Appendix 2: TPA Module for XML Services

The objectives of this Appendix are: (a) To specify the business framework of the XML Transactions and Standards that the Parties to the Trading Partner Agreement (hereinafter the "Agreement") are intending to operate and use; (b) To identify the Parties and define the technical means for the transport, Encryption, Digital Certificate exchange of XML messages, and support procedures as well.

2.1. RosettaNet Business Specifications

The Parties may agree in writing, upon the adoption by RosettaNet of additional or updated Standards versions, to amend this Appendix to include such changes.

The Parties agree that any portion of the RosettaNet Standards which aims to determine contract formation, change, cancellation, or other legal rights or remedies does not form a part of this Agreement or any other agreement between the Parties. The Parties further agree that if any provision of the RosettaNet Standards is found inconsistent with this Agreement, this Agreement shall control.

According to the Parties' role specified below for a PIP^{TM} exchange, each Party may electronically transmit to or receive from the other Party: (a) any of the RosettaNet PIP Specifications listed below; (b) any additional Specification listed below to amend a PIP; and (c) such additional Specifications which the Parties by paper-based written agreement add to this Appendix.

Any attachment sent as part of a Business Signal shall be solely for the internal use of the transmitting Party and shall have no force or effect between the Parties except as eventually specified below with respect to any applicable PIP.

Where required in a PIP and as specified below, Digital Signatures shall be applied using a cryptographic Public-Private Key pair issued by the Certificate Authority identified below.

This Appendix is governed by the general legal provisions of the Trading Partner Agreement, Version _____, effective date _____.

This Appendix, and the Trading Partner Agreement, may be considered as a part of another related agreement: _____ (*title of the related agreement*), effective date _____

2.2. RosettaNet Technical Specifications

Parties to the Agreement	Company Name	Company Representative	Effective Date
Company A			
Service Provider A			
Company B			
Service Provider B			

PIPs or PIP scenario to the Agreement	
PIP #1	Title: e.g. 5C1 V01.00.00 Distribute Product list
PIP #2	Title:
PIP #3	Title:
PIP #4	Title:
PIP #5	Title:
PIP #6	Title:
PIP #7	Title:
PIP #8	Title:
PIP #9	Title:
PIP #10	Title:

Company A		
IDENTIFICATION	Company Address:	
	Contact Person for PIP Deployment	Name: Title: Address: Dept: Responsibility: Tel.: Fax: Email:
	Service Provider	Name: Address: Responsible: Tel.: Fax: Email:

Company B		
IDENTIFICATION	Company Address:	
	Contact Person for PIP Deployment	Name: Title: Address: Dept: Responsibility: Tel.: Fax: Email:
	Service Provider	Name: Address: Responsible: Tel.: Fax: Email:

Company A

COMMUNICATION	Protocol:	Name: e.g. HTTP Version: e.g. 1.1
	Production URL(s):	https://………………….. Notes:
	Quality & Assurance URL(s):	https://………………….. Notes:
	Test URL(s):	https://………………….. Notes: e.g. URL will return a welcome page; URL will return a reference text with date/time stamp; etc.
	Production IP Address:	
	Q & A IP Address:	
	Test IP Address:	
	Host Computer / Server System	
	Security	Digital Signature Requirements: ……………………………
	Other Requirements / Specifications:	…………………………… e.g. At least two separate environments for development and production are required.
ENCRYPTION	B2B Software / Infrastructure, SSL Server	Name: e.g. webMethods Version: e.g. 3.6 Cipher strength: e.g. 128 bits
	SSL Encryption Algorithm	Name: e.g. RSA Key Length: e.g. 1024 bits
	Other Requirements / Specifications:	PIP-specific, 3rd Party-specific, etc: ……………………………
CERTIFICATE	Standard / Policy	Name: e.g. X.509 Version: e.g. V1
	Expiration / Validity Period	Validity (start / end Date): ……………………………
	Signature Algorithm	Name: e.g. RSA-MD5
	Exchange Method:	…………………………… e.g. by encrypted email, by registered post,…
	Certificate Authority (CA)	Name: e.g. VeriSign Other CA Supported: ……………………
	File Format:	…………………………… e.g. DER Format
	Other Requirements / Infrastructure Specs:	e.g. Sender must provide Certificate for Authentication

