

Creating a Single Global Electronic Market With ebXML™



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ebXML enables anyone,
anywhere
to do business with
anyone else
over the Internet

A global electronic market

where enterprises of any size, anywhere can:

- Find each other electronically
- Conduct business through the exchange of XML based messages
 - *using standard message structures*
 - *according to standard business process sequences*
 - *with clear business semantics*
 - *according to standard or mutually agreed trading partner agreements*
- Using off the shelf purchased business applications

ebXML Characteristics

- Participation is free and open to anyone, anywhere
- Complement, not compete
 - EDIFACT, X12,...
 - protect existing infrastructure investment
 - “extend-and-embrace” versus “rip-and-replace”
- Focus on needs of SME
 - easy, low cost, rapid development & deployment
 - plug and play shrink wrapped solutions
 - built on open, available, proven standards
- Modular and inclusive
 - implement what applies to you

Main ebXML concepts

- Business Processes – Defined as models, Expressed in XML
- Business Messages – Expressed in XML
- Trading Partner Agreement – Specifies parameters for businesses to interface with each other – Expressed in XML
- Business Service Interface – Implements Trading Partner Agreement – Expressed in XML
- Transport and Routing Layer – Moves the actual XML data between trading partners
- Registry/Repository - Provides a “container” for process models, vocabularies, and partner profiles.

