

eTOM – Public B2B Business Operations Map (BOM) Application Note C

An initial proposal for the scope and structure of ICT Business Transactions

GB 921 C

TMF Approved Version 4.0

March 2004

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- RosettaNet www.RosettaNet.org
- ebXML –OASIS <u>www.ebxml.org</u> <u>www.oasis-open.org</u>

Particular thanks go to Dave Milham of BT who handled editing of this document, and integrated comments and suggestions into the final form shown here. This task requires insight and an ability to balance and combine suggested changes into a result that can find consensus amongst those involved, and the efforts involved are much appreciated.

ABOUT THIS DOCUMENT

TM Forum Documents

The eTOM Public B2B Business Operations Map (BOM) is being issued as Version 4.0 as part of the GB921v4.0 suite of eTOM documentation.

The purpose is to encourage input based on experience of members and the public as they begin to use the document.

This document will continue under formal change control. Further work will be reflected in revisions to this document.

Revision History

Version	Version Name (optional)	Date	Purpose/Changes from Previous/Status
3.6	eTOM-Public B2B BOM	Jan 2004	New document release based on material in GB921B v3.5 which was split into two documents in v3.6: GB921B and GB921C.
4.0	eTOM-Public B2B BOM	Feb 2004	Released version
4.0.1		Mar 2004	Cosmetic update to state approved version.

Time Stamp

This version can be considered valid until it is updated or replaced.

How to obtain a copy

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How to comment on the document

Comments must be in written form and addressed to the contacts below for review with the project team. Please send your comments and input to:

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Please be specific, since your comments will be dealt with by a team evaluating numerous inputs and trying to produce a single text. Thus, we appreciate significant specific input. We are looking for more input than "word-smith" items, however editing and structural help are greatly appreciated where better clarity is the result.

Individuals or enterprises who are not members of the TM Forum are encouraged to provide comments on this document. However, in order for their comments to be considered, a signed waiver must be on file with TM Forum pertaining to intellectual property rights. To obtain this form, please contact the TM Forum.

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PREFACE

About TeleManagement Forum

TeleManagement Forum is an international consortium of communications service providers and their suppliers. Its mission is to help service providers and network operators automate their business processes in a cost- and time-effective way. Specifically, the work of the TM Forum includes:

- Establishing operational guidance on the shape of business processes.
- Agreeing on information that needs to flow from one process activity to another.
- Identifying a realistic systems environment to support the interconnection of operational support systems.
- Enabling the development of a market and real products for integrating and automating telecom operations processes.

The members of TM Forum include service providers, network operators and suppliers of equipment and software to the communications industry. With that combination of buyers and suppliers of operational support systems, TM Forum is able to achieve results in a pragmatic way that leads to product offerings (from member enterprises) as well as written specifications.

Use and Extension of a TM Forum Application Note

This document provides a definition of an eTOM Public B2B Business Operations Map. It also provides an initial taxonomy proposal for B2B Business Transactions that may be used by enterprises in linking their eTOM process implementations to their trading partners and suppliers.

It references a number of other sources such as RosettaNet and standards from ITU-T, ETSI, and GSM Association. However this BOM provides a foundation for the diverse range of end to end processes needed for trading in the ICT industry.

The use of this eTOM Public B2B BOM is described in the eTOM B2B Integration GB921B document which should be read before reading this document

1 INTRODUCTION

1.1 What need is being addressed?

While eTOM is the global de facto Business Process Framework at the Enterprise Level for the Telecommunications Industry, specific process frameworks and good practice guides have also been developed for use between enterprises in other industries, e.g., the Supply Chain Council, RosettaNet, Electronic Business XML (ebXML) process frameworks, and the Balanced Scorecard.

This document is part of a series of documents showing how the frameworks and best practices developed and used other industry sectors can be used together with the eTOM Business Process Framework to provide a richer and more complete Enterprise Business Process Framework.

This document provides a definition of the taxonomy of B2B Transactions called the eTOM Public B2B Business Operations Map (ePBOM) and provides a taxonomy/content for the ICT industry equivalent to the RosettaNet Business Operations Map (BOM), and the proposed ebXML Repository.

