023** | **TAX BREAKDOWN** | Tax Breakdown information must exist. | M | Choose an item. |  |
| 116 | Tax Category Taxable Amount | Tax Category taxable amount must exist. | M | Choose an item. |  |
| 117 | Tax Category Amount | Tax amount must equal to the taxable amount times the taxable rate, rounded to two decimals. | M | Choose an item. |  |
| 118 | Tax Category Code | Tax category code must reflect value from United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 16B – Duty or tax or fee category code (Subset of UNCL5305) | M | Choose an item. |  |
| 119 | Tax Category Rate |  | O | Choose an item. |  |
| 120 | Tax Exemption Reason Text | More than one Tax Exemption Reason Text entry exists. | O | Choose an item. |  |
| 121 | Tax Exemption Reason Code |  | O | Choose an item. |  |

Choose an item.

## Additional Supporting Documents

| **ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-024** | **ADDITIONAL SUPPORTING DOCUMENTS** |  | O | Choose an item. |  |
| 122 | Supporting document reference |  | O | Choose an item. |  |
| 123 | Supporting document description |  | O | Choose an item. |  |
| 958 | Document Issue Date |  | O | Choose an item. |  |
| 124 | External document location |  | O | Choose an item. |  |
| 125 | Attached document |  | O | Choose an item. |  |
| 125-1 | Attached document Mime code |  | O | Choose an item. |  |
| 125-2 | Attached document Filename | Attached document filename must exist exactly once. | O | Choose an item. |  |

## Invoice Line Information

| **NABT-ID** | **Information Element** | **Information Rules** | **Assigned Cardinality** | **Suggested Change** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **NABG-25** | I**NVOICE LINE AND CREDIT NOTE LINE** (1..n) |  | M | Choose an item. |  |
| 126 | Invoice Line and Credit note Line identifier |  | M | Choose an item. |  |
| 127 | Invoice Line Note (0..n) |  | O | Choose an item. |  |
| 129 | Invoiced quantity | Invoiced quantity must exist exactly once. | M | Choose an item. |  |
| 130 | Invoiced Quantity Unit of Measure Code | Invoiced quantity unit of measure code must reflect values from UN/ECE Recommendation N.20 "Codes for Units of Measure Used in International Trade" | M | Choose an item. |  |
| 131 | Invoice Line Net Amount |  | M | Choose an item. |  |
| 132 | Purchase Order Line Number (0..n) | Purchase Order Line Number must exist exactly once. | O | Choose an item. |  |
| 957 | Document Reference (0..n) |  | O | Choose an item. |  |
| 133 | Invoice line Buyer accounting reference |  | O | Choose an item. |  |
| 956 | Shipping Number (0..n) |  | O | Choose an item. |  |
| **NABG-026** | **INVOICE LINE AND CREDIT NOTE LINE PERIOD** |  | O |  |  |
| 134 | Invoice Line and Credit Note Line period start date | Invoice Line and Credit Note Line Period Start Date or Invoice Line and Credit Note Line Period End Date must exist if Invoicing Line and Credit Note Line Period information is provided. | O | Choose an item. |  |
| 135 | Invoice Line and Credit Note Line period end date | Invoicing Line and Credit Note Line Period End Date cannot be before Invoicing Line and Credit Note Line Period Start Date. | O | Choose an item. |  |
| **NABG-994** | **INVOICE LINE AND CREDIT NOTE LINE TAX INFORMATION (0..n)** |  | O | Choose an item. |  |
| 955 | Tax Amount |  | M | Choose an item. |  |
| 954 | Tax Subtotal (0..n) |  | O | Choose an item. |  |
| 953 | Tax Subtotal Amount |  | M | Choose an item. |  |
| 952 | Tax Category Code | Tax Category Code must reflect value from United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 16B – Duty or tax or fee category code (Subset of UNCL5305) | O | Choose an item. |  |
| 951 | Tax Scheme Identifier |  | O | Choose an item. |  |
| **NABG-27** | **INVOICE LINE AND CREDIT NOTE LINE DISCOUNTS** |  | O | Choose an item. |  |
| 136 | Invoice line and Credit Note line discount amount |  | O | Choose an item. |  |
| 137 | Invoice line and Credit Note line discount base amount |  | O | Choose an item. |  |
| 138 | Invoice line and Credit Note line discount percentage |  | O | Choose an item. |  |
| 139 | Invoice line and Credit Note line discount reason | Cannot have more than one Invoice line discount reason. | O | Choose an item. |  |
| 140 | Invoice line and Credit Note line discount reason code | Invoice line discount reason code must reflect value from United Nations Economic Commission for Europe (UNECE) -(UNTDID) D. 18A – Usage of Element 5189 (Charge/allowance description, coded) | O | Choose an item. |  |
| **NABG-28** | **INVOICE LINE AND CREDIT NOTE LINE CHARGES** |  | O | Choose an item. |  |
| 141 | Invoice line and Credit Note line charge amount |  | O | Choose an item. |  |
| 142 | Invoice line and Credit Note line charge base amount |  | O | Choose an item. |  |
| 143 | Invoice line and Credit Note line charge percentage |  | O | Choose an item. |  |
| 144 | Invoice line and Credit Note line charge reason | Cannot have more than one Invoice line charge reason. | O | Choose an item. |  |
| 145 | Invoice line and Credit Note line charge reason code | Invoice line charge reason code must reflect value from United Nations Economic Commission for Europe (UNECE) - (UNTDID) – D.18A – Element 7161 (Special service description code) | O | Choose an item. |  |
| **NABG-029** | **PRICE DETAILS** | Price Details must exist exactly once. | M | Choose an item. |  |
| 146 | Item price |  | M | Choose an item. |  |
| 147 | Item price discount | Cannot have more than one item price discount. | O | Choose an item. |  |
| 950 | Item price discount % |  | O | Choose an item. |  |
| 148 | Item gross price | Cannot have more than one item gross price.  Item gross price cannot be negative. | O | Choose an item. |  |
| 149 | Item price base quantity |  | O | Choose an item. |  |
| 150 | Item price base quantity unit of measure code | Code must be equal to Invoiced/Credited Quantity Unit of Measure Code. | O | Choose an item. |  |
| **NABG-030** | **ITEM TAX INFORMATION (0..n)** | Invoiced Item Tax Rate and Per Unit Tax Amount are mutually exclusive. | O | Choose an item. |  |
| 151 | Invoiced Item Tax Category Code | Invoiced Item Tax Category Code must reflect value from United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 16B – Duty or tax or fee category code (Subset of UNCL5305) | M | Choose an item. |  |
| 152 | Invoiced Item Tax Rate |  | O | Choose an item. |  |
| 949 | Per Unit Tax Amount |  | O | Choose an item. |  |
| 947 | Invoiced Item Tax Scheme Identifier | Invoiced Item Tax Scheme Identifier must reflect value from United Nations Economic Commission for Europe (UNECE) – (UNTDID) D. 18A – Usage of Element 5153 (Duty/tax/fee) | O | Choose an item. |  |
| **NABG-031** | **ITEM INFORMATION** |  | M | Choose an item. |  |
| 153 | Item name | Item Name must exist exactly once. | M | Choose an item. |  |
| 154 | Product/service description (0..n) |  | O | Choose an item. |  |
| 155 | Item Seller's identifier |  | O | Choose an item. |  |
| 156 | Item Buyer's identifier |  | O | Choose an item. |  |
| 157 | Product/Service Code |  | O | Choose an item. |  |
| 157-1 | Scheme identifier |  | O | Choose an item. |  |
| 158 | Item classification identifier (0..n) |  | O | Choose an item. |  |
| 158-2 | Scheme identifier |  | O | Choose an item. |  |
| 159 | Item country of origin |  | O | Choose an item. |  |
| 946 | Manufacturer Identification Number |  | O | Choose an item. |  |
| 945 | Item Instance |  | O | Choose an item. |  |
| 944 | Serial Identification Number |  | O | Choose an item. |  |
| 943 | Lot Identification |  | O | Choose an item. |  |
| 942 | Lot Identification Number | Lot identification number must exist exactly once. | O | Choose an item. |  |
| **NABG-032** | **ITEM ATTRIBUTES (0..n)** |  | O |  |  |
| 160 | Item attribute name |  | O | Choose an item. |  |
| 161 | Item attribute value |  | O | Choose an item. |  |