Company B		
COMMUNICATION	Protocol:	Name: Version:
	Production URL(s):	https://………………….. Notes:
	Quality & Assurance URL(s):	https://………………….. Notes:
	Test URL(s):	https://………………….. Notes:
	Production IP Address:	
	Q & A IP Address:	
	Test IP Address:	
	Host Computer / Server System	
	Security	Digital Signature Requirements:
	Other Requirements / Specifications:	
ENCRYPTION	B2B Software / Infrastructure, SSL Server	Name: Version: Cipher strength:
	SSL Encryption Algorithm	Name: Key Length:
	Other Requirements / Specifications:	PIP-specific, 3rd Party-specific, etc:
CERTIFICATE	Standard / Policy	Name: Version:
	Expiration / Validity Period	Validity (start / end Date):
	Signature Algorithm	Name:
	Exchange Method:	
	Certificate Authority (CA)	Name: Other CA Supported:
	File Format:	
	Other Requirements / Infrastructure Specs:	

ROSETTANET STANDARDS	**Partner Interface Process PIP #1**	Name: e.g. 5C1 Distribute Product List Version: e.g. V01.00 Notes: e.g. PIP Specifications' exchange is required for version verification; see Supporting Documentation.
	RosettaNet Implem. Framework (RNIF)	Name / Version: e.g. RNIF 1.1 Date: …………………………
	RosettaNet Technical Dictionary	Name / Version: e.g. RNTD 1.0 (or: not relevant for this PIP) Date: …………………………
	Global Transaction Code	e.g. Distribute Product List
	PIP Flow Direction	e.g. Initiator of PIP Transaction is Company B
	Supporting Documents, Values, Specifications, Business Rules	• e.g. Please refer to RNIF Technical Advisory A, 01.00.00, for PIP version • e.g. Empty XML optional element must not be transmitted in order to reduce file size and to avoid validation errors. • Please, for details see attached PIP Specification
	Company A	
	DUNS and DUNS+4 Number(s):	e.g. ST NV Swiss Branch: 488132309 ST USA: 065174484 ST Singapore: ……… ST Japan: ………
	Global Partner Role Classification Code:	e.g. Seller
	Global Partner Classification Code:	e.g. Manufacturer
	Global Supply Chain Code	e.g. Electronic Components
	Company B	
	DUNS and DUNS+4 Number(s):	
	Global Partner Role Classification Code:	e.g. Buyer
	Global Partner Classification Code:	e.g. Original Equipment Manufacturer
	Global Supply Chain Code	e.g. Electronic Components

OPERATION AND SUPPORT	**Company A**	
	Response Times for Confirmation Messages and Business Signals	Specifications (mandatory / agreed): e.g. Exceptions or further Specifications agreed by the Parties including variations of Confirmation requirements (Receipt / Acceptance)
	Failure Procedures	Specifications, if any:
	Service Availavility	Specifications, if any:
	Service Level Support	Specifications, if any:
	Other Requirements / Specifications:	Specifications, if any:
	Company B	
	Response Times for Confirmation Messages and Business Signals	Specifications (mandatory / agreed):
	Failure Procedures	Specifications, if any:
	Service Availavility	Specifications, if any:
	Service Level Support	Specifications, if any:
	Other Requirements / Specifications:	Specifications, if any:

2.3. Glossary

Business-to-Business: Business-to-Business ("B2B") means business Transactions conducted over public networks, including Transactions that use the Internet as a delivery vehicle. Financial transfers, online exchanges, delivery of products and Services, supply chain activities, and integrated business networks are all examples of B2B.