There is a need for an eTOM Public B2B BOM because no other B2B initiative has a sufficient scope to support the required range of end to end ICT processes encountered by enterprises implementing the eTOM. The RosettaNet and ebXML B2B Models both assume the use of a registry/ repository as part of the mechanism for establishing trading partnership agreements. To achieve consistency and interoperability it is necessary to have a proposal for such a repository to support ICT inter-enterprise processes.

This document provides this initial proposal and may at some stage be taken over by another industry group such as the ITU-T, RosettaNet, ITU-T SG4, OASIS; or some combination of them in conjunction with the TMF.

1.2 ebXML Repository Model

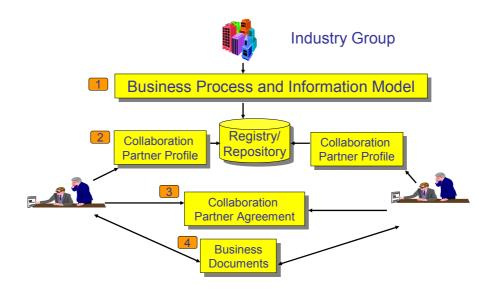


Figure 1-1 ebXML Repository

This figure shows how enterprises use the ebXML Registry/Repository as part of the process for forming and operating automated Business Processes amongst themselves. However there is an issue of how the Repository is created, and what is in it.

The above slide shows a simplified view of the Repository usage:

Step 1 comprises the creation of the Repository content by industry groups;

- Step 2 is the registration of an individual enterprise profile in the Registry/Repository which describes the capabilities that it can support;
- Step 3 is the formation of a specific Collaboration Partner Agreement (CPA) between a pair of enterprises; and
- Step 4 is the exchange of Business Documents as part of business transactions within a specific CPA.

Steps 2 to 4 are described in some detail in GB921B [1].

ebXML assumes that their core work will be extended to support vertical industry segments. However no specific arrangements have been put in place to achieve this goal.

In the IT and software industries RosettaNet has extended these definitions, and has captured Business Transactions, and the Business Messages within its Partner Interchange Processes (PIP^{TM}). It has captured the definition of Business Entities through its Dictionary Structures and Dictionary Content. This taxonomy of Business Transactions - PIPs - is categorized by RosettaNet as a Business Operations Map (BOM).

Currently no equivalent of the RosettaNet Business Operations Map has been created by the ICT industry.

This document provides an initial TMF eTOM proposal for such an ICT B2B Business Operations Map. It is expected that this eTOM Public B2B BOM will be adopted by either the TMF on behalf of the ICT industry or by means of some collaboration amongst industry enterprises such as the TMF, RosettaNet, OASIS, and ITU-T SG4 (Generic Telecom Data Dictionary).

The following section describes the proposal for this eTOM Public B2B Business Operations Map.

References to existing functional proposals for Business Transactions based on RosettaNet and other standards such as ITU-T X.790 are for information purposes. For many of these examples there are presumed transport protocols and information modeling notations, that may or may not be suitable for eTOM B2B purposes, when main stream e-Business standards are to be used. GB921B discusses in more detail some of the issues around technology choices for B2B.

2 eTOM Public B2B BUSINESS OPERATIONS MAP

2.1 Introduction

This Document proposes eTOM Public B2B BOM descriptions to levels 0/1/2, and provides guidance on level 3 and 4. The document is regarded as indicative rather than definitive at this stage of industry development of telecom B2B standardization.

This breakdown is based on references to existing relevant standards from a range of bodies. Some of these standards are stable with deployed implementation, and others are simply specifications. The stability of the individual Level 1/2 process proposals can be judged by whether they have been implemented or not.