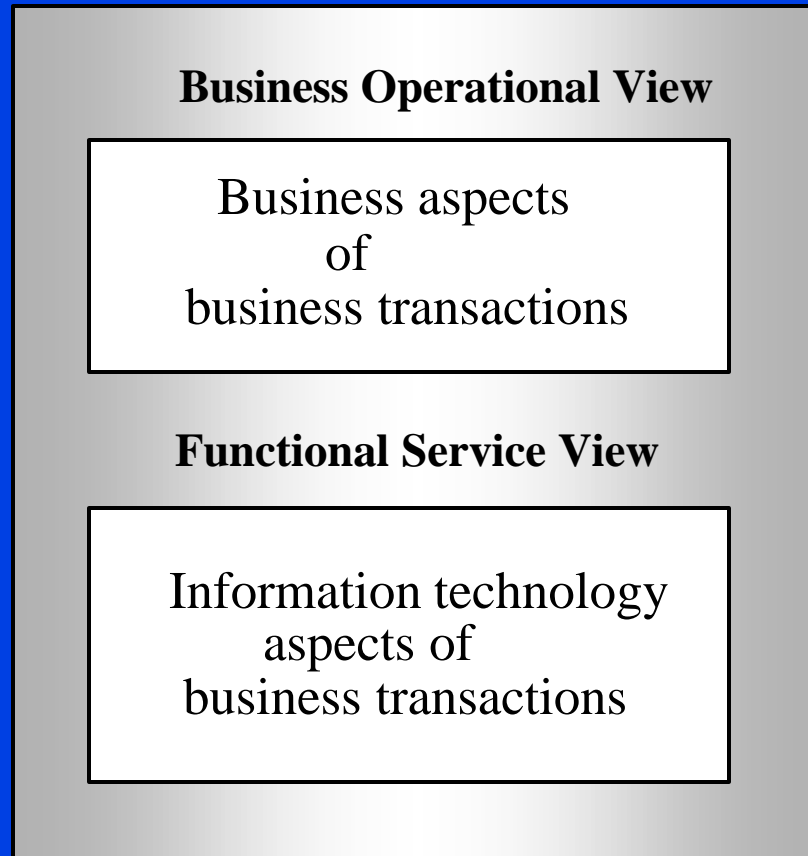
Open-edi Reference Model

ISO/IEC 14662

Creating a Single Global Electronic Market™

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Semantic Web

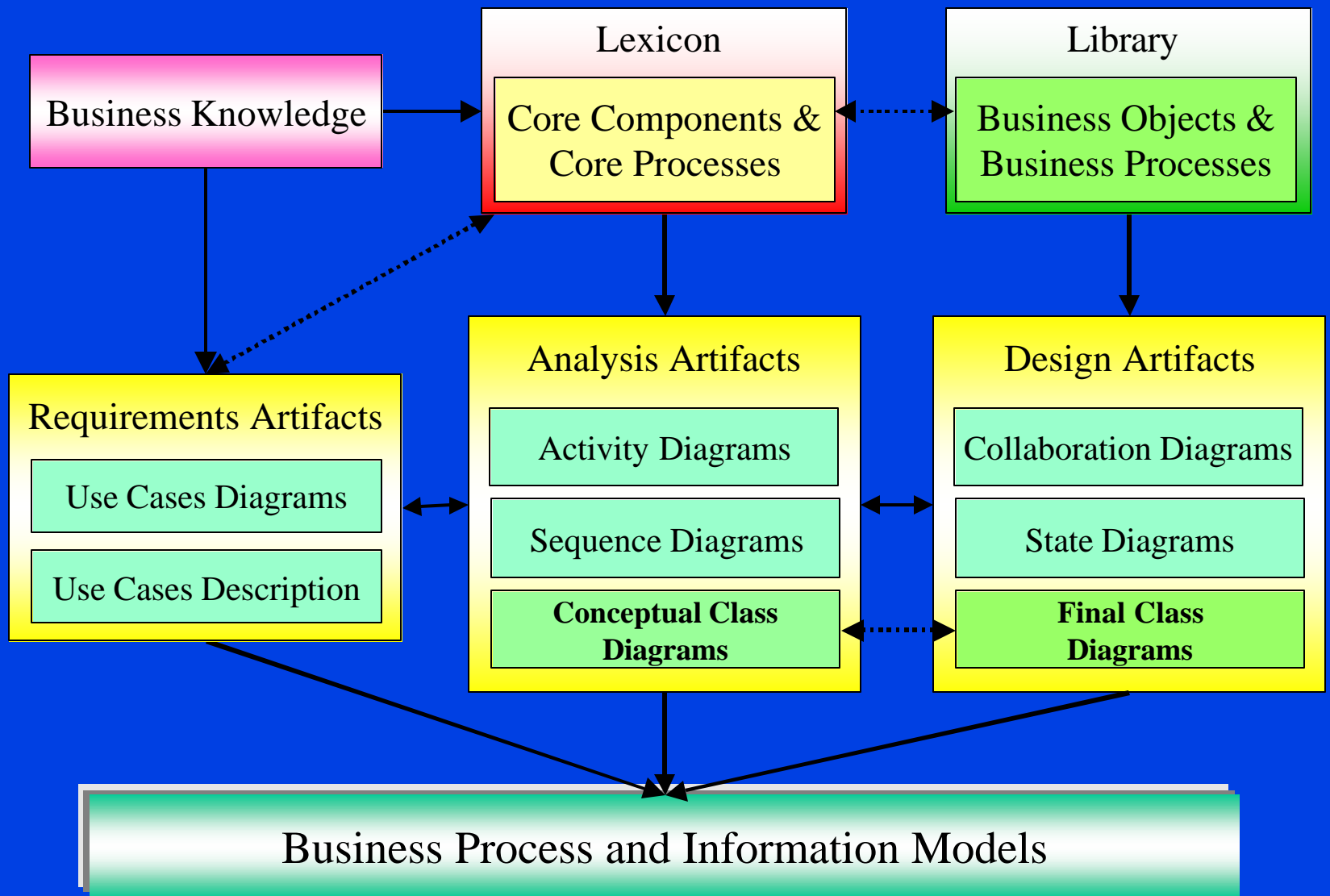


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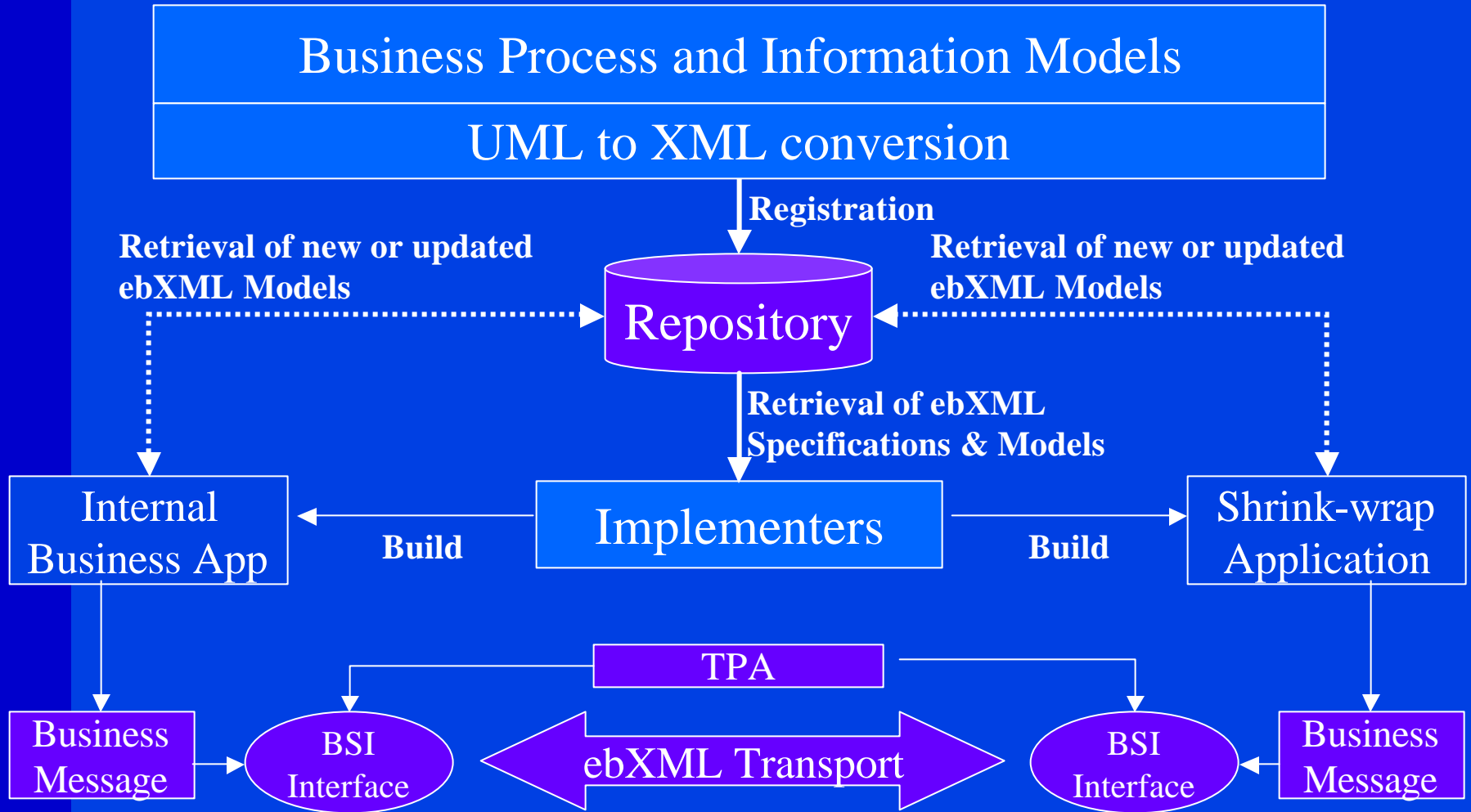
Web Services