Business Signal: A message exchanged between two RosettaNet network applications to communicate certain events within the execution of a PIP instance. Examples of Business Signals include Confirmation of Receipt and successful validation of a message. A Business Signal can be used to communicate an exception condition within the normal message choreography of a PIP.

Certificate Authority: A Certificate Authority ("CA") is an authority in a network that issues and manages security credentials and Public Key for message Encryption. A CA associates Digital Certificates with a specific person or entity, identifies the person or entity that is to receive a Digital Certificate, issues and revokes these when required, and provides notice of revocations in a published Certificate revocation list.

Cipher: A Cipher is any method of encrypting text. It is also sometimes used to refer to the encrypted text message itself.

Cryptography: Cryptography is the science of Information security. Modern Cryptography concerns itself with the following four objectives: (a) Confidentiality (the Information cannot be understood by anyone for whom it was unintended); (b) Integrity (the Information cannot be altered in storage or transit between sender and intended receiver without the alteration being detected); (c) Non-repudiation (the creator/sender of the Information cannot deny at a later stage his or her intentions in the creation or transmission of the Information); (d) Authentication (the sender and receiver can confirm each others identity and the origin/destination of the Information).

Digital Certificate: A Digital Certificate (in short: "Certificate") is an electronic identification containing the credentials to operate business Transactions via Internet. A Certificate is issued by a CA and contains the owner's name, a serial number, the expiration dates, a copy of the Certificate Public Key, which is used for Encryption and Digital Signature, and the Digital Signature of that Certificate Authority to allow a recipient for verification of Certificate validity.

Digital Signature: A Digital Signature is an Electronic Signature that can be used to authenticate the identity of the sender of a message or the signer of a document, and possibly to ensure that the original content of the message or document that has been sent is unchanged.

DUNS ® Number: The Data Universal Numbering System ("DUNS") is a sequentially generated nine-digit number that is assigned and maintained only by Dun and Bradstreet (D&B: http://www.dnb.com), which identifies unique business locations, and is global in scope.

DUNS ® + 4 Number: In addition to the DUNS number, there is a DUNS + 4 number, which can be used as a four-digit extension to the DUNS number to indicate specific locations within a campus environment of a company. As opposed to the DUNS number, which is centrally assigned and maintained by D&B, the DUNS + 4 is assigned and maintained by the owning organization.

Electronic Signature: An Electronic Signature means an electronic sound, code, symbol, or process, attached to or logically associated with a contract or other document and executed or adopted by a person with the intent to sign the document.

Encryption: Encryption is the conversion of data by means of mathematical algorithms into a form (secret code) that cannot be easily understood by unauthorized people.

Global Partner Classification Code: RosettaNet code identifying a Partner's function in the supply chain. Examples of possible values are the following: Broker, Carrier, Contract Manufacturer, Customs Broker, Distribution Centre, Distributor, End User, End User Government, Financier, Manufacturer, Original Equipment Manufacturer, Reseller, Retailer, Shopper, Warehouser.

Global Partner Role Classification Code: RosettaNet code identifying a Partner's role in the supply chain. Examples of possible values are the following: Anonymous Buyer, Buyer, Catalog Producer, Customer, Demand Creator, Financier, Product Distributor, Product Information User, Product Provider, Product Supplier, Return Provider, Return Receiver, Return Requester, Sales Facilitator, Seller, Supplier.

Global Supply Chain Code: The code identifying the supply chain for the Partner's function, e.g. Information Technology and Electronic Components.

Global Transaction Code: The code identifying the name of the business activity and the Transaction dialog in the PIP Specification document. Examples of possible values are the following: Distribute Purchase Order Status; Cancel Subscription; Change Subscription; Create Purchase Order; Change Purchase Order; Query Price and Availability; Query Product Information; Request Quote; Distribute Registration Status; Distribute Product List.