2.2 References

- [1] GB921B ETOM B2B Integration Using B2B Inter-enterprise integration with the eTOM V4.0 February 2004
- [2] Value Chain Issues facing the ICT Industry TR148 v0.5 June 2002 Member evaluation version
- [3] <u>www.RosettaNet.org</u>
- [4] www.ebxml.org and www.ebtwg.org
- [5] TeleManagement Forum Enhanced Telecomm Operations Map GB921 v4.0
- [6] UOM Unified Ordering Model vol 1,2,3 <u>www.atis.org</u>
- [7] RosettaNet PIP directory <u>www.RosettaNet.org</u>
- [8] X.790 ITU-T Recommendation X790 Information Technology Data Networks And Open System Communications: Trouble Management Function for ITU-T Applications Systems Management
- [9] X.745 ITU-T Recommendation X745 Information Technology Open Systems Interconnection –Systems Management: Test Management Function
- [10] IPDR Network Data Management Usage Specification Version 3.1.1
- [11] Parlay X Version 4 www.parlay.org
- [12] ETSI TS_101321v020101 Open Settlement ProtocolOpen Settlement Protocol (OSP) for Inter-Domain pricing, authorization, and usage exchange
- [13] TAP Transferred Account Procedures GSM Association www.gsmworld.org

2.3 Concepts

The main focus of the eTOM Public B2B BOM work [1] is to extend industry B2B Business Operation Maps (BOM) to meet the requirements of ICT Value Chains [2].

A few points are worth re-emphasizing:

- The eTOM Public B2B BOM is conceptually a repository that allows trading relationships to be established amongst Trading Partners that may, or may not, be using an internal process model based upon the e-TOM Business Process Framework. It follows the RosettaNet Conceptual Model [3].
- The B2B processes are based upon defining public processes.
- B2B processes synchronize the internal processes of two different enterprises. The method of synchronization is based upon Business Transaction Activities concept from ebXML [4].

- The approach proposed is consistent with the current work in the major e-Commerce activities of the UN CEFACT ebXML groups, RosettaNet, OAGIS CAM and nascent activities in the ITU-T:
 - Unified Ordering Model;
 - Generic Telecomm Data Dictionary (GTDD); and
 - Telecomm Markup Language tML.

2.4 eTOM Public B2B BOM Level 0 Process Area - Operations

This area of B2B processes is concerned with supporting the Operations vertical process groupings of the eTOM Business Process Framework[5]. This has historically been the primary focus for automating B2B transactions since these processes are executing frequently and have high costs if they are performed manually. Moreover automation of these B2B processes typically leads to improvements in service quality.

The proposed breakdown of this process area is based upon the eTOM Business Process Framework vertical process groupings.

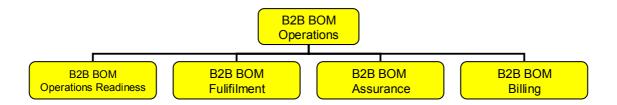


Figure 2-1: eTOM Public B2B BOM Operations Level 0/1

B2B BOM Fulfillment: This process grouping is concerned with all the B2B public process activities that are needed to inquire about a product or service; to order and confirm the product or service delivery; to track the status of the order; to modify the order at the request of the customer; to manage appointments where provisioning requires access to customer facilities; and to complete the ordering process by acceptance of the delivery, or 'turning up of service.

B2B BOM Assurance: This process grouping is concerned with all the B2B public process activities that are needed to monitor and maintain service quality. It covers the necessary B2B public processes for problem reporting and status notification/update, performance reporting, jeopardy management, and Service Level Agreement Management.

It covers supports the request and monitoring of remote automated diagnosis and testing between trading partners e.g. Line test, alarm check, etc.

It also covers appointment processes for carrying out repair actions on the customer's facilities and confirming the customer's acceptance of the resolution of the problem.

B2B Billing: This process grouping is concerned with all the B2B public process activities that are needed to invoice for service, provide service credits, provide call records, monitoring of account information, and settlement processes.

B2B Operations Readiness This process grouping is concerned with all the B2B public process activities that are needed to bring in new, or modified, eTOM Public B2B BOM Processes into operational use between trading partners.

2.4.1 eTOM Public B2B BOM - Level 1 Fulfillment

The proposal below is a synthesis of the T1 ITU SG4 Unified Ordering Model [6] and the published

RosettaNet clusters[7].

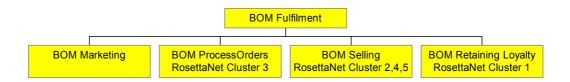


Figure 2-2: eTOM Public B2B BOM Fulfillment Level 1/2

B2B BOM Marketing This process grouping is concerned with all the B2B public process activities that are needed to support co-marketing and channel partner marketing activities.