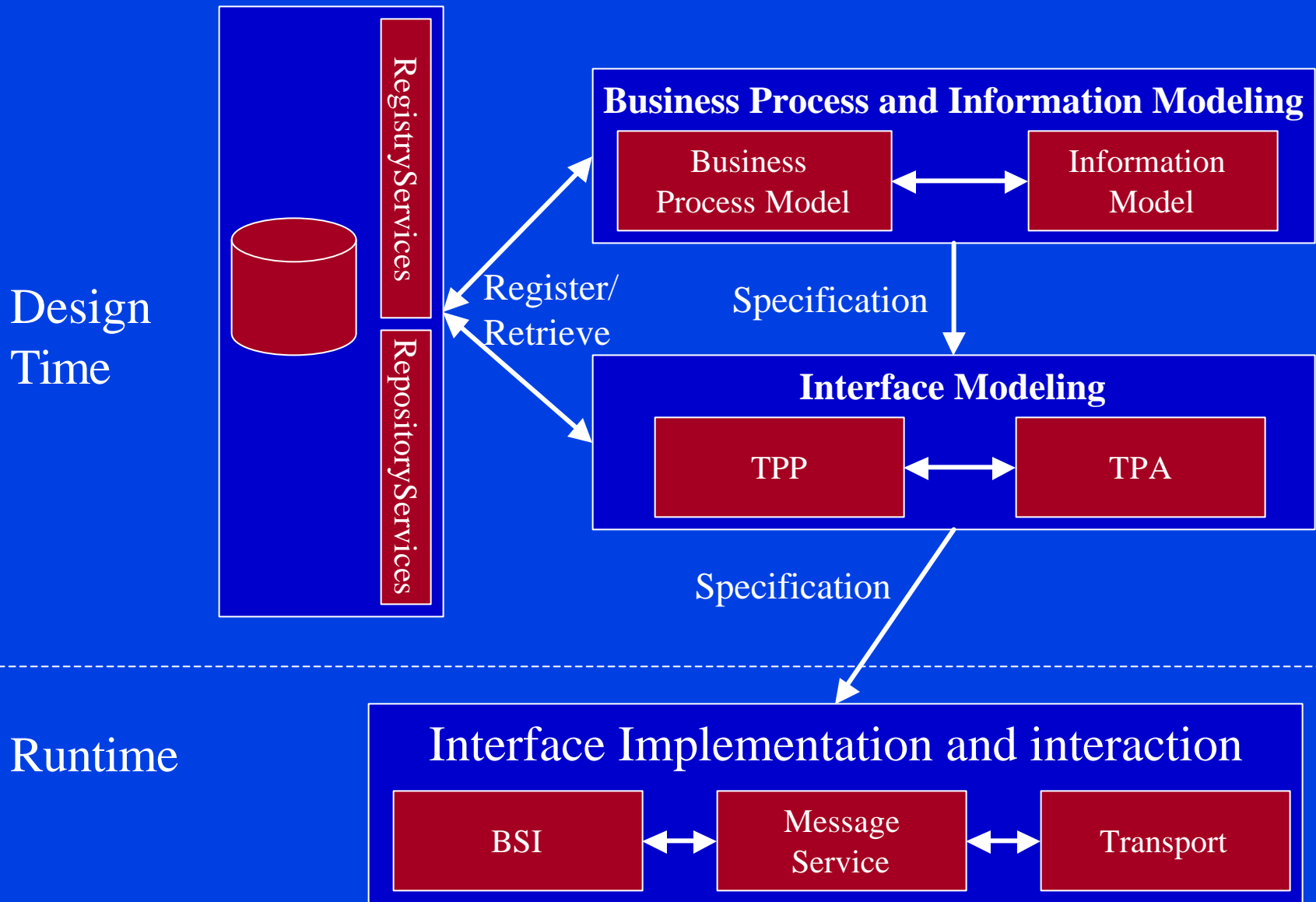
Business View



Functional View

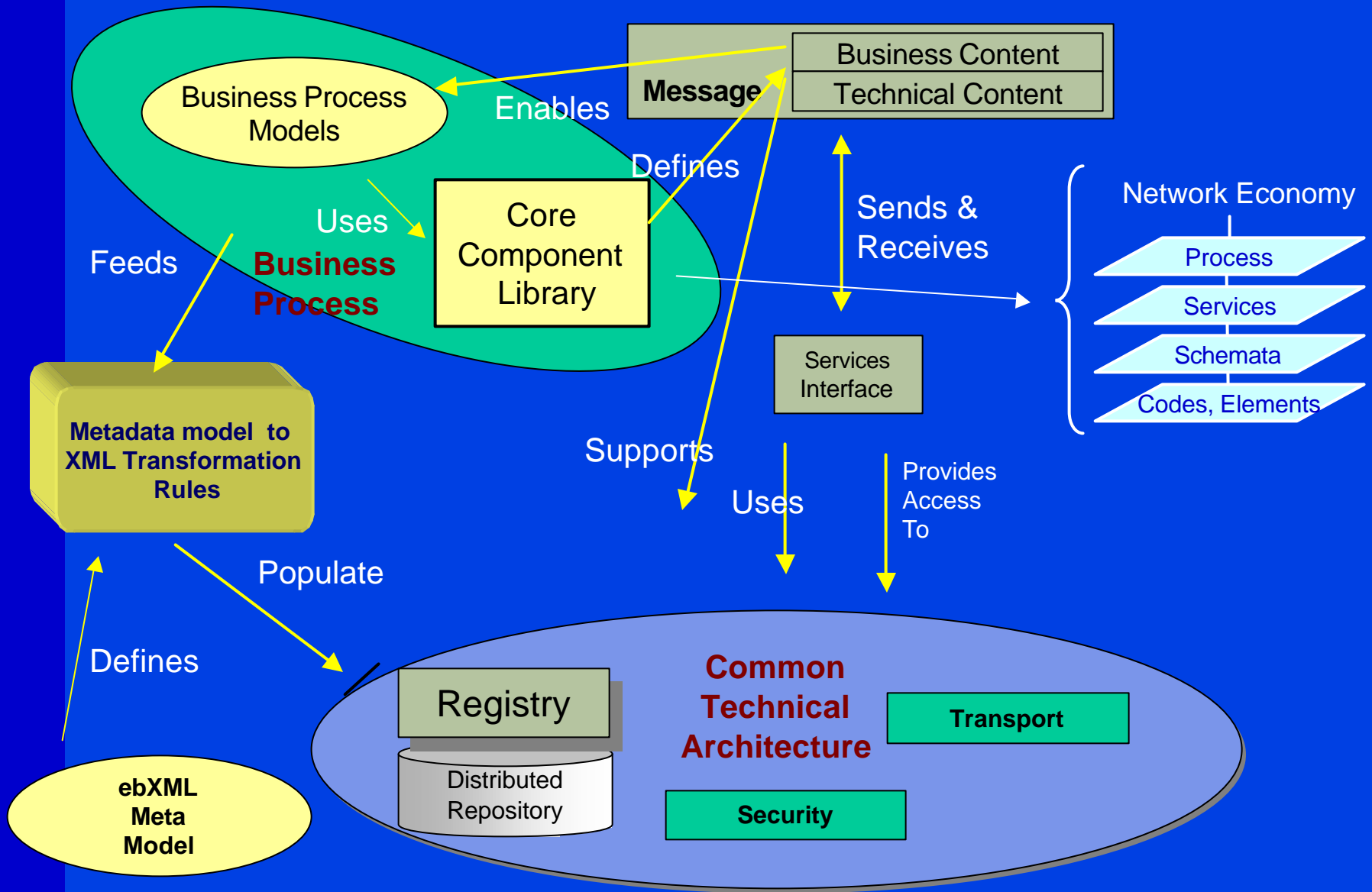


ebXML High Level Architecture



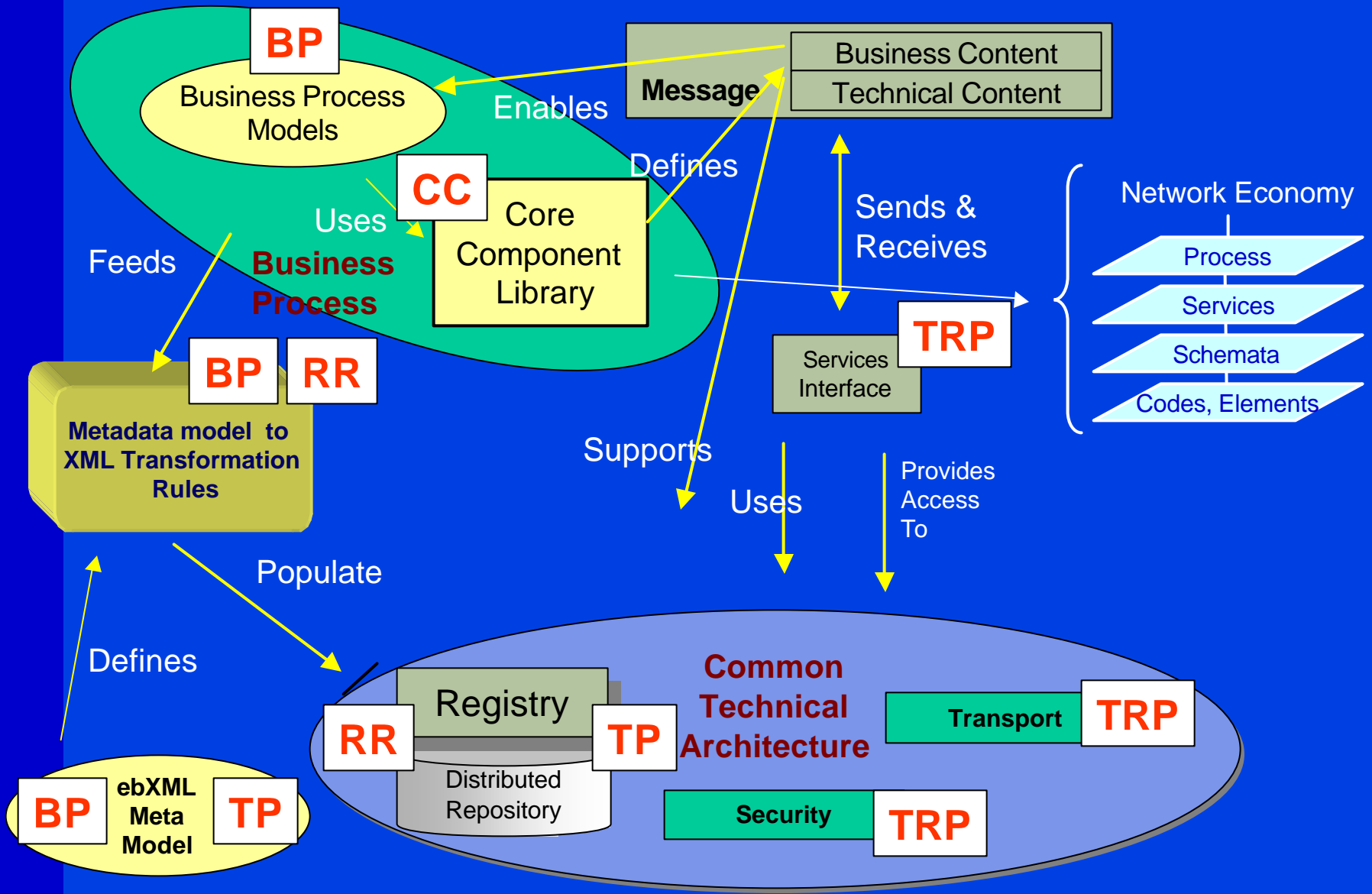
ebXML Architecture

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ebXML Architecture

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Transport and Routing

- Message Service Specification
 - Packaging Specification
 - ebXML SOAP Extensions
 - Message Service Handler Services
 - Reliable Messaging
 - Error Handling
 - Security

Communication Protocol (SMTP, HTTP, etc.)

MIME multipart/related

SOAP Envelope

SOAP Header

eb:MessageHeader
 eb:TraceRoute
 ds:Signature

/SOAP Header

SOAP Body

eb:Manifest
 eb:StatusData
 eb:ErrorList
SOAP-Env:SoapFault
/SOAP-Env:SoapFault
 eb:Acknowledgements

