RosettaNet Implementation Guide

Cluster 3: Order Management
Segment C: Returns & Finance Management

PIP3C7: Notify of Self-Billing Invoice

V01.00.00
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1   Document Purpose

The purpose of this document is to present PIP Usage Notes for PIP3C7, Notify of Self-Billing Invoice <V01.00.00>**.** This document was created by the collaborative efforts of a specific Validation Team.

This document is a **<u>recommended</u>** guideline for implementing a RosettaNet PIP® between Trading Partners. This document provides information that articulates specific use by the Validation Team. This document should enable:

     i.   Shortened implementation lead-time by documenting the best way to map internal systems to RosettaNet Standards;

     ii.   Consistency in standards deployment; and

     iii.   Increased interoperability

1.1   Related Documents

- Specific PIP Specification Package (including Specification, Message Guidelines, DTD, Release Notes, etc.)
- RIG Fundamentals

2   Introduction

Based upon the traditional invoice process, the self-billing process is a re-engineering effort associated with liability settlements arising from supply of goods between a Customer and a Supplier. The Self-Billing Invoice (SBI) is the procedure for authorizing payment for received goods based upon received or used quantities of goods. Prices must be pre-negotiated and maintained by both the Customer and the Supplier in their respective applications in order for the process to operate smoothly.

In traditional material invoicing (where 3C3 is used), one delivery from the Supplier is normally invoiced with one invoice. In the consignment stock operation, this link is broken. Each and every single consumption from the consignment stock to the Customer's owned stock creates a liability towards the Supplier. There can be thousands of individual consumptions per day, which equals thousands of self-billing line items. The companies who currently utilize SBI/Consignment have agreed that it does not make sense to create a separate invoice per consumption, but to combine the consumptions into one SBI on a daily or weekly basis.

The self-billing process does not operate independently of other processes. It is dependent upon the functions of ordering and physical distribution, and it triggers the payment process. Parts of these processes are also shown in order to clarify the relationships between them. The picture below shows the key processes in a Forecast and Inventory Management scenario.
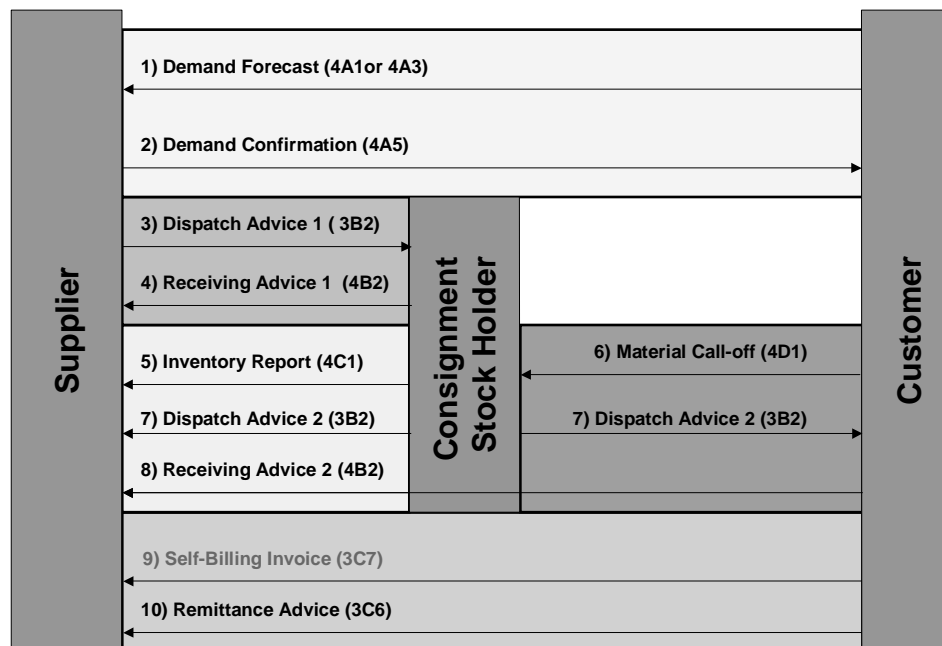

Figure 1: Forecast and Inventory Management Scenario

2.1 Assumptions

The primary focus of this implementation guide is the supplier receiving the customer-initiated invoice (i.e. Self-Billing Invoice).