B2B BOM Selling This process grouping is concerned with all the B2B public process activities that are needed to support co-selling and exchange of customer sales leads between channel partners. It includes from RosettaNet:

- Cluster 2 Product Information
- Cluster 4 Inventory Management Segment 4F Price Protection
- Cluster 5 Marketing information management
 - Segment 5A Lead Opportunity Management
 - Segment 5B Marketing Campaign Management

B2B BOM Process Orders This process grouping is concerned with all the B2B public process activities that are need to manage Orders from quotation through formal contract, delivery and final acceptance invoice for service. This is modeled as three phases following the UOM model and utilizes material from RosettaNet Cluster 3: Order Management:

- Preorder: this is concerned with all the activities for a customer to establish whether and how
 they may place an order with a Supplier. It covers inquiries related to locations Service
 Availability and Connecting Facility Assignment Inquiry (CFAI). The RosettaNet Segment 3A
 is mostly relevant
 - Quoting Order: Segment 3A1 Request Quote and Order Entry
 - Querying Price and Availability: Segment 3A2 Querying Price and Availability
- Ordering: This is focused on the creation and acceptance of a Firm Order sometimes referred to as a Service Request
 - Create Order: Segment 3A4 Manage Purchase Order
 - Change Order including providing supplementary information : Segment 3A8 Change Purchase Order
- Post Confirmation:
 - Cancel Order: Segment 3A9 Cancel Purchase Order
 - Query Customer's Services
 - Query Order Status: Segment 3A5 Query Order Status
 - Notify of Order Acceptance: Segment 3A6 Notify of Purchase Order Acceptance
 - Distribute Order Status Segment 3A6 Distribute Order Status

- Notify of Jeopardy
- Provide updated design information

B2B BOM Retaining Loyalty. This process grouping is concerned with B2B public processes for exchange of information related to retaining customers and channel partners it includes RosettaNet Cluster 1: Partner Profile Management.

2.4.2 eTOM Public B2B BOM - Level 1 Assurance

The diagram below proposes the breakdown of the B2B Assurance Level 1 process into Level 3 process components/ BTA

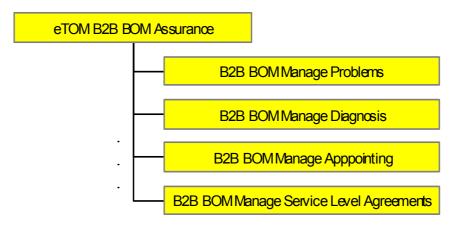


Figure 2-3: eTOM Public B2B BOM Assurance Level 1/2

In the Assurance Process Grouping there is little or no previous e-commerce work to guide the structuring of the proposed eTOM Public B2B BOM, unlike fulfillment and billing. The pre-existing work on ITU-T X.790 is mainly concerned with basic trouble ticket synchronization, and the process aspects have largely been addressed in industry groups such as ATIS / ANSI T1, rather than standards groups.

The main Level 3 process groupings that have been identified are:

- Manage Problems
- Manage Diagnosis
- Manage Appointing that is needed for handling visits to shared facilities or customer facilities to rectify equipment faults.
 - Note the Fulfillment processes may also use this Process.
- Manage Service Level Agreements including Jeopardy.
 Note the Fulfillment processes may also use this process.

B2B BOM Manage Problems. This process grouping is concerned with all the B2B public process steps needed to receive, record progress, clear and confirm problems. It is logically coupled to the concept of Trouble Administration and Trouble Ticketing. This may be carried out after the customer has carried out an initial diagnosis using the Managing Diagnosis processes.

It comprises a number of business transactions loosely based on ITU-T X.790¹ [8]:

- Request Trouble Report (X.790 Para 8.2.1 Enter Trouble Report)
- Request Trouble Report Closure (X.790 Para 8.12 Cancel Trouble Report)
- Request Trouble Report Clear (X.790 Para 8.14 Delete Telecommunications Trouble Report)
- Request Trouble Report Change (X.790 para 8.9 Modify Trouble Administration Information Functional Unit)
- Request Trouble Report Status (X.790 para 8.2.2)
- Review Trouble History (X.790 para 8.5)
- Add Trouble Information (X.790 para 8.6)
- Modify Trouble Administration Information (X.790 para 8.9)
- Update State and Status (X.790 para 8.17)
- Notify Trouble Report Change
- Notify Trouble Report History Status (X.790 para 8.4.1 Trouble History Event Notification)
- Notify Trouble Report Status/Commitment Time Update (X.790 para 8.7.1)
- Notify Trouble Administration Configuration Event (X.790 para 8.10)
- Notify Trouble Report Progress (X.790 para 8.11.1)
- Notify Trouble Report Closure
- Notify Trouble Report Clear
- Refer Telecommunications Trouble Report (X.790 para 8.15)
- Transfer Telecommunications Trouble Report (X.790 para 8.16)
- Verify Repair Completion (X.790 para 8.8)

B2B BOM Manage Diagnosis. This process grouping is concerned with B2B public processes requesting diagnostic tests between enterprises. For example, this type of capability is needed to support Internet service providers that provide broadband over an incumbent's xDSL Access network. Often they need to initiate tests in the Access Network and get results automatically in order to decide whether repair actions are needed to the DSL access network, or in their own network, in order to clear an end to end problem.

It comprises:

Initiate Test (Simple uncontrolled or one-shot test X745 para. 7.2.1. Test initiation [9]

- Initiate Scheduled Test (X745 para. 7.2.2 Test scheduling)
- Request Test Suspension (X745 para. 7.2.4Test suspension and resumption)
- Request Test Resumption (X745 para. 7.2.4Test suspension and resumption)

¹ X.790 has a data model view of trouble reports with use of GET and SET functions. Some judgment is needed for representing X.790 using the e-commerce message based interfaces that use 'action notification' models. This adjustment of the x.790 model needs to take account of the current business rules for using the x.790. This document is an initial proposal.

- Cancel Test (X745 para.7.2.5 Test termination)
- Notify Test Results (X745 para.7.2.3)

B2B BOM Manage Appointments. This process grouping is concerned with B2B public processes for managing the establishment of a mutual acceptable appointment time between two trading partners. For example to access customer premises, locked engineering or other facilities, or for joint testing between two enterprises. It includes:

- Request Appointment Availability (returns a set of appointment slots)
- Request Appointment
- Request Appointment Change
- Request Appointment Cancel
- Notify Appointment Required

B2B BOM Manage Service Level Agreements and Jeopardy This process grouping is concerned with B2B public processes for managing Service Level Agreements (SLA) established either as part of the Trading Partner Agreement processes (eTOM Public B2B BOM SIP) or during the Fulfillment processes for the provision of an instance of services. It covers the SLAs that describe the product or service that is provided and jeopardy in the processes providing or repairing and instance of service – sometimes referred to as Key Performance Indicators (KPI). National regulators often require reports on KPIs. It comprises:

- Request SLA/KPI report
- Set SLA threshold
- Notify SLA event
- Notify SLA Violation
- Notify Jeopardy Status (customer or supplier) [UOM]
- Notify Jeopardy Cleared [UOM]

2.4.3 eTOM Public B2B BOM - Level 1 B2B BOM Billing

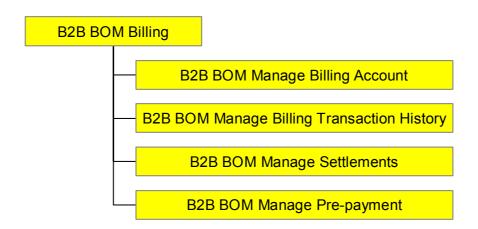


Figure 2-4: eTOM Public B2B BOM Billing Level 1/2

This process grouping is concerned with exchange of bills, billing and account information, prepayment accounts, and settlement processes between trading partners. The billing process group covers: Call Detail Records, Service Detail Records. The work of the IPDR group on Detailed Usage Records [10] are relevant entities. In the billing process group a major technical focus is the proper structuring and representation of billing and accounting records, and the processing rules for this information.

The proposed breakdown is based upon published information from the Parlay Group [11] and the ETSI Open Settlements Processes [12] and the GSM Association Transferred Account Procedures(TAP) [13].

B2B BOM Manage Billing Account This process grouping is concerned with B2B processes for managing Bill accounts. It covers the creation modification and archiving of Bill accounts.

