

XML Initiatives and Standards Convergence

Agenda

- Part One: Conceptual Model for Understanding XML-based Standards Components
- Part Two: Current Snapshot of Specific XML Initiatives
- Part Three: RosettaNet XML Standards Convergence Perspective

Prefacing Statements

- The following information was developed based on input from a wide variety of respected business and technology leaders both inside and outside the RosettaNet community
- Most of the XML organizations referred to herein have been given the opportunity to provide input on the conceptual model (Part One) and update the snapshot of their XML initiatives (Part Two)
- The standards convergence perspective (Part Three) was developed by RosettaNet based on current information and trends it sees in XML standards development and adoption
- While RosettaNet has made significant attempts to accurately and objectively reflect the information contained in this document, other organizations may have differing or alternative perspectives
- This information is a snapshot in time and is expected to change on a regular basis as XML standards mature

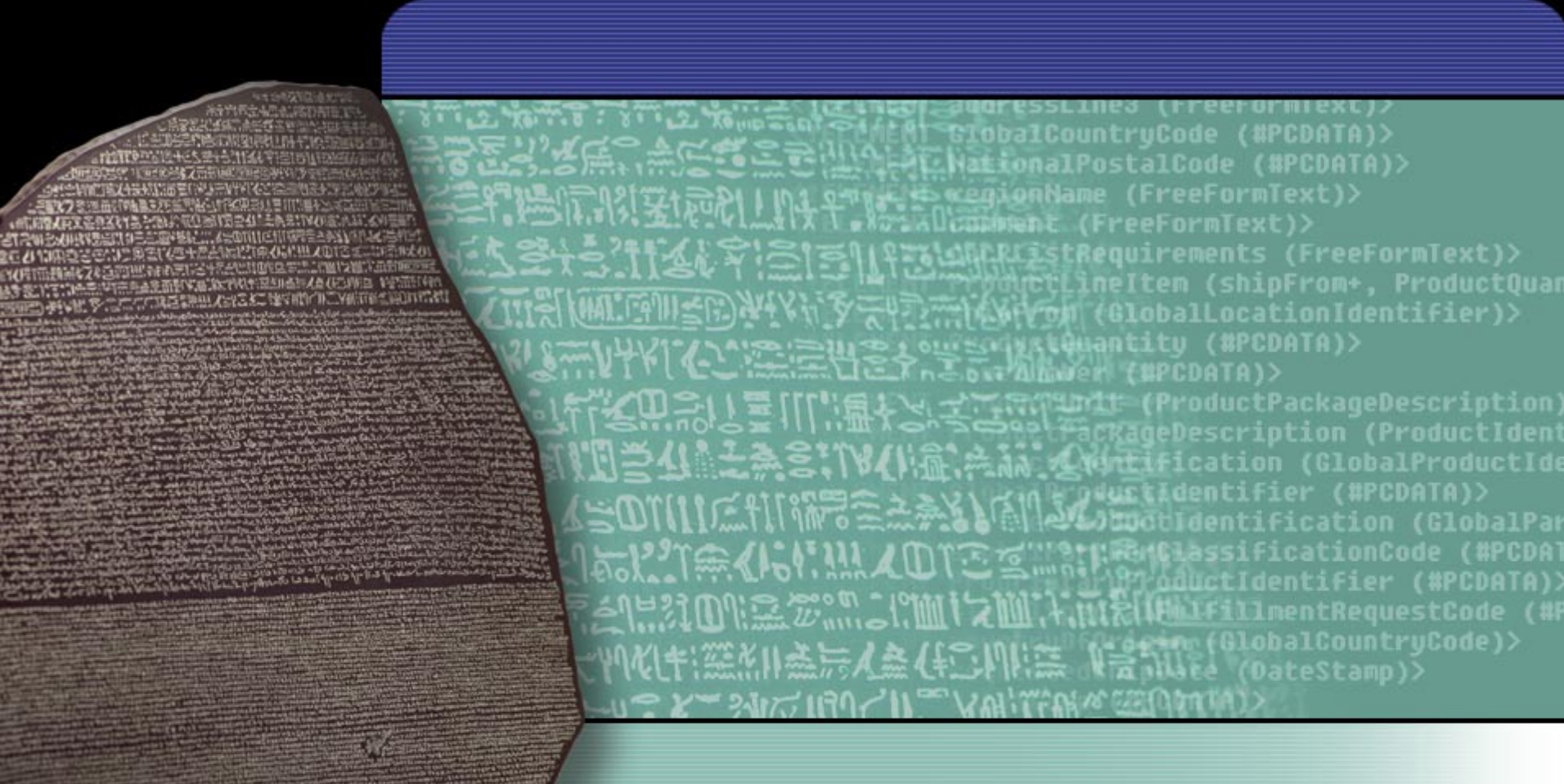
The Current State of B2B & XML

- For B2B e-business to become pervasive, it requires the availability of common vertical and horizontal business process and supporting standards
- XML is key in the development of today's business process standards and new XML initiatives are announced on a regular basis
- While most of these XML initiatives are complementary, the number of announcements has led to mass confusion for many end-users
- This confusion is leading many companies into:
 - Wait and see mode
 - Analysis paralysis mode
 - Less than optimal decision making mode

RosettaNet Goal

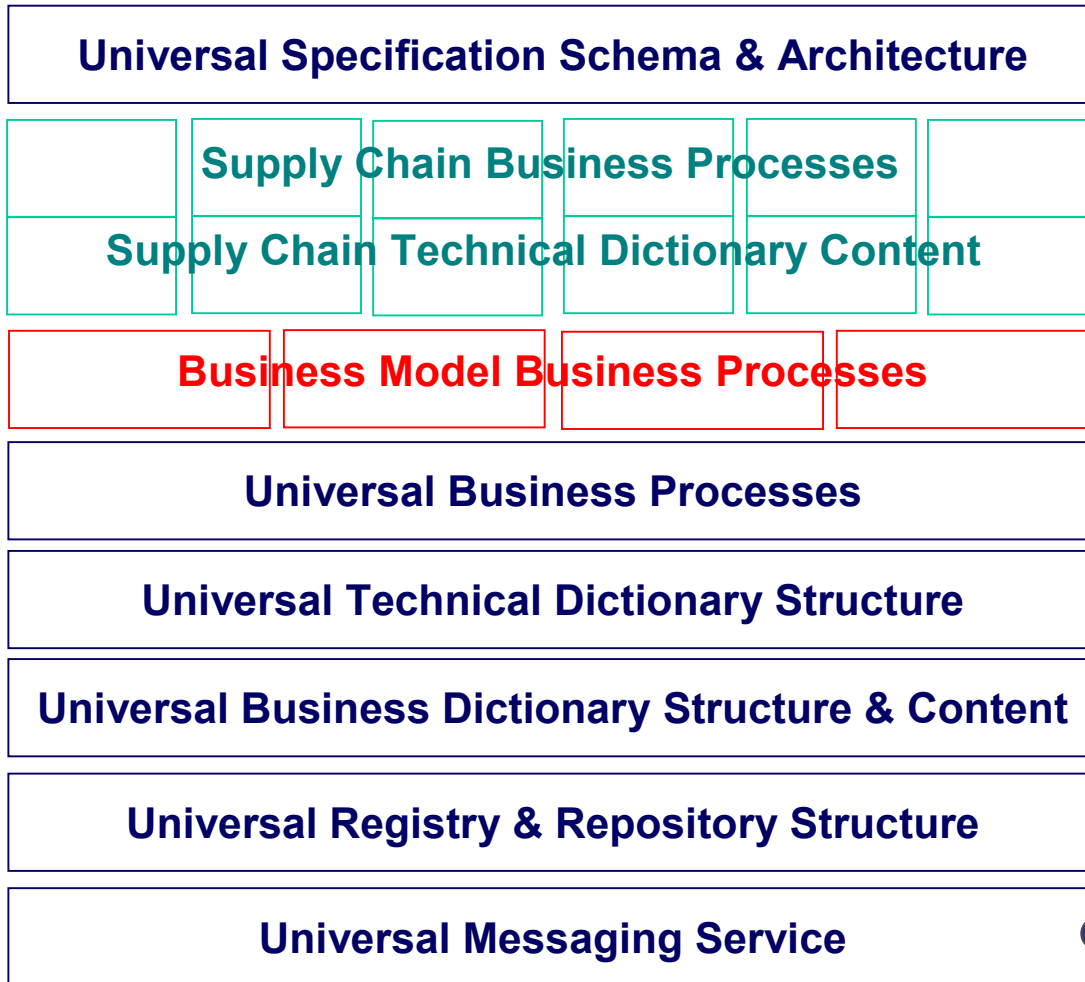
RosettaNet seeks to increase the speed of B2B business process integration by:

- Reducing confusion through a conceptual model that puts individual XML component standards into context
- Evaluating existing and new XML initiatives against the conceptual model
- Embracing horizontal XML initiatives as they become proven and universally accepted
- Maintaining a leadership role in the development of XML business process standards required to meet the specific needs of the high technology industry



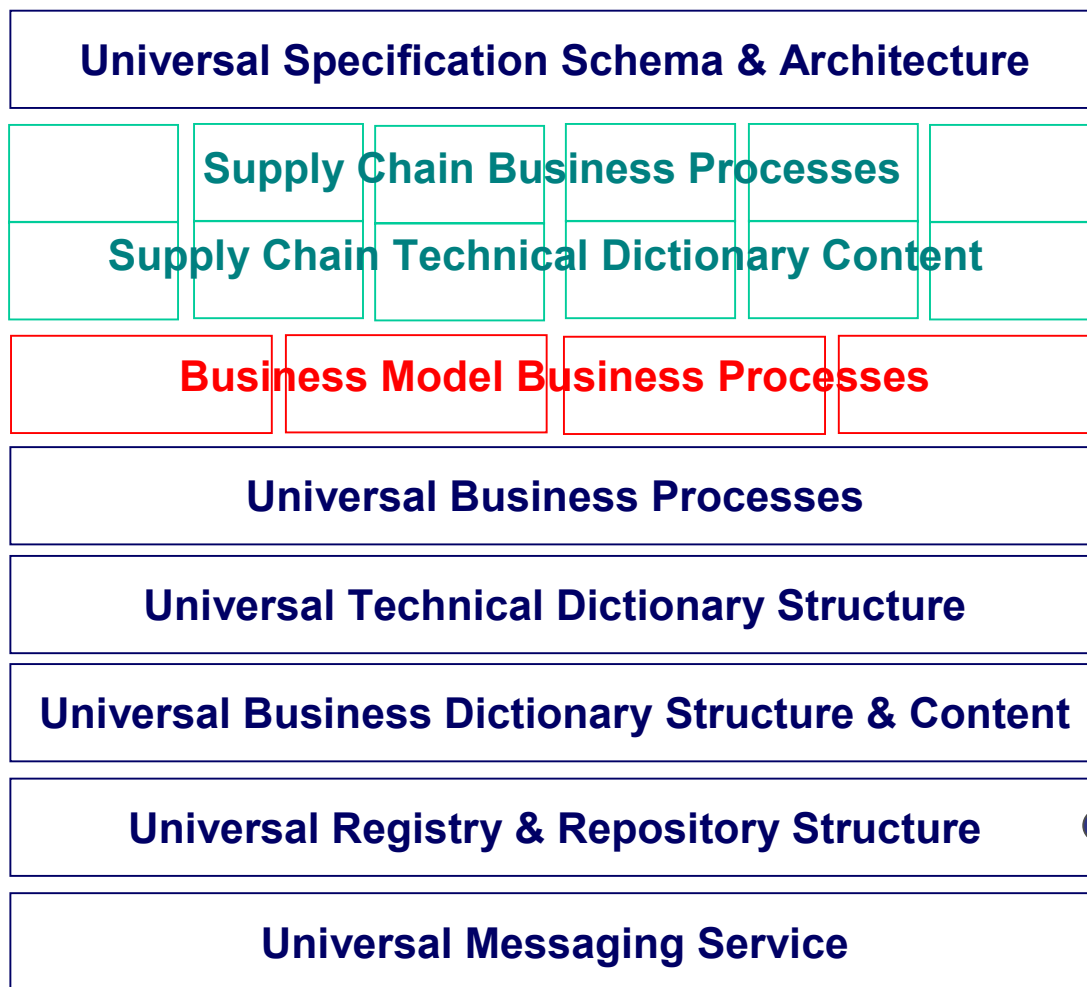
Part One: Conceptual Model for Understanding XML-based Standards Components

XML Standards Components



The standards required to support the transfer, routing, packaging (TRP) and digital signature of information shared between trading partners via the Internet.

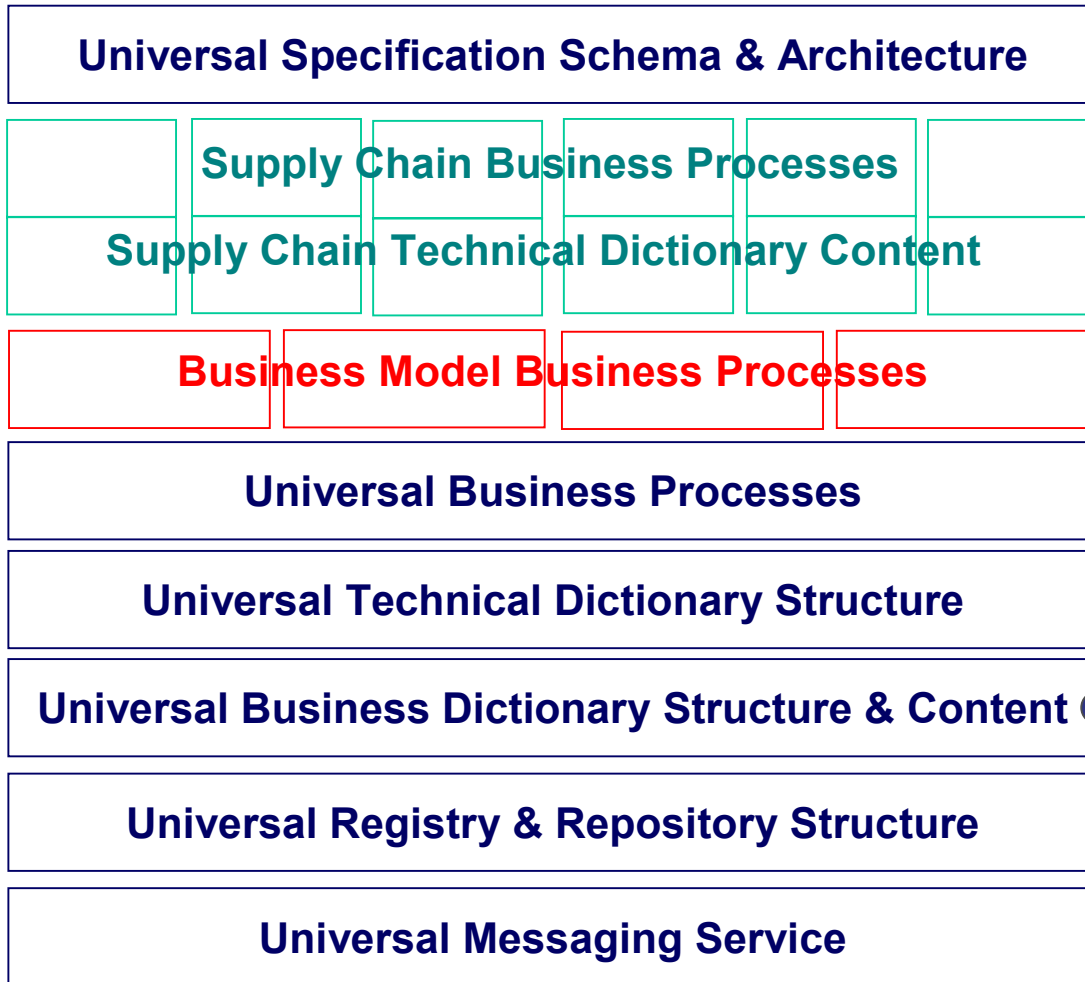
XML Standards Components



The standards required to support the electronic discovery and configuration of business processes, or e-services, between trading partners.