2.1.1 Supply Chain Focus

This PIP includes design and technology requirements utilized in the supply chains listed below:
   1. Electronic Components (EC)
   2. Semiconductor Manufacturing (SM)

2.1.2 Business Scenarios

The PIP is designed to fulfill two different Self-Billing business scenarios:
   1. Consignment Stock Self-Billing
   2. Evaluated Receipt Settlement (ERS) Self-Billing (SBI without consignment stock)

NOTE 1: The team only validated the Consignment Stock Self-Billing scenario, since the other process is not in use between the validation partners.

Note 2: Some governments have specific requirements to enable audit of invoices for tax purposes. It is the responsibility of each trading partner to ensure that they comply with regulations concerning the use of electronic invoice, applicable in the countries where they are doing business.

2.1.2.1   Definition of Self-Billing in Consignment Stock

Definition of Self-Billing on Consignment Stock: Goods on consignment = Goods that are physically delivered to a customer or its agent, but which remain the property of the supplier. The goods are sold to the customer, when the customer takes them for use or resale. When Self-Billing on consignment is used, instead of simply reporting usage of stock, the customer issues the invoice for the goods used from the consignment stock.

2.1.2.2 Consignment Stock Scenario

Refer to Figure 1 (previous page), the Consignment Stock Scenario:

   1. Demand Forecasts – For validation, demand forecasts represent the Customer's expression of its future demand for a supplier's product. The demand may cover any time, from immediate delivery to long-term planning. Data will be represented using discrete time intervals, which the buyer specifies. The Supplier can utilize the forecasts for planning or allocating manufacturing capacity, acquiring raw material products, producing semi-finished inventories, and/or final assembling/testing to put into finished goods inventories purposes.
   2. Demand Confirmation - In some scenarios, the Supplier is expected to confirm its capability to meet the demand.

3. The Supplier has four possible information sources from the Customer on which to base the decision to replenish the Consignment Stock:
   - Demand Forecast (i.e. planning information from the customer) - 4A3 and 4A5
   - Inventory Report (i.e. Inventory information about the consignment stock) - 4C1
   - Consumption Message (i.e. Receiving Advice 2) - 4B2
   - Self-Billing Invoice - 3C7
4. The Supplier ships the goods to the Consignment Stockholder. The Supplier provides shipment information with a Dispatch Advice 1 - 3B2.
5. When the Consignment Stockholder receives the goods, they inform the Supplier about the receipt with the Receiving Advice 1 - 4B2.
6. The Supplier can also receive inventory information via an Inventory Report - 4C1.
7. When the Customer requires goods from the consignment stock, a Material Call Off – 4D1 is sent to the consignment stockholder, who provides the goods. The stockholder or the customer acting as a stockholder should take care that the normal stockholder procedures are in place relevant for that type of product.
8. When the Consignment Stockholder ships the goods to the Customer, it should also inform the Supplier about the shipment with Dispatch Advice 2 - 3B2. In the Consignment Stock Scenario, it is possible to use the same PIPs twice for different purposes; therefore they are called Dispatch Advice 1 and 2 and Receiving Advice 1 and 2. The Dispatch Advice 2 can also be sent to the Customer to inform about the coming shipment.
9. When the Customer receives the goods, it can inform the Supplier about receiving the goods with Receiving Advice 2 - 4B2.
10. The customer prepares a Self-Billing Invoice - 3C7 (Consignment) for the goods it has used. This may take place following usage (one invoice for each usage) or usage may be accumulated over a short period (e.g. daily or weekly) so that a Self-Billing Invoice is prepared for usage in the period. The Self-Billing Invoice (consignment) should include a line item for each issuance of goods from the consignment stock including the unique consumption reference number identifying the issuance i.e. one-to-one relationship with physical flow. The SBI is calculated on the basis of received or used goods with the agreed upon prices and includes the payment due date.
11. The Remittance Advice - 3C6 will reference the SBI (3C7). The payment process will follow the remittance advice. The reference is usually the Self-Billing Invoice Number.

Disclaimer: It is <u>NOT</u> the intent of this document to provide every possible permutation of usage for this PIP.

For further information regarding the business process for this PIP refer to the Business Operational View (Section 3) of the PIP 3C7 Specification (.doc) or the Specification Requirements Document (SRD).

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3   PIP Usage Notes

This section contains usage notes for data blocks utilized by the Validation Team in the PIP 3C7 Notification.