B2B BOM Manage Billing Transaction History This process grouping is concerned with B2B processes for managing Transaction History. It involves receiving and process queries about transactions and creating report on accounts including balance queries. This process grouping may also be used to support internal Fraud management processes. Because Billing transactions may be voluminous, it is common to provide file mechanisms to transfer the information, and to notify when the file information is available. It includes:

- Request Transaction History
- Provide Periodic Transaction Histories
- Notify Transaction History

B2B BOM Manage Prepayment. This process grouping is concerned with the B2B processes for supporting prepayment billing. Functions that need to be supported (based upon Parlay v4 [ParlayX] and the ETSI Open Settlements Protocol [OSP]) include:

- Get Account Balance. This provides the account balance indicated by the end user identifier and associated end user PIN.
- Get Credit Expiry Date. This provides the expiration date of the credit indicated by the end user identifier and associated end user PIN.
- Recharge Account Balance. This process directly recharges the account indicated by the end
 user identifier and optional associated end user PIN.
- Update Voucher. This process directly recharges the account indicated by the end user identifier and optional associated end user PIN. It uses a voucher identifier that indirectly specifies the charge. An optional voucher PIN code may be used to verify the voucher.
- Get Account History. Results in return of the transaction history of the account indicated by the end user identifier and associated end user PIN.

B2B BOM Manage Settlements: This process grouping is concerned with B2B processes for managing settlements processes amongst trading partners. The breakdown proposed is loosely based upon the activities of the GSM Association and the business concepts of the TAP protocol. It includes:

- · Establishing and modifying trading arrangements and credentials
- Agree process for netted off settlements
- Exchange and confirmation of settlement payments
- Notification

Settlement processes of their very nature imply the use of some form of intermediary and are therefore a little more complex than the normal two party B2B processes.

2.4.4 eTOM Public B2B BOM-Level 0 Strategy Infrastructure and Product

This process grouping is concerned with the joint development of Strategy Product and infrastructure amongst trading partners. Given the modest development of B2B in the ICT industry this area is quite immature compared to manufacturing where supply chain management is more extensively developed.

It also includes the formation of Trading Partner Agreements amongst trading partners. This is referred to as Collaborative Partner Agreements (CPA) in ebXML.

Examples of SIP processes in the ICT industry are in the development and specification of interconnect products between network operators. This is a largely manual process conducted in national groups in response to national or regional e.g. European regulation.

For Infrastructure build there are examples where operators exchange on a rolling basis forecasts for interconnect services by interconnection point, type and volume. For example interconnect traffic for traffic between operators in the UK is forecast up to 18 months ahead and takes account of changes to the number and location of interconnection points, changes in numbering plans and switching centers. Usually these forecasts are commercially 'locked down' about 90 days ahead. The longer-term forecasts are essential to driving the SIP planning processes.

There are also similar planning and provision processes used between Service Providers and their suppliers for network infrastructure build.

RosettaNet Cluster 4 Inventory management has functions similar to those described above. Cluster 7 manufacturing where design information is exchanged also has some similarity with the ICT SIP processes for joint design of products.

2.4.5 eTOM Public B2B BOM-Level 0 Enterprise Management

This process area will support automated B2B processes amongst Enterprises.

Possible candidates might include:

- The electronic exchange of financial information between an enterprise and its bank.
- B2B Security. It is expected that a security grouping will be need to be added that is concerned
 with the B2B public processes to maintain trust, identity management and authorization status for
 trading parties and their customers.. Whilst security is a generic process there are specific
 processes needed to be agreed between Trading Partners to permit trading requests to be
 commercially processed.

These processes are unlikely to be specific to the ICT industry, and as yet are not a priority for investigation.

2.5 eTOM Public B2B BOM-Level 2/3 Decomposition

The Level 1/2 descriptions have provided pointers to a number of B2B public process definitions that could be used in the ICT industry. These effectively reach down to the process groupings at level 2, and provided guidance on atomic process components level 2 or 3. At this stage it is felt that extension to level 3 and 4 processes should be carried out after industry groups have reviewed these level 2 proposals in this addendum more widely.

