ECIMF Business Context
&
eBTWG Business Objects

Andrzej Bialecki
WebGiro, Chief System Architect
<abial@webgiro.com>

ECIMF meeting, Brussels 2002.02.19
ECIMF – eBTWG coordination

- Informal process (email discussions)
- Started from the common use of REA framework
  - Initial ECIMF adoption of REA and UMM
  - ebXML use of UMM Economic Elements (based on simplified REA)
ECIMF Business Context

- **ECIMF Interoperability Model**
  - Interop. of technical infrastructures
  - Interop. of business infrastructures

- **ECIMF Business Context**
  - Economic aspects, based on REA
    - **Resources**: what is traded
    - **Events**: when and how it happens
    - **Agents**: who is involved
    - Agreements & Commitments: legal aspects
  - Value-chain view of commerce
    - Chain of business processes
    - Flow of resources between processes

- **Important for interoperability**
  - Economic goals, business rules and legal obligations ultimately define the meaning and consequences of information exchange
ECIMF Business Context models

Customer’s view

- "Commitment" Shipment
  - "Agreement" ShippingContract
    - "Event" Shipment
      - "Agent" ShippingAgent
        - "Resource" Truck
      - "Agent" Customer
        - "Commitment" Payment
          - "Event" CashRcpt
            - "Agent" ShippingAgent
              - "Resource" Cash $1000
            - "Commitment" CashRcpt
              - "Event" CashRcpt
                - "Agent" Cashier
                  - "Resource" Cash
        - "Commitment" Payment
          - "Event" CashRcpt
            - "Agent" ShippingAgent
              - "Resource" Cash $1000
            - "Commitment" Payment
              - "Event" CashRcpt
                - "Agent" Cashier
                  - "Resource" Cash

Shipping Agent’s view

- "Commitment" Shipment
  - "Event" Shipment
    - "Agent" ShippingAgent
      - "Resource" Truck
  - "Resource" Shipment
    - "Commitment" Payment
      - "Event" CashRcpt
        - "Agent" ShippingAgent
          - "Resource" Cash $1000
      - "Commitment" Payment
        - "Event" CashRcpt
          - "Agent" Cashier
            - "Resource" Cash

Example taken from ECIMF-POC

These two models match* - “let’s have a deal!”

*see ECIMF-GM for definition of matching
Business Context & Business Processes

- Business Context determines the business-related constraints, e.g.:
  - certain timeouts
  - rollback or compensation for failed transactions
  - relationships between several business processes
  - etc.

- These constraints cannot (easily/at all) be explained at the technical level
eBTWG: BOTL and BCP/MC work

- e-Business Transitionary Working Group
  - Continuation of ebXML (excluding TRP)
- Business Information Object Types team
- Business Collaboration Patterns and Monitored Commitments team
CC, BIE, ABIE, BOT...

- BOTs consist of:
  - context-modified CCs
  - business semantics
  - state model (and current state)
BOTS, Commitments & Collaborations

BusinessCommitmentPattern
Specifies the reciprocal business commitments

BusinessCollaborationPattern
Specifies the orchestration of business partner actions

BusinessObjectTypes
Specifies the computation of named business states

BusinessProcesses
Specifies the interactions between business partners

- Uses states to define success and failure
- Uses states to define transition conditions
- Uses process to define interactions
- Uses states to define transaction success and failure
- Uses collaboration to describe commitment execution

Commitments, collaborations and processes use BOTs:
- BOTs help to represent the state of all BIEs processed by each partner, in the appropriate business context
ECIMF Business Context with BOTs

Enhanced definition of Business Context:

Business Context is a collection of:

- Agreements / Contracts containing Commitments
- Collaboration Patterns (using Business Processes) to execute commitments
- Business Objects with their semantics, lifecycle and state, which encapsulate business data and business rules

Advantages over the old definition:

- Better defined relationship of Business Context to Processes and Semantics layers in the ECIMF model
- Reflects work of the leading e-commerce standardization initiative
- Provides clearer implementation guidelines
- May lead to reducing complexity of the Process Mediation step
BOTs and Process Mediation

- BOTs explain requirements for specific business data
- BOTs allow to follow the state of collaboration
- BOTs explain how to adjust missing/superfluous data between partners, to cause desired state changes
- New Business Context + BOTs provides better indications how to implement process mediators
Summary

- ECIMF Business Context concept ties together eBTWG CCs, BOTs, Collaborations and Commitments - useful for eBTWG
- eBTWG work expands greatly the scope of ECIMF, and explains the crucial connection to the technical layers - useful for ECIMF
- The informal cooperation should continue
  - Limited by available “free”, voluntary resources…
  - What about the formal cooperation?
Further information

- ECIMF Project Information Center
  - http://www.ecimf.org
- UN/CEFACT eBTWG
  - http://www.ebtwg.org