3.1   Self-Billing Invoice for Consignment Stock Usage Notes

In validation, the Self-Billing Invoice was sent daily from multiple sites (one self-billing invoice per site per day), if there was consumption of materials. The Self-Billing Invoice is generated in the back-end systems every night as a result of the batch job and after generation, sent to the Supplier using 3C7.

Data element block information to follow:

Line #	Cardinality	3C7	Usage
1-12	1	fromRole.PartnerRoleDescription	Lines 1-12 identify the Customer initiated Self-Billing party's role in the supply chain and the contact information.
13-13	0..1	GlobalDocumentFunctionCode	Code identifying the function of a document as either a request or a response. In validation, this was request.
14-436	1	Invoice	An itemized list of goods or services specifying the price and the terms of sale.
24	1	|-- GlobalDocumentTypeCode	This document is "Self-billing invoice"
30	1	Line item	SBI line item number
46-48	0..n	| | | |-- PartnerProductIdentification	Block is used to identify the material (product) code.
50-72	1..n	| | |-- ProductMovement	The product movement block identifies all the

			needed information for each consumption:
			51: UTC date and time of consumption
			52-58: This block can be repeated many times for each consumption, e.g. one occurrence for transfer Order and one occurrence for scheduling agreement number
			59: Unit of measure of the consumed material
			67-71: Block indicating Unit price
			72: Free form text. Validation partner is using this field only in rare cases: Finnish Government requirement to indicate bank reference code in self-billing invoice document at the line level
123-126	1	| |-- totalLineItemAmount.FinancialAmount	Block used for invoiced line item amount (quantity * price)
164-198	1	|-- remitTo.PartnerTaxDescription	Block is used to identify remit-to information. Only DUNS (167) and Global Partner Classification Code (183) were used.
222-231	0..n	| |-- NationalTax	Block is used to identify the invoice total tax amount, Customer's VAT identification code, tax point date and country where tax is applicable.
245-279	1	|-- selfBillingFrom.PartnerTaxDescription	Block is used to identify the self-billing-from (i.e. the customer/partner initiating the SBI) – partner tax description. Team used only Customer DUNS (248) and GlobalPartnerClassificationCode (264)
280-314	1	|-- selfBillingTo.PartnerTaxDescription	Block is used to identify the self-billing-to (i.e. the supplier/partner receiving the SBI) –partner tax description. Team used only Supplier DUNS (283) and GlobalPartnerClassificationCode (299)
350-	0..1	|-- shipTo.PartnerTaxDescription	Block is used to identify the ship-to –partner tax

384			description. Team used only Customer DUNS (353) and GlobalPartnerClassificationCode (369)
385-419	0..1	|-- soldBy.PartnerTaxDescription	Block is used to identify the sold-by – partner tax identification. This block identifies: Supplier VAT code (390) Country of VAT registration (391) German VAT code (393) GlobalPartnerClassificationCode (404)
432-435	1	|-- totalInvoiceAmount.FinancialAmount	Block used for invoiced total amount (sum of line items +/- taxes)
437	1	thisDocumentGenerationDateTime.DateTimeStamp	UTC Time and date when the Self-Billing Invoice was generated in the back-end systems
438	1	thisDocumentIdentifier.ProprietaryDocumentIdentifier	The identifier of the document (self-billing invoice number)
439-450	1	toRole.PartnerRoleDescription	Block is used to describe the partner who receives the SBI (Supplier)

Note: PIP Usage Notes are included only if they are deemed to apply to the participating parties (i.e. validation groups); no Trading Partner specific notes are included in this documentation.

For information regarding the specific values utilized by the Validation Team for the specific data elements, refer to the excel workbook located within this zip file.

4 Lessons Learned

Implementing partners may pay attention that 3C7 has 450 fields and the validation partners used about 30 to 80 depending how one calculated the use of the field. The reason why 3C7 contains a lot of fields is that it tries to consider invoicing related legal environment globally. A couple of examples: validation partners communicate party information only using DUNS-numbers, but the 3C7 also provides space for other contact information (address, phone numbers, emails etc.) – if it is a mandatory requirement to use that data in particular country. Many of the fields have been used to describe different kind of taxes (local, regional, national etc.). However, the validation scenarios did not include tax scenarios. Also the validation partners did not use all the partner blocks that could have been communicated in 3C7.

The 3C7 replaced existing EDI Self-Billing Invoice message between the partners. Since the SBI message is closely linked to receivers ERP and/or reporting systems, it was very easy to compare if the 3C7 was providing the same relevant information as the EDI message. After checking, the validation partners could easily switch to 3C7 and EDI was switched off. It was not needed to run EDI SBI and 3C7 in parallel. The option was available to revert back to EDI SBI in case of major problems.