IP Address: The Internet Protocol (in short: "IP") is the method or Protocol by which Information and data is sent from one computer to another on the Internet. Each computer on the Internet has at least one IP Address that uniquely identifies it from all other computers on the Internet. When Information is transmitted, the message gets

divided into little chunks called packets. Each of these packets contains both the sender's Internet address and the receiver's address.

Key: In Cryptography, a Key is a variable value that is applied using an algorithm to a string or block of unencrypted text to produce encrypted text, or to decrypt encrypted text. The length of the Key (e.g 1028 bits) is a factor in considering how difficult it will be to decrypt the text in a given message.

PIP^{TM} (Partner Interface Process^{TM}): A Partner Interface Process ("PIP") is the RosettaNet^{TM} model based on XML documents containing Information and data that depicts the activities, decisions and Trading Partner role interactions that fulfil a B2B Transaction between two Trading Partners.

Protocol: In Information Technology, a Protocol is the special set of rules that end points in a telecommunication connection use when they communicate. Protocols are often described in an industry or international Standard.

Public-Private Key: A Public Key is a value provided by some designated authority as a key that, combined with a Private Key derived from the Public Key, can be used to effectively encrypt messages and Digital Signatures. A system for using Public Keys is called a Public Key Infrastructure.

RNIF: The RosettaNet Implementation Framework ("RNIF") provides implementation guidelines for those Trading Partners who wish to create interoperable software application components that execute PIPs.

RosettaNet: RosettaNet^{TM} is an independent, self-funded, non-profit consortium[1] dedicated to the development and deployment of Standard electronic business interfaces to align the processes between supply chain Trading Partners on a global basis.

Service: A Service is a software module deployed on network accessible platforms provided by the Service Provider. Its interface is described by a Service description. It exists to be invoked by or to interact with a Service requestor. It may also function as a requestor, using other Services in its implementation.

Service Availability: In Information Technology, Service Availability refers to a Service that is continuously operational for a desirably long length of time. Since a computer system or a network consists of many parts in which all parts and components usually need to be present in order for the whole to be operational, critical points for high Service Availability center around backup and fail-over processing and data storage and access.

Service Provider: A company that provides to its Trading Partner Electronic Information Exchange Services that would otherwise have to be located in their own company computers. The Service Provider is the owner of the Services offered.

Specification: The RosettaNet Specification is the complete documentation set of business and technical requirements and procedures that apply to the exchange of a PIP.

SSL: The Secure Sockets Layer ("SSL") is a commonly used Protocol for managing the security of a message transmission on the Internet. SSL uses the Public-Private Key Encryption system from RSA Security Inc., which also includes the use of a Digital Certificate.

Technical Dictionary: The RosettaNet Technical Dictionary provides common language for defining products and Services. In RosettaNet, the Technical Dictionary serves as a *bridge* from form, fit, and function Specification to a product number.

Transaction: A Transaction means an action or set of actions relating to the conduct of business, consumer, or commercial affairs between two or more persons, including any of the following types of conduct: (a) the sale, lease, exchange, licensing, or other disposition of (i) personal property, including goods and intangibles, (ii) Services, and (iii) any combination thereof; and (b) the sale, lease, exchange, or other disposition of any interest in real property, or any combination thereof.

URL: A Uniform Resource Locator ("URL") is the address of a file or resource accessible on the Internet. The type of resource depends on the Internet application Protocol. The URL contains the name of the Protocol required to access the resource, a domain name that identifies a specific computer on the Internet, and a hierarchical description of a file location on the computer.

XML: The Extensible Markup Language ("XML") is a language that is concerned with creating, sharing and processing Information. Similarly to the language of today's Web pages (the Hypertext Markup Language), XML is concerned with display and transport of content.

---

[1] For the RosettaNet Bylaws and Intellectual Property Policy see the supporting documentation in the Web site www.rosettanet.org.