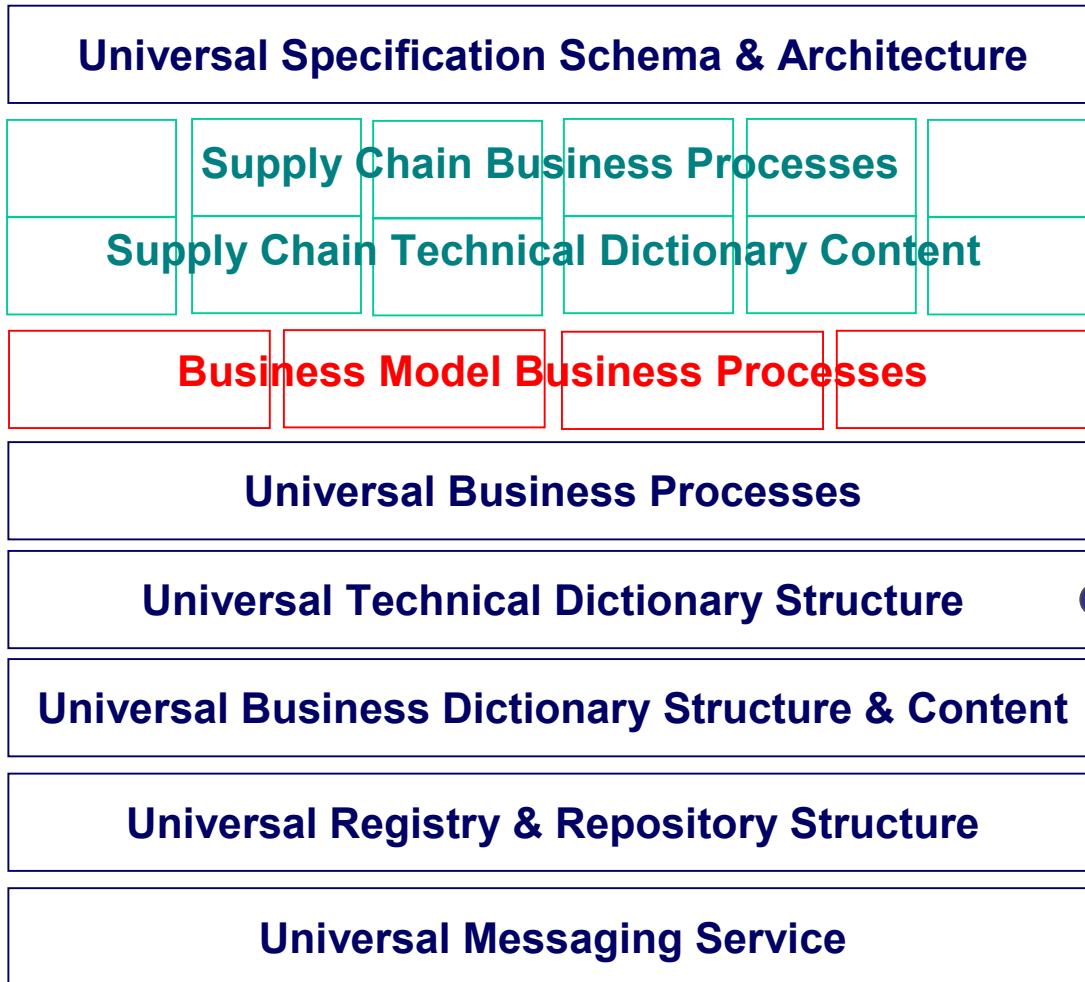
Also includes the dynamic creation and management of trading partner agreements between partners.

XML Standards Components



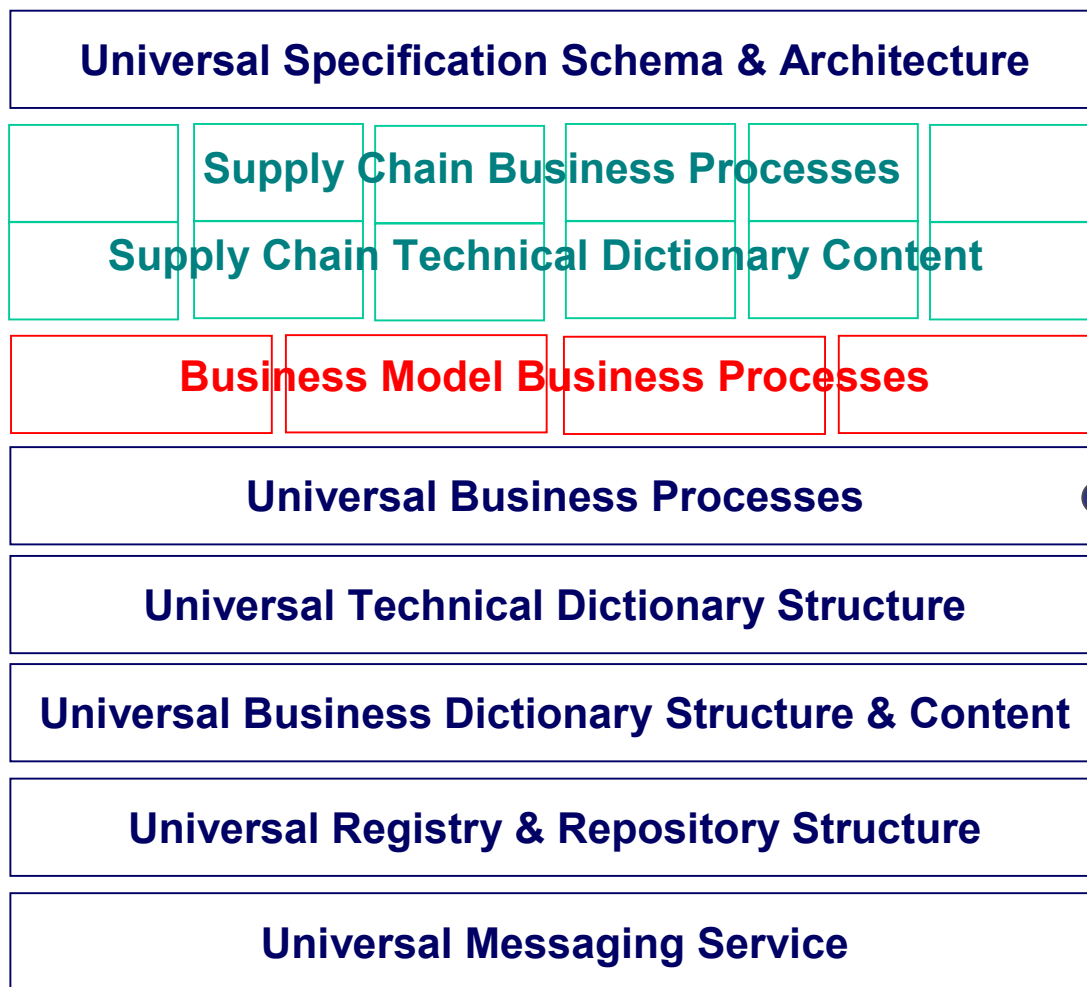
The standards required to structure, and the aggregation of all content fields, elements, constraints, code lists and objects used within electronic business processes.

XML Standards Components



The standards required to structure form, fit and function attributes of products and services.