/SOAP Body

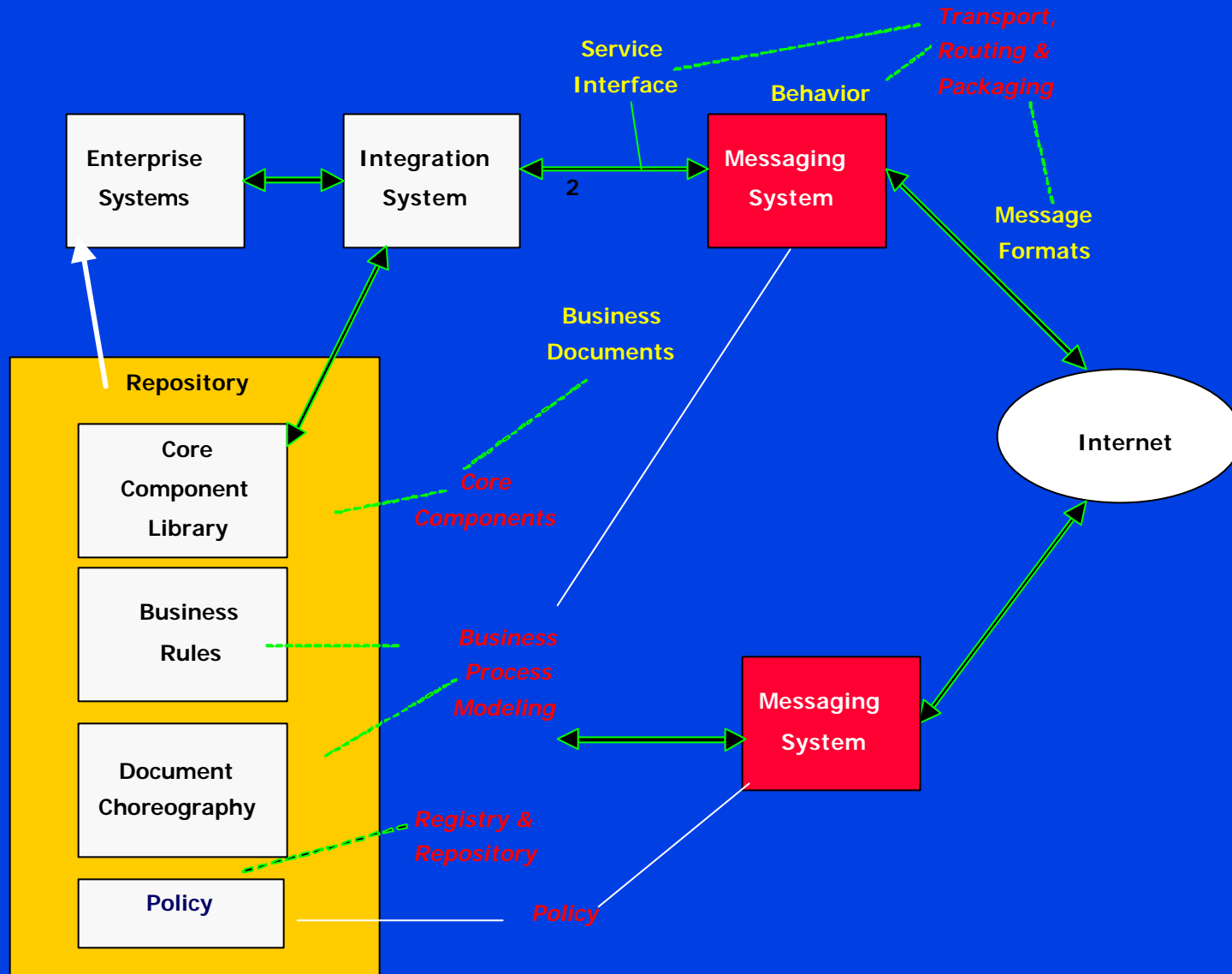
Payload

Payload

Registry and Repository

- Registry Information Model
 - Based heavily on ANSI ASC X3.285
 - Submission to ISO 11179
 - Key concepts
 - Classification Scheme support
 - Managed Objects
 - Storage of anything
 - Flexible associations
 - Subscription to managed objects (in progress)
- Registry Services
 - Life cycle management
 - Query
 - Library Control System
 - Transformation
 - Workflow
 - Logging
 - Subscription
 - Publish
 - Interface Discovery Service
 - Quality Assurance Service

Architecture Interactions



Trading Partner Profile

- Collaboration-Protocol Profile and Agreement Specification
 - Collaboration Protocol Profile (CPP)
 - Describes party's IT capabilities
 - Communication protocols
 - Security requirements
 - Business processes it supports
 - Collaboration Protocol Agreement (CPA)
 - Agreed IT capabilities
 - Business process to be performed
 - Definition of business transactions, transition rules, etc.
 - CPA is intersection of two parties' CPPs plus results of negotiating variable parameters

Main sections of CPP & CPA

- Party identification
- Transport
- Protocol, encoding, timeout, security, etc.
- Document exchange
- Messaging protocol, security, etc.
- Collaboration protocol
- Business transaction definitions
- Derived from business process metamodel

CPP/CPA Summary

What Parties WILL do

CPA

Party 1
CPP

Party 2
CPP

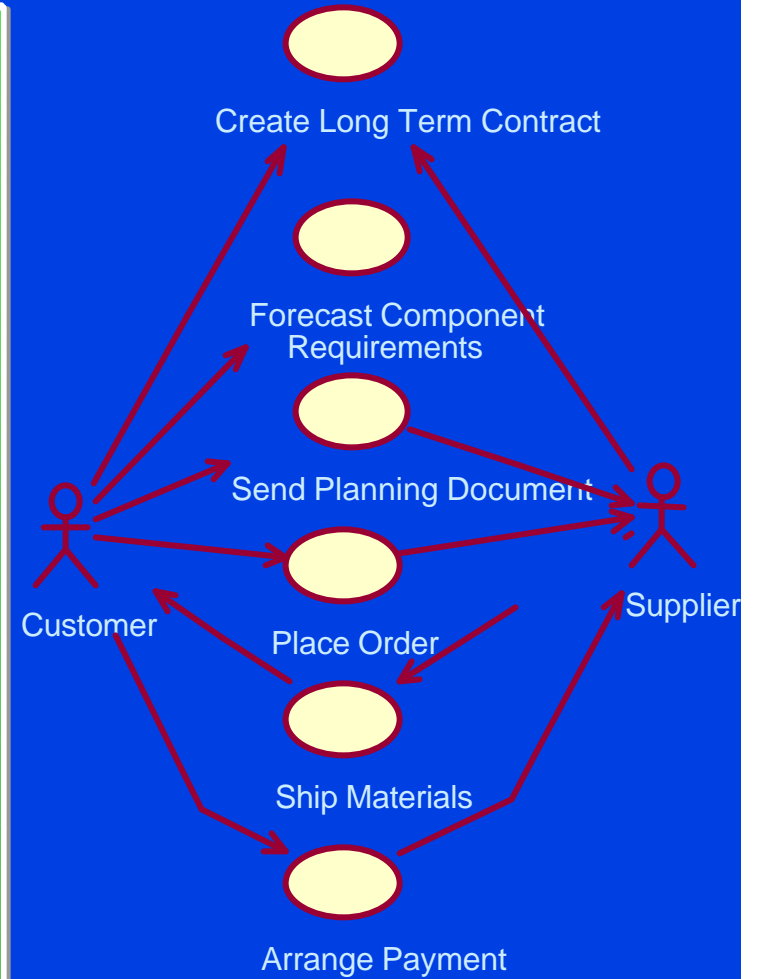
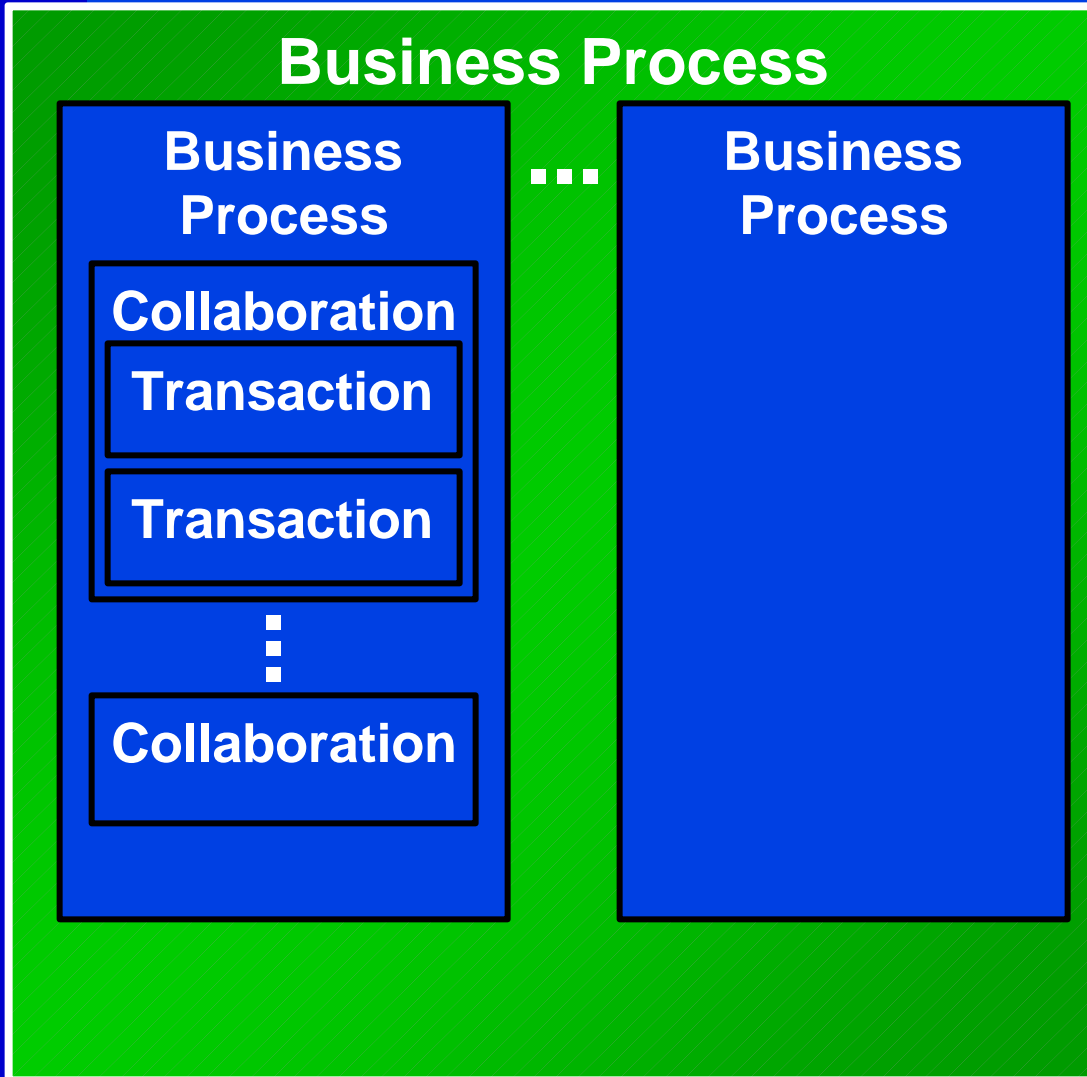
Intersection,
negotiation