Moreover work in the ITU-T and elsewhere is maturing and should be factored into this level of analysis in a later release.

2.6 Summary

This document has provided the first analysis of the process groupings appropriate to support the eTOM Public B2B Business Operations Map. Because the work links into industry activities such as ebXML, RosettaNet and other groups; many of the proposed public process decompositions provide pointers to Level 3 and Level 4 process component definitions available in the industry.

This level of analysis is sufficient to allow practical definition of example end to end supply chain processes amongst trading partners, some using the definition contained in the eTOM Business Process Framework as a starting point for modeling, and some using proprietary, or other internal process models.

The specifications in the B2B industry are evolving and this work is based on information available as of May 2003.

A specific issue that needs some care, is that, whilst RosettaNet is the most comprehensive set of specifications that they bundle specific choices of technical solutions e.g. RosettaNet Implementation Framework (RNIF) and specific document types. Those technology choices may not be appropriate to the ICT industry.

The modeling of information for the ICT is a major challenge and this is likely to lead to an evolution from the RosettaNet mechanisms for capturing data dictionaries and different ways of structuring the business documents that are exchanged. RosettaNet itself is one of the leading partners for the evolution of these standards. The most notable is ebXML OASIS Content Assembly Mechanism (CAM) which will lead to more systematic ways of defining Business Documents that supports change management more efficiently.

Readers are strongly advised to track the most update materials from ebXML, RosettaNet, ITU-T SG4 and OASIS.

ANNEX A: TERMINOLOGY AND ACRONYM GLOSSARY

A.1 Acronyms

ANSI American National Standards Institute

ASP Application Service Provider

ATIS Alliance for Telecommunication Industry Solutions (US)

B2B Business to Business

BOM Business Operations Map

BPSS Business Process Specification Schema

BSS Business Support System

BTA Business Transaction Activity
CAM Content Assembly Mechanism

CBL Common Business Library, also called xCBL.

CFAI Connecting Facility Assignment Inquiry

COTS Commercial Off-the-shelf

CPA Collaboration Partner Agreement

CRM Customer Relationship Management

DTD Document Type Definition

E2E End-to-end

ebXML Electronic Business Extensible Mark-up Language www.ebxml.org and

www.ebtwg.org

EDI Electronic Data Interchange
EM Enterprise Management

eTOM enhanced Telecom Operations Map

ETSI European Telecommunications Standards Institute

FAB Fulfillment, Assurance and Billing
GTDD Generic Telecom Data Dictionary
HTML Hyper Text Markup Language

ICT Information and Communications Technology

ILM Infrastructure Lifecycle Management

IP Internet Protocol

IPDR Internet Protocol Detailed Record

ISP Internet Service Provider

ITU-T International Telecommunication Union – Telecommunication

Standardization Sector

KPI Key Performance Indicator

NGOSS Next Generation Operations Systems and Software

OAGIS Open Applications Group Integration Specification

OASIS Enterprise for the Advancement of Structured Information Standards

OPS Operations

ORT Operations Readiness Testing
OSP Open Settlements Protocol

OSR Operations Support & Readiness

OSS Operations Support System

PIN Personal Identification Number

PIP Partner Interface Process

PLM Product Lifecycle Management

RFP Request for Proposal

RM&O Resource Management & Operations

RNIF RosettaNet Implementation Framework

RosettaNet www.RosettaNet.org

SD&M Service Development & Management
SID Shared Information & Data Model
SIP Strategy, Infrastructure and Product
SM&O Service Management & Operations
SOAP Simple Object Access Protocol
SP Service Provider (see also ICSP)

S/P Supplier/Partner

S/PRM Supplier/Partner Relationship Management

TAP Transferred Account Procedures GSM Assocation

TM Forum TeleManagement Forum (see also TMF)
tML Telecommunications Markup Language

TMF TeleManagement Forum (see also TM Forum)
TMN Telecommunications Management Network

TOM Telecom Operations Map
UML Unified Modeling Language

UN/CEFACT United Nations Center for Trade Facilitation and Electronic Business

UOM Unified Ordering Model

VC-MC Value Chain Market Center

W3C World Wide Web Consortium

XML Extensible Markup Language

To find Acronyms expansions go to http://www.acronymfinder.com.