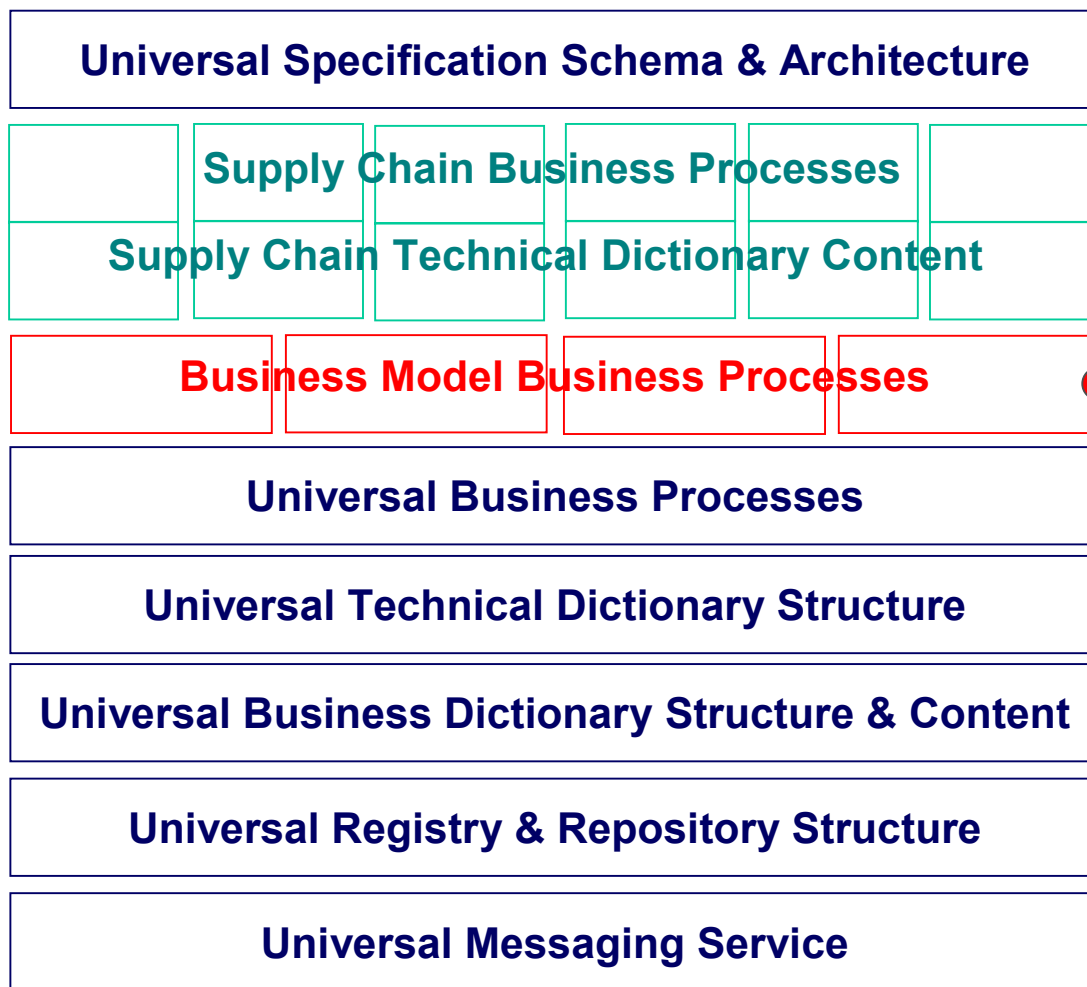
XML Standards Components



The standards required to automate relatively common business processes between trading partners across almost any supply chain or business model.

It is generally accepted that an XML business process standard should include both a content (payload) and choreography (dialogue) component.

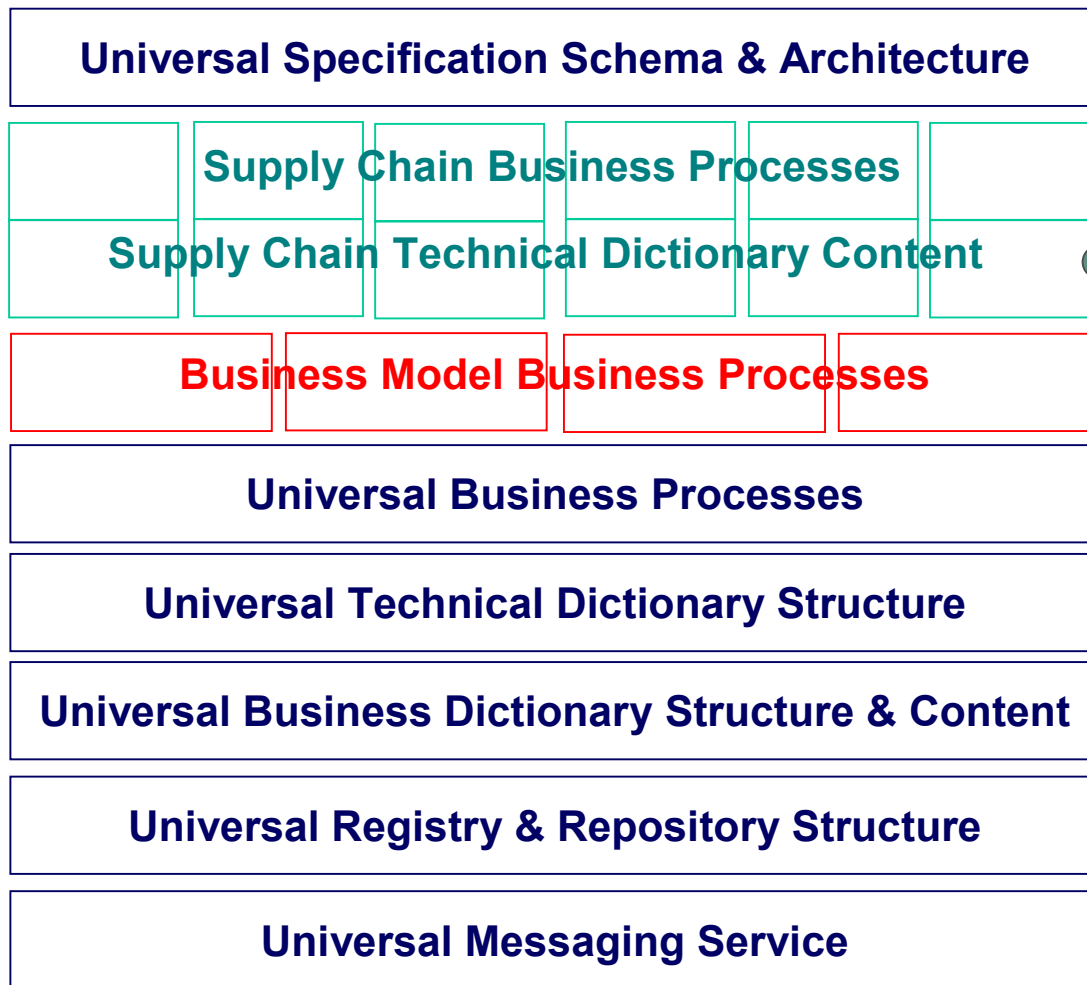
XML Standards Components



The standards required to automate business processes between trading partners that are fairly unique to a given business model.

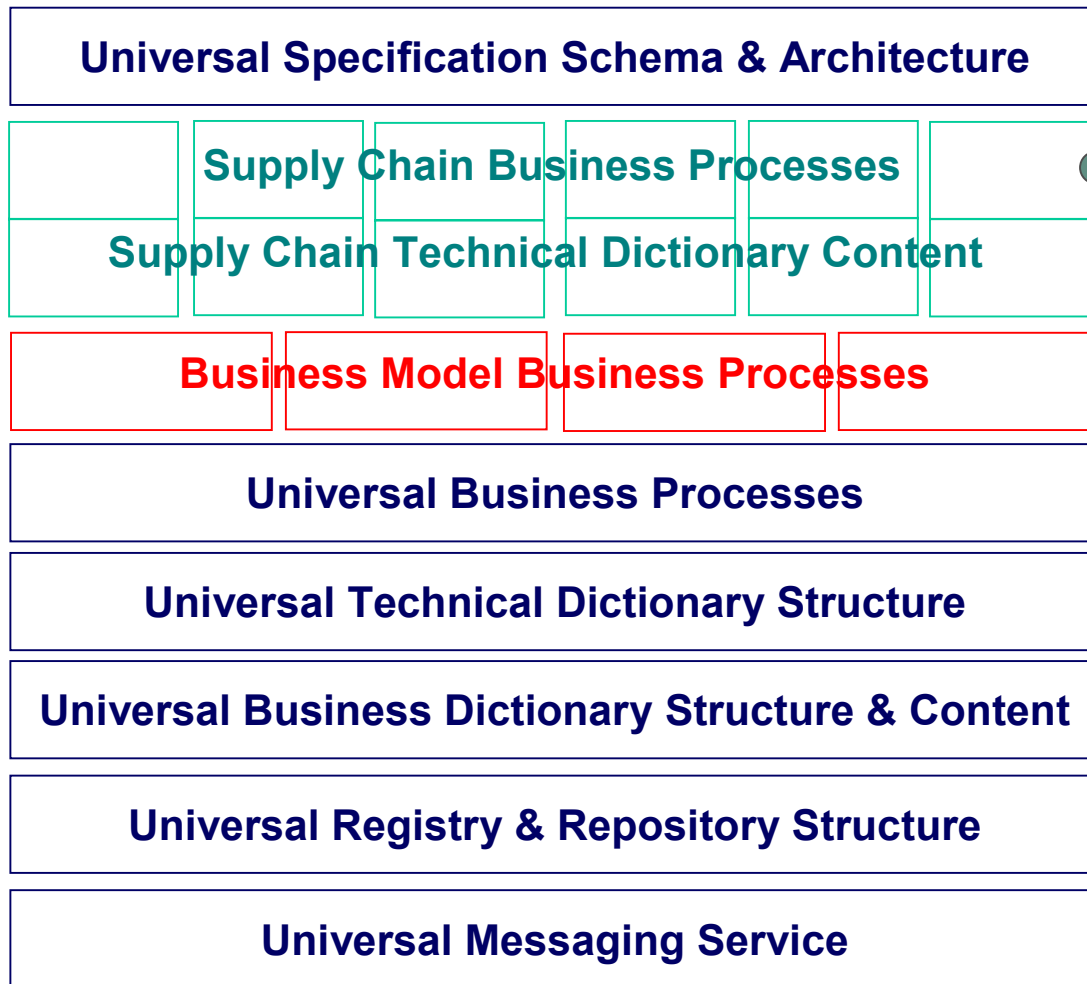
It is generally accepted that an XML business process standard should include both a content (payload) and choreography (dialogue) component.