It has been realized that 3C7 is completing the consignment stock business model and the business model is in shape that wider deployments can be done. The biggest challenge or even barrier in the electronic invoicing implementation is the legal environment. In many countries, authorities either do not allowing self-billing invoicing, electronic archiving, pure electronic invoicing or they allow EDI, but not RosettaNet. At the moment, the process and message can be implemented easily but additional steps may have to be taken (e.g. sending paper copies or storing paper copies etc.) in order to fulfill legal requirements.

The B2B and business people reviewed the DTD and message guideline at a fairly late stage (after going live) and some discrepancies were identified at that time. This review is good to have done in an earlier stage to make sure that the PIP is really fulfilling the business requirements and successful conversion from EDI to RosettaNet was done.

5   Validation Modifications

This section provides the potential implementer with information regarding the changes that were made to the standard during the validation process. The information includes the name of the specific data element or data element block accompanied with the reason for the modification.

Data Element or Data Element Block Name	Reason for modification
FinancialAmount/GlobalCountryCode at line 224	Error in PIP, the element should be GlobalCurrencyCode.

6   Glossary

COI Customer owned inventory: Stock in the hands of the Consignment Stockholder, which is owned by the customer. (See SOI)
Consignment stock The stock of goods physically delivered to a Customer but which remains the property of the Supplier. The goods are sold to the Customer when he takes them for use or resale.
Consignment stock consumption An issue of a quantity of a type of product from consignment stock for consumption by the Customer.
Consignment stock consumption reference A reference to a consumption of consignment stock that is unique at least within the relationship between two trading partners.
Consignment Stockholder The function responsible for physical control of consignment stock. Also known as a logistics service provider (LSP).
Customer A party, which acquires by way of trade, goods and/or services. Also known as buyer, purchaser.
Dispatch advice Information provided by a Supplier to the Customer about a shipment.
Electronic Data Interchange (EDI) Syntax and message standards for the automatic exchange of structured information between application systems of separate organizations.
Evaluated Receipt Settlement (ERS) The self-billing procedure whereby the Customer issues the self-billing invoice in respect of a shipment, after receipt of the shipment.
Party Organization or person acting as responsible body on one of the two sides in legal action or in establishing a contract or agreement.
Party identification An identification in a code system that identifies a party.
Payment terms The part of a contract specifying the conditions for and methods of payment for goods or services agreed upon between a Supplier and a Customer (including determination of the due date, means of payment, currency, location of payment, etc.).
Price Amount of money or money's worth for which a thing is bought or sold.
Product identification A character or string of characters or symbol unambiguously identifying a type of product.
Quantity A measure used to indicate a number of units.
Reference A pointer to a related document, transaction or agreement.
Remittance advice A notice giving information about (partial) settlement of given account items and

related settlement discount, by means of payments to be effected on a certain date.
Self-billing A business procedure whereby the invoice document or message is raised by the customer, instead of by the supplier.
Self-billing invoice A document sent by the Customer to the Supplier specifying the value to be paid for goods delivered or services rendered.
Self-billing invoice-from function The function in a Customer's organization responsible for creating self-billing invoices and sending them to the Supplier.
Self-billing invoice-to function The function in a Supplier's organization responsible for receiving self-billing invoices from the Customer.
Self-billing invoice item A separate line item on a self-billing invoice.
Self-billing invoice number Code, assigned by the customer, identifying a self-billing invoice.
Shipment A separately identifiable collection of one or more goods items (available to be) transported together from one ship-from to one ship-to.
SOI Supplier owned inventory: consignment stock in the hands of the Consignment Stockholder. (See COI).
Supplier A party, which provides, by way of trade, goods and/or services. Also known as seller, vendor.
Tax Contribution levied on persons, property or business, for support of national or local government.
Tax summary A statement of the types, rates and amounts of tax applied in an invoice.
Total amount The summation of all the amounts in an invoice, which are chargeable to the customer.
Total line items amount The summation of the line item amounts in an invoice.
Value Added Tax (VAT) Tax applied on the amount of sales of goods and services, which is collected progressively along the supply chain proportionally to the value added and ultimately charged to the consumer.
VAT number The identifier of a party assigned by the fiscal authority for the purposes of value added tax.