# 7.0 Additional Suggested Information Elements

Please provide any additional suggested information element business groupings that you would like considered for inclusion in the Semantic Model.

|  |  |  |
| --- | --- | --- |
| Information Element Business Grouping | Nature of the Information (e.g. Bill of lading for Delivery) | Comments |
| Choose an item. |  |  |
| Choose an item. |  |  |
| Choose an item. |  |  |
| Choose an item. |  |  |
| Choose an item. |  |  |

8.0 Respondent Profile

The BPC is requesting general information from industry comment respondents. Below are dropdown selections for use in providing *optional*, high-level information regarding you and your industry[[3]](#footnote-4).

|  |  |
| --- | --- |
| Industry (if a business) | Choose an item. |
| Role (if a business) | Choose an item. |
| Annual Invoice Volume (if a business) | Choose an item. |
| Number of Vendors / Customers (if a business) | Choose an item. |
| Type of Service Provider / Enabler | Choose an item. |

9.0 Support

If you have questions about the Request for Industry Comment, how to review the information elements and provide feedback, please email the Business Payments Coalition at [business.payments.smb@mpls.frb.org](mailto:business.payments.smb@mpls.frb.org).

1. The connection between corners 1 and 2 and corners 3 and 4 represent the relationship between an access provider and their customer. How the access provider sends and receives the invoice is dependent on customer requirements. [↑](#footnote-ref-2)
2. The BPC will continue their review of the following business processes in 2020 including, but not limited to: invoicing the delivery of goods and services against a pre-payment; invoicing the delivery of goods and services against a spot payment; payment in advance of delivery; invoices with references to a dispatch advice; invoices with references to a dispatch advice and a receiving advice; cancellation/corrective invoicing; partial and final invoicing; and self-billing. [↑](#footnote-ref-3)
3. Submissions are anonymous and should not identify the name of the individual or firm making the submission. Information received will only be shared within the BPC to assist in the assessment described in this document. [↑](#footnote-ref-4)