XML Standards Components



The standards required to commonly describe the form, fit and function attributes of like products and services within a given supply chain or industry.

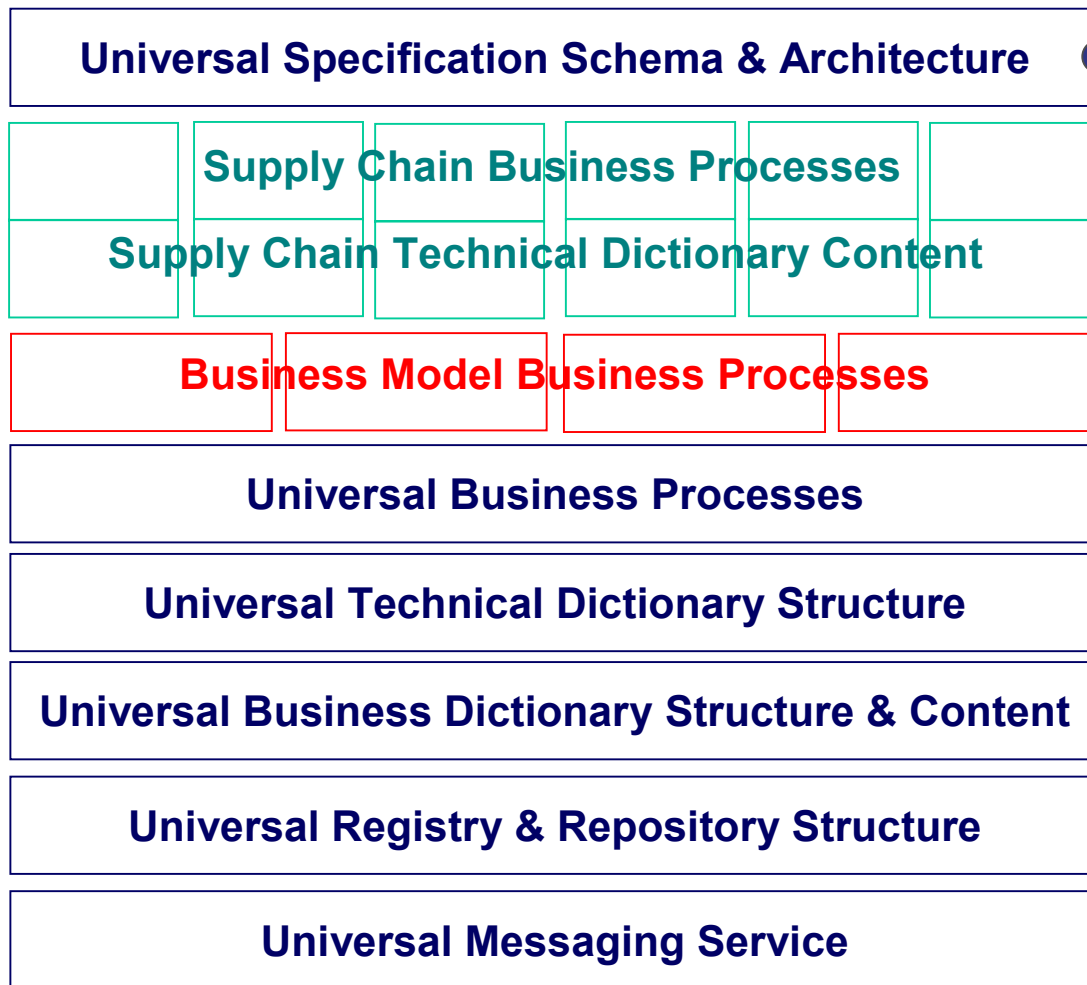
XML Standards Components



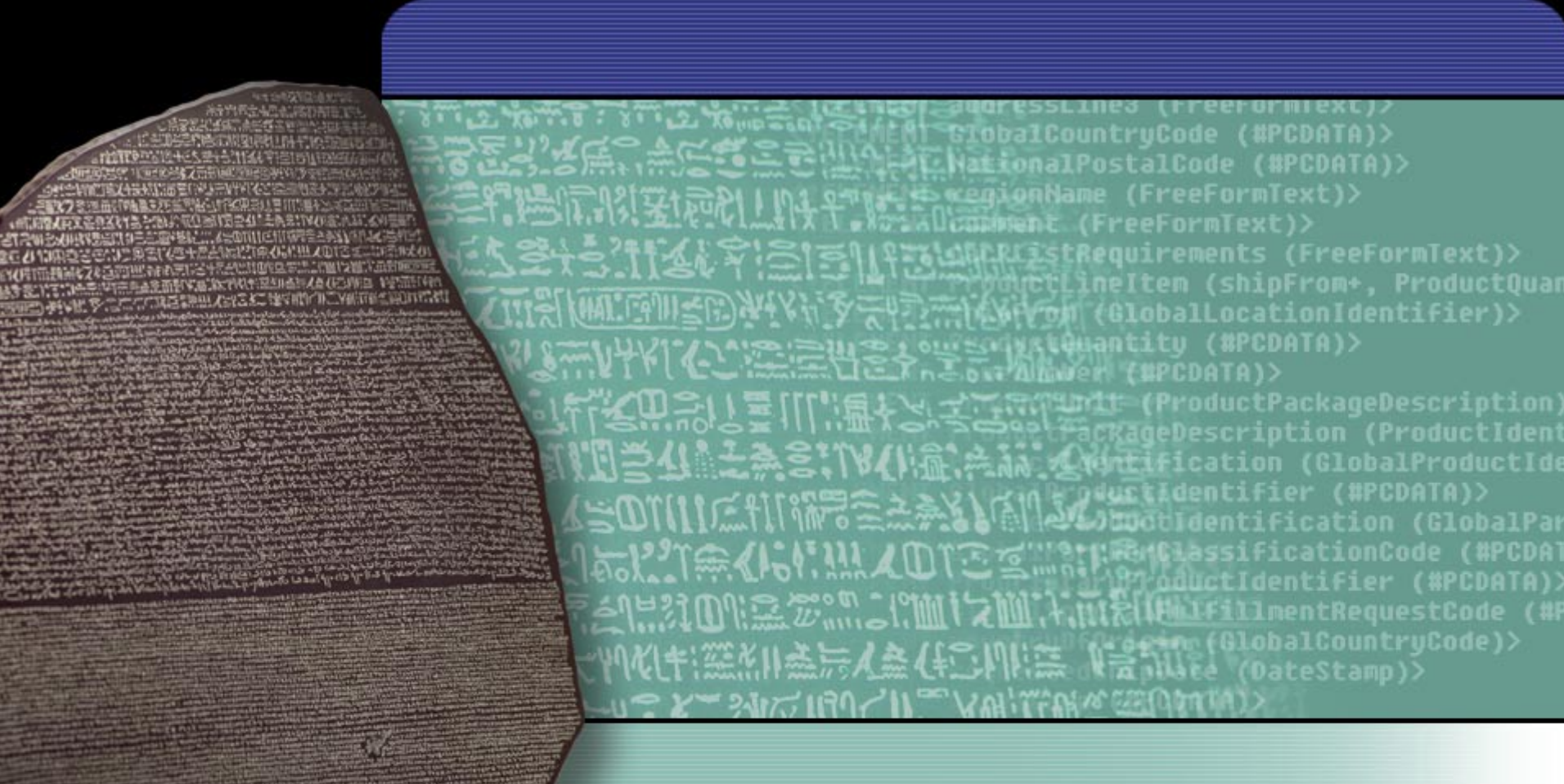
The standards required to automate business processes between trading partners that are fairly unique to a given supply chain.