What Parties CAN do

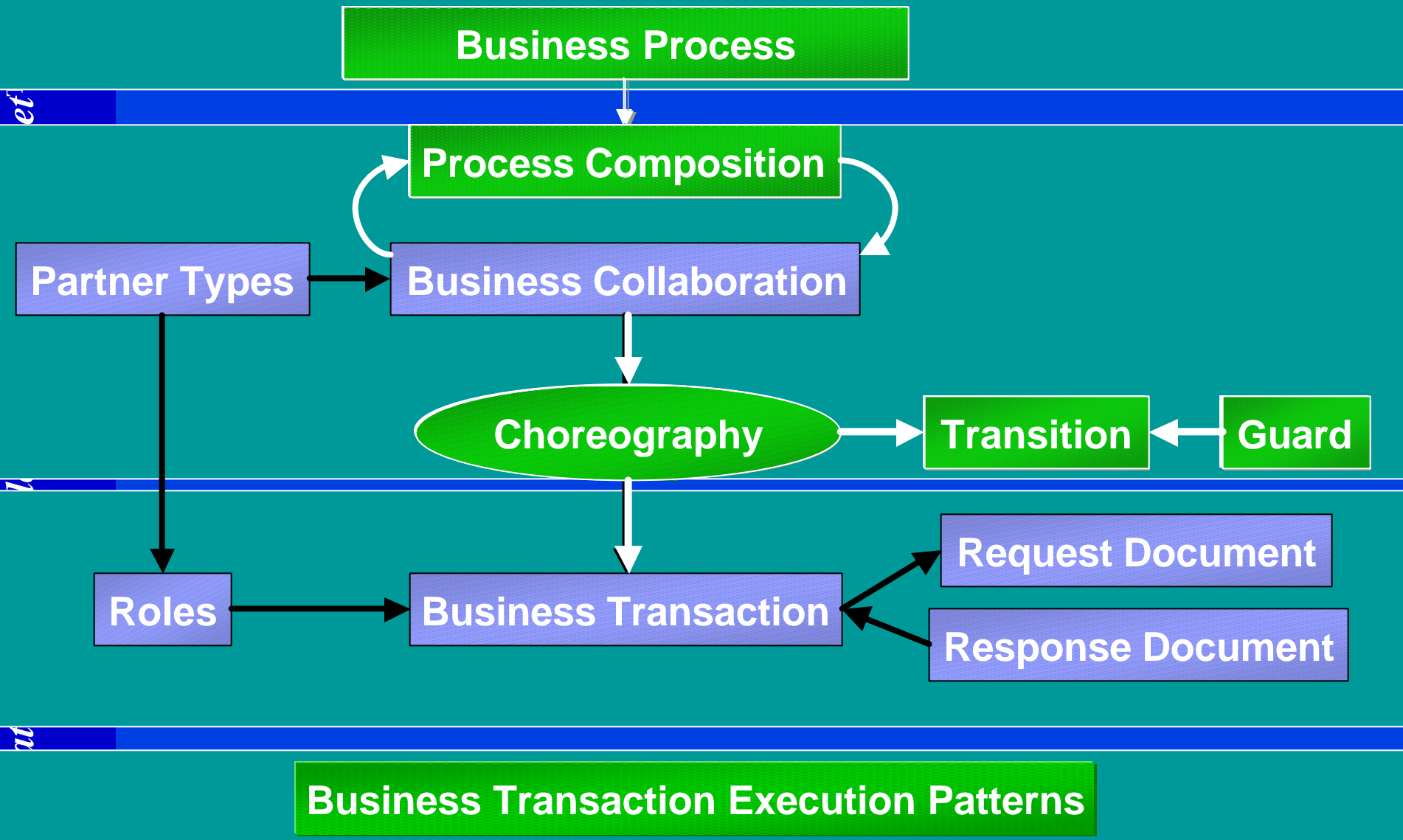
Business Process

- Business Process Specification Schema
- Business Process and Business Information Analysis Overview
- Business Process Analysis Worksheets & Guidelines
- E-Commerce and Simple Negotiation Patterns
- Catalog of Common Business Processes