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XML Standards Components



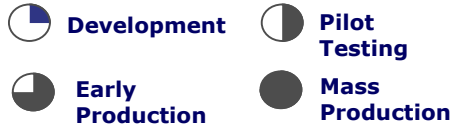
The standards required to define the context and relationships of the horizontal and vertical standards components below.



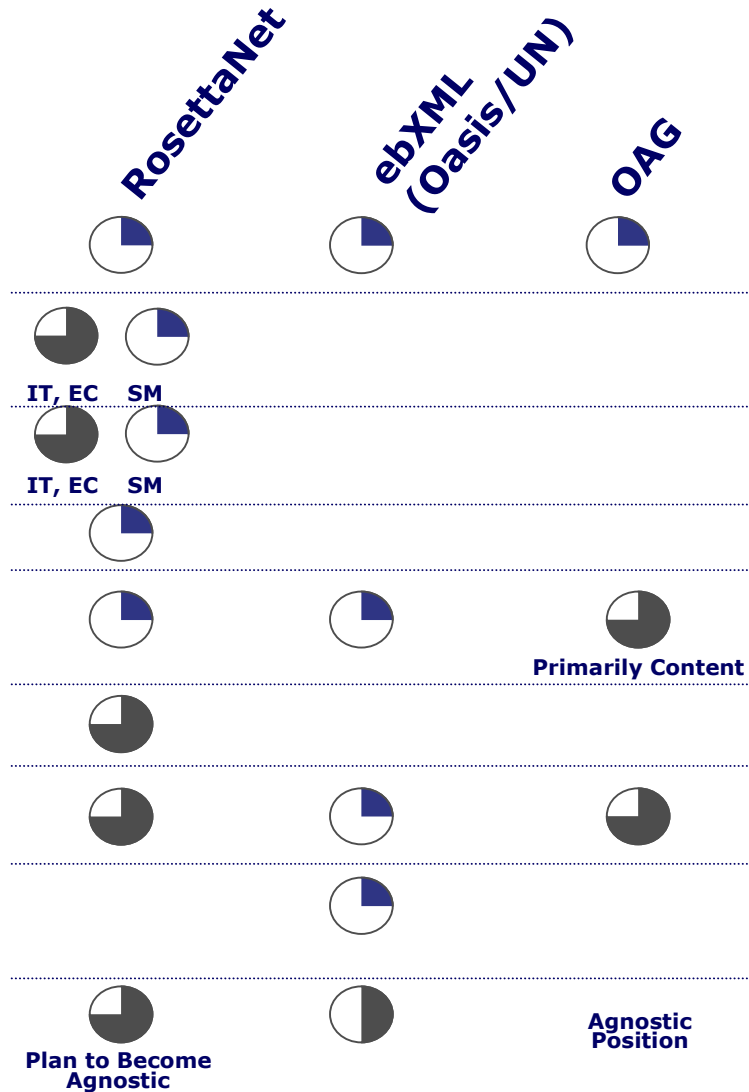
Part Two: Current Snapshot of Specific XML Initiatives

XML Standards Snapshot

Open XML Initiatives







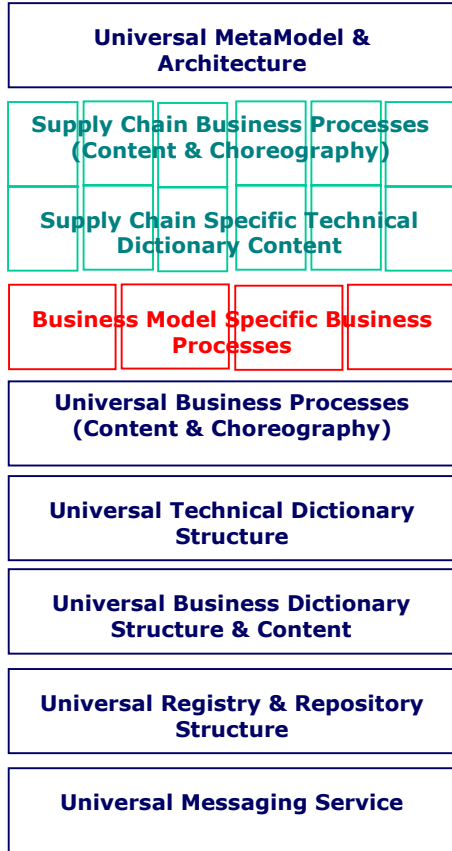
Universal MetaModel & Architecture				
Supply Chain Business Processes (Content & Choreography)				
Supply Chain Specific Technical Dictionary Content				
Business Model Specific Business Processes				
Universal Business Processes (Content & Choreography)				
Universal Technical Dictionary Structure				
Universal Business Dictionary Structure & Content				
Universal Registry & Repository Structure				
Universal Messaging Service				



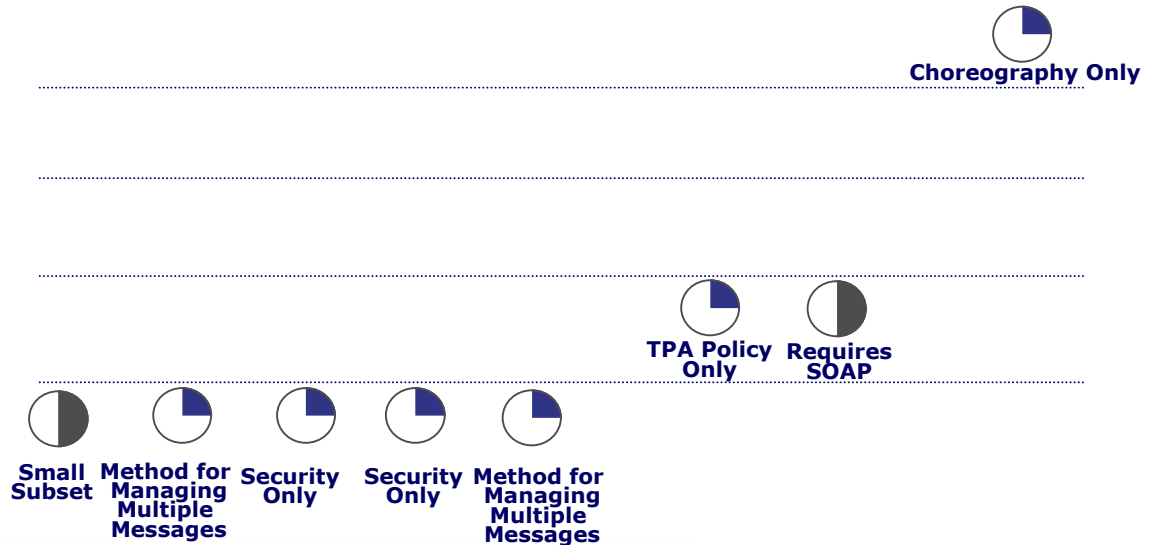
XML Standards Snapshot

Open XML Initiatives

-  Development
-  Pilot Testing
-  Early Production
-  Mass Production







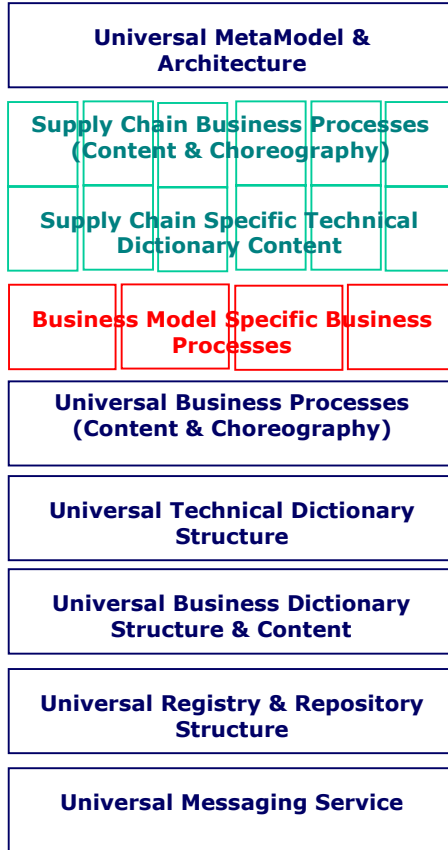
SOAP (W3C)
 XAML
 S2ML (Oasis)
 authXML (Oasis)
 BTP (Oasis)
 TPAML (Oasis)
 UDDI
 BPML (BPMI)



XML Standards Snapshot

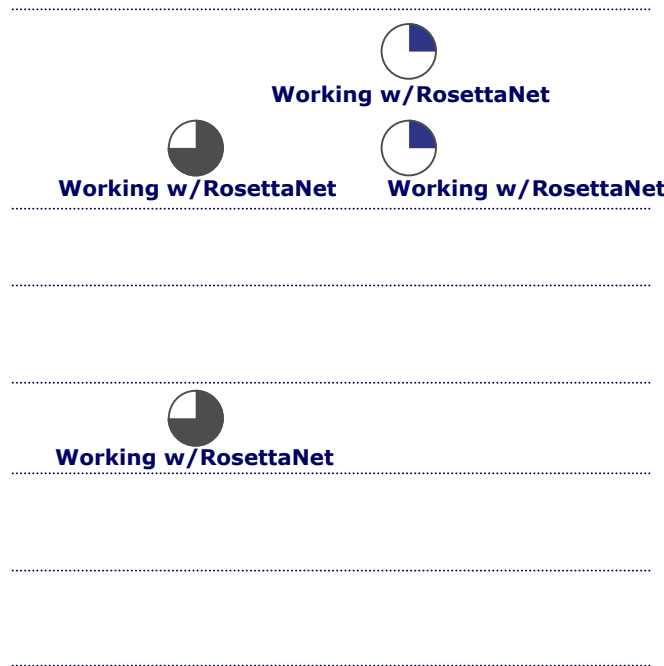
Open Electronic Component XML Initiatives

-  Development
-  Pilot Testing
-  Early Production
-  Mass Production







ECIX (Si2)

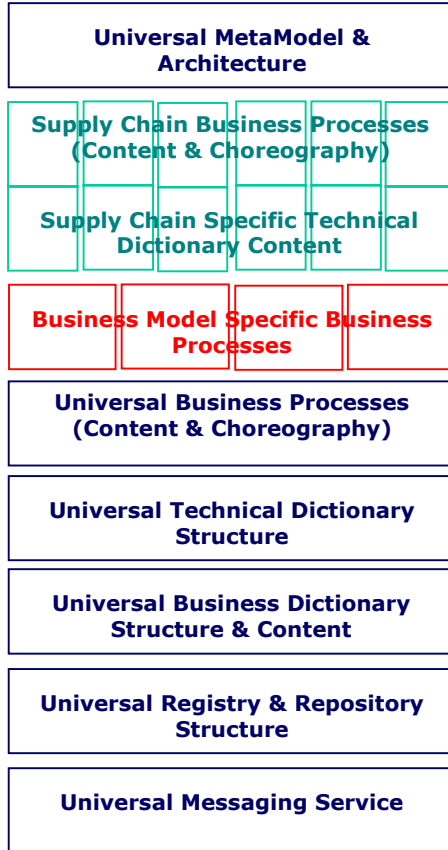
VFIIP (NEMI/IPC)



XML Standards Snapshot

Proprietary XML Initiatives

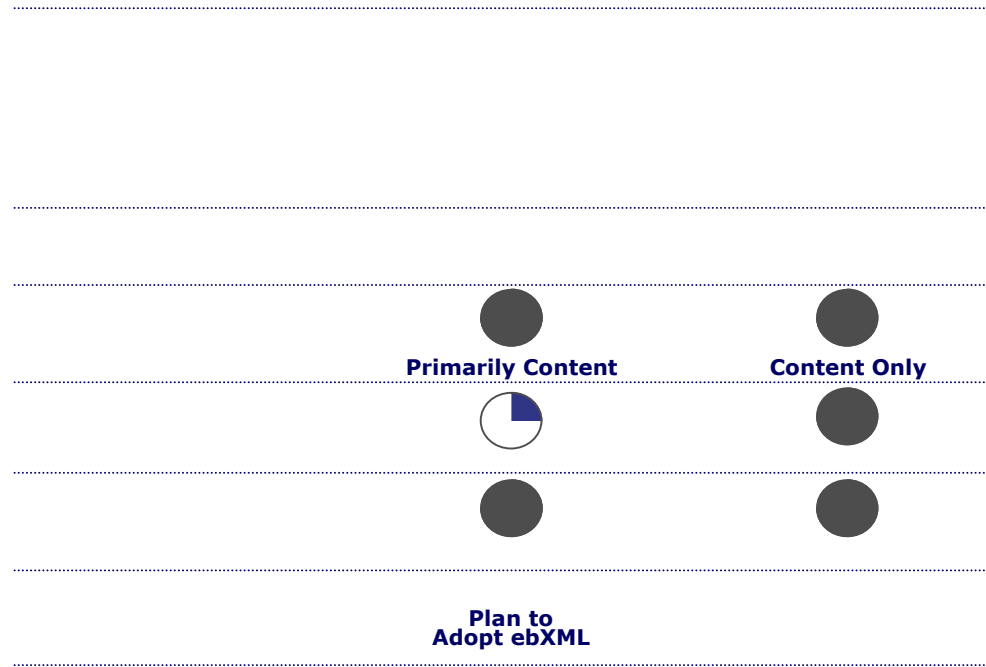
-  Development
-  Pilot Testing
-  Early Production
-  Mass Production



BizTalk Framework* (Microsoft)

xCBL (CommerceOne)
Plan to adopt ebXML

cXML (Ariba)