Business Process: Conceptual Model



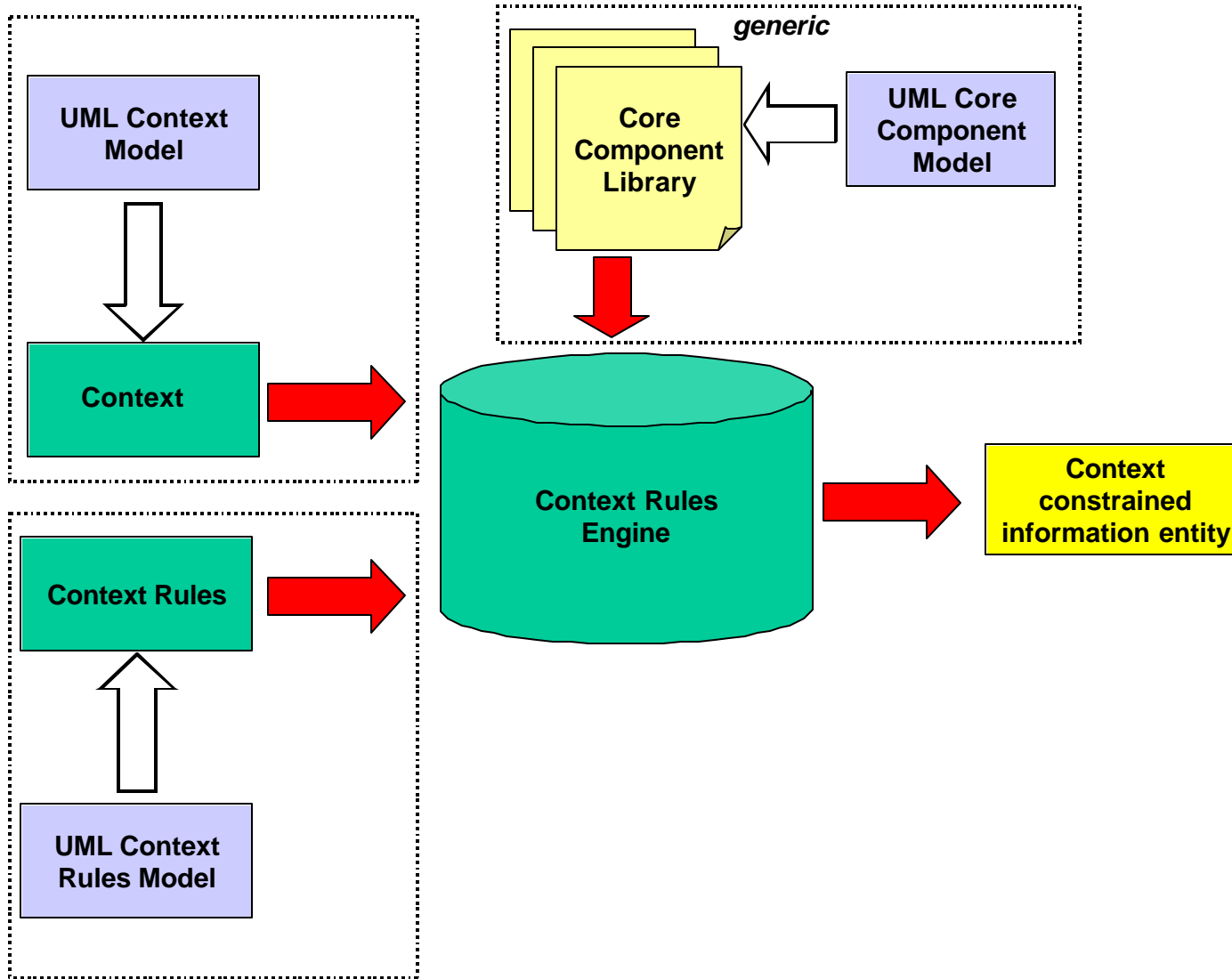
Overview: ebXML Specification Schema



Core Components

- The role of context in the reusability of CC & BP
- Methodology for discovery & analysis of CC
- Naming conventions for CC & BP
- Specification for the application of XML based assembly and context rules
- The Initial Catalog of Core Components
- Core Component and Business Process Document Overview