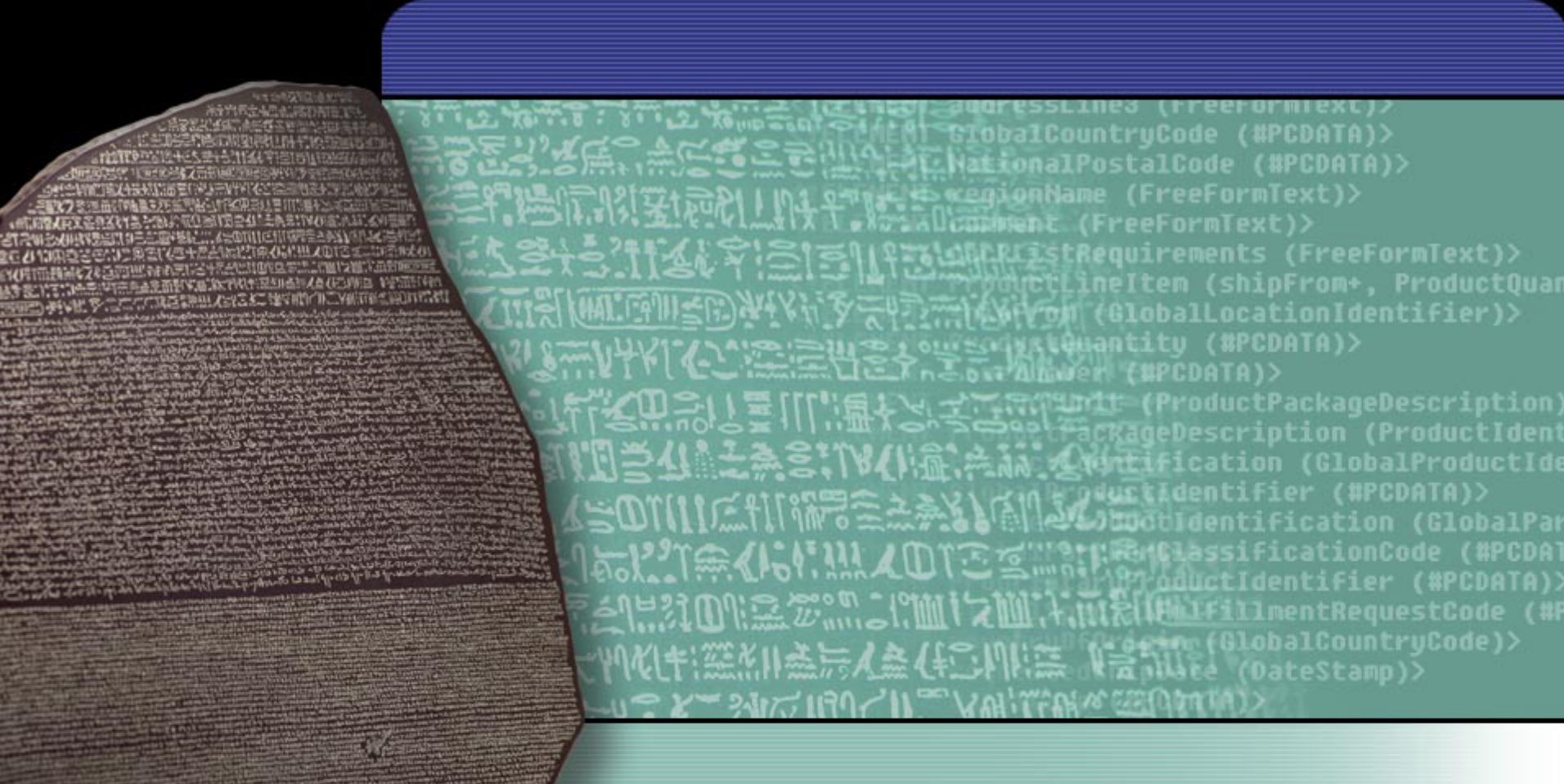

Built on SOAP

Plan to Become Agnostic

* Not the same as BizTalk Server which is a commercial software product.

XML Initiatives to be Included in Future

- Open XML Initiatives
 - Horizontal: OBI (CommerceNet)
 - Vertical: UCC (Grocery & General Merchandise)
- Proprietary XML Initiatives
 - Horizontal: E-Services (Hewlett-Packard)



Part Three: RosettaNet XML Standards Convergence Perspective

RosettaNet Convergence Strategy

- Keep RosettaNet's current standards developing and evolving on a fast track
- Leverage RosettaNet's leadership role and production implementation experience
- Ensure that RosettaNet can "plug into" universal, horizontal standards
- Reduce confusion and create clarity around B2B standards in the marketplace
- Work closely with B2B standards groups that have complementary goals
- Move toward more cost effective implementation solutions for small and medium sized businesses

RosettaNet Convergence Perspective – *Current Snapshot for IT, EC & SM Supply Chains*

- RosettaNet was created to develop vertical XML business process standards specific to the IT, EC and SM industry. In the absence of critical horizontal standards, RosettaNet met this challenge by developing a number of horizontal components to provide a robust solution for its supply chains
- Since RosettaNet's formation, a number of viable horizontal XML standards have materialized and are in various stages of development and acceptance
- Limited interoperability exists between the various vertical and horizontal XML standards initiatives in development

RosettaNet Convergence Perspective – Current Solution Set for IT, EC & SM Supply Chains

Universal Specification Schema & Architecture	RosettaNet
Supply Chain Business Processes	RosettaNet
Supply Chain Technical Dictionary Content	RosettaNet (with Si2, IEC, JETIA)
Business Model Business Processes	RosettaNet (with NEMI)
Universal Business Processes	RosettaNet
Universal Technical Dictionary Structure	RosettaNet (with Si2)
Universal Business Dictionary Structure & Content	RosettaNet
Universal Registry & Repository Structure	UDDI & Si2
Universal Messaging Service	RosettaNet & ebXML & BizTalk Framework

RosettaNet Convergence Perspective

Short-Term Prediction for IT, EC & SM Supply Chains

- RosettaNet will continue its XML standards efforts in all current component areas to support the 2001 production implementation goals of its IT, EC and SM supply chains
- RosettaNet will develop a plan to support other proven and universally accepted messaging service standards
- RosettaNet will support both UDDI and ebXML registry and repository standards
- RosettaNet will monitor ebXML progress on various horizontal components to assess their viability and acceptance as universal standards in a production environment

RosettaNet Convergence Perspective

Short-Term Prediction for IT, EC & SM Supply Chains

Universal Specification Schema & Architecture	RosettaNet or ebXML plus RosettaNet extensions (?)								
<table border="1"> <tr> <td></td> <td>Supply Chain Business Processes</td> <td></td> </tr> <tr> <td>Supply Chain</td> <td>Technical Dictionary</td> <td>Content</td> </tr> </table>		Supply Chain Business Processes		Supply Chain	Technical Dictionary	Content	<table border="1"> <tr> <td>RosettaNet</td> </tr> <tr> <td>RosettaNet (with IEC, JETIA)</td> </tr> </table>	RosettaNet	RosettaNet (with IEC, JETIA)
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Universal Technical Dictionary Structure	RosettaNet (with Si2)								
Universal Business Dictionary Structure & Content	RosettaNet & ebXML(?)								
Universal Registry & Repository Structure	UDDI & ebXML								
Universal Messaging Service	RosettaNet & ebXML & BizTalk Framework								

RosettaNet Convergence Perspective

Mid-Term Prediction for High Technology Supply Chains

- RosettaNet will continue to focus the majority of its efforts on vertical supply chain and business model specific e-commerce process standards, with an emphasis on rapid adoption and production implementation in the high technology industry
- RosettaNet will embrace and provide a smooth migration path to universally accepted horizontal standards components at such time as they are proven in a production environment
- RosettaNet will continue horizontal standards efforts only in areas where no universally accepted and proven horizontal standards exist

RosettaNet Convergence Perspective

Mid-Term Prediction for High Technology Supply Chains

Universal Specification Schema & Architecture	RosettaNet <u>or</u> ebXML plus RosettaNet extensions (?)								
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Universal Registry & Repository Structure	UDDI <u>or</u> ebXML								
Universal Messaging Service	ebXML <u>or</u> BizTalk Framework								

Presentation Summary

- B2B integration requires both horizontal and vertical XML standards in order to support business process complexity and interoperability goals between supply chains
- Although many XML standards initiatives are complementary, the groundswell of XML activity has created confusion among end-users
- Providing a context with which to understand current and new XML initiatives will reduce confusion and speed adoption of B2B integration
- Long-term predictions on the viability of specific horizontal XML standards are challenging at best, given many are still in the development phases

Glossary of Terms

authXML	Authentication and Authorization Information in XML
BPML	Business Process Modeling Language
BPMI	Business Process Management Initiative
BTP	Business Transaction Protocol
cXML	Commercial Extensible Mark-up Language
ebXML	E-business XML Initiative
ECIX	Electronic Component Information Exchange
IEC	International Electrotechnical Commission
JETIA	Japan Electronics and Information Technology Industries Association
NEMI	National Electronic Manufacturing Initiative

Glossary of Terms

OAG	Open Applications Group
OASIS	Organization for Advancement of Structured Information Standards
OBI	Open Buying on the Internet
S2ML	Security Services Mark-up Language
Si2	Silicon Integrated Initiative
SOAP	Simple Object Access Protocol
TpAML	Trading Partner Agreement Mark-up Language
UDDI	Universal Description Discovery and Integration
UCC	Uniform Code Council
UN	United Nations
VFIIP	Virtual Factory Information Interchange Project
W3C	World Wide Web Consortium
xAML	Transaction Authority Mark-up Language
xCBL	XML Common Business Library

ROSETTANET

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NationalPostalCode (#PCDATA)>  
RegionName (FreeFormText)>  
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ProductDescription (ProductPackageDescription)>  
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