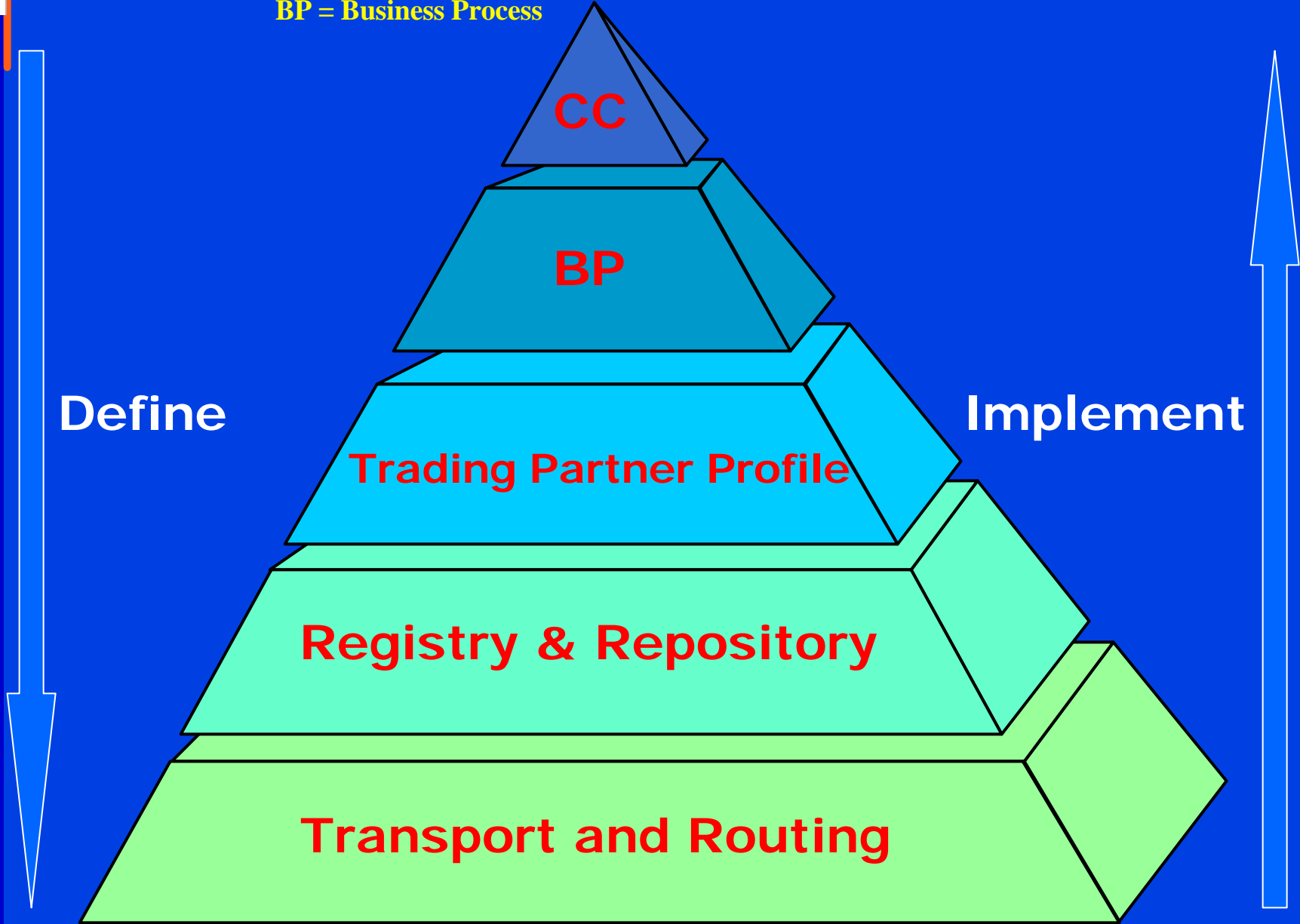
Overview of CC Scope



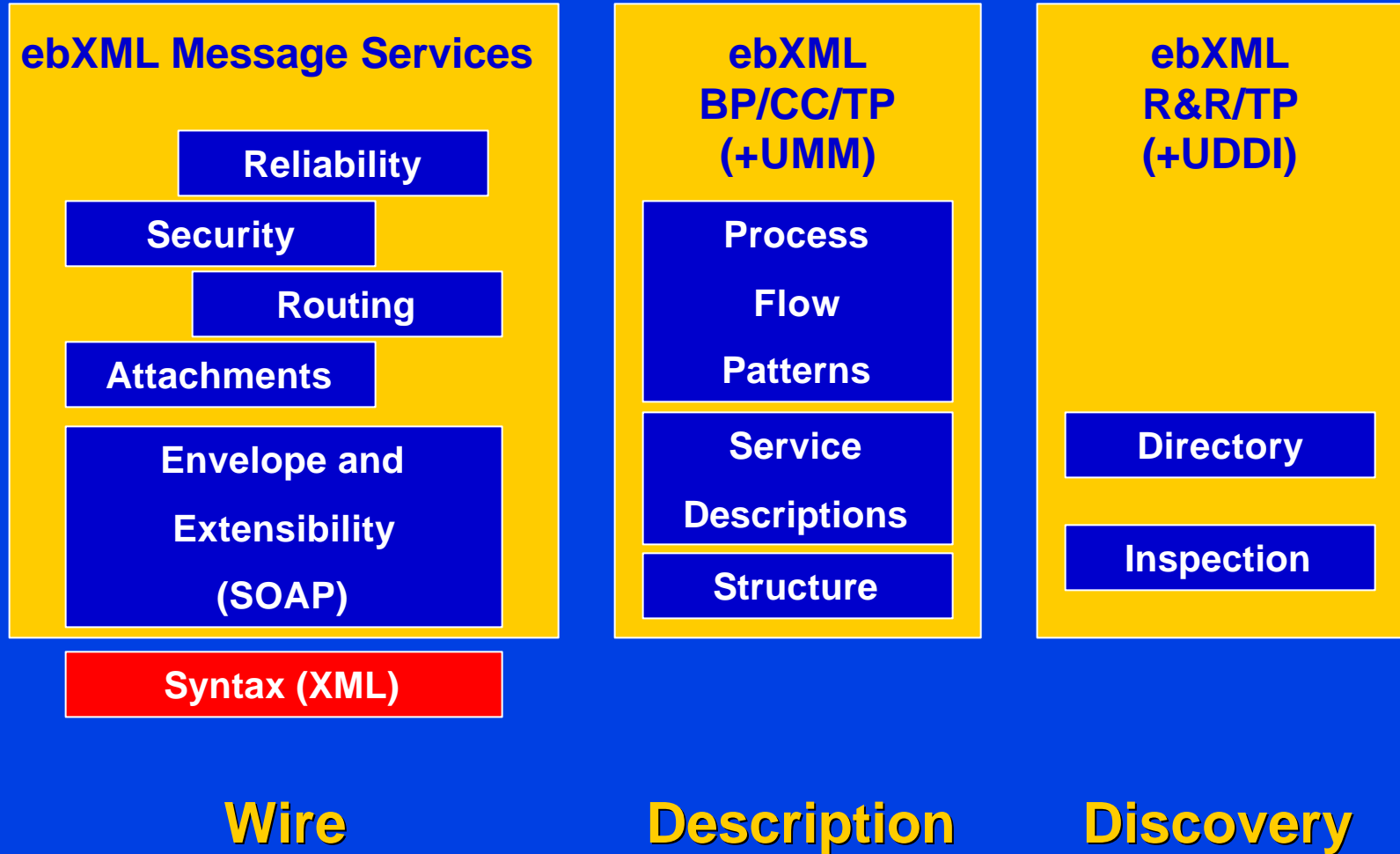
Other ebXML Deliverables

- ebXML Requirements Specification v1-0 (approved at the Brussels meeting 12 May 2000)
- ebXML Technical Architecture specification v1.04 (approved by the Vancouver plenary, 16 February 2001)
- ebXML Technical Architecture Risk Assessment
- Formal ebXML Presentation
- ebXML White Paper

CC = Core Components
BP = Business Process



Andrew's World aligned with ebXML





**For more information
<http://www.ebxml.org>**

Specifications are available at:

http://www.ebxml.org/specdrafts/approved_specs.htm

http://www.ebxml.org/specdrafts/Specs_for_review.htm