Enterprise COllaboration & INteroperability

COIN Workshop: *COIN EI / EC Services for Collaborative networks in the Enlarged European Union*

COIN EI / EC Services in the EEU from requirements to first adoption
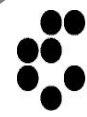
Aachen, June 22nd 2010
Sergio Gusmeroli
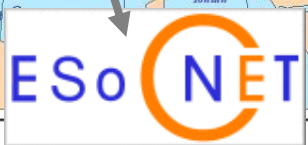**TXT e-solutions SPA, COIN Technical Coordinator**

Project participants

University of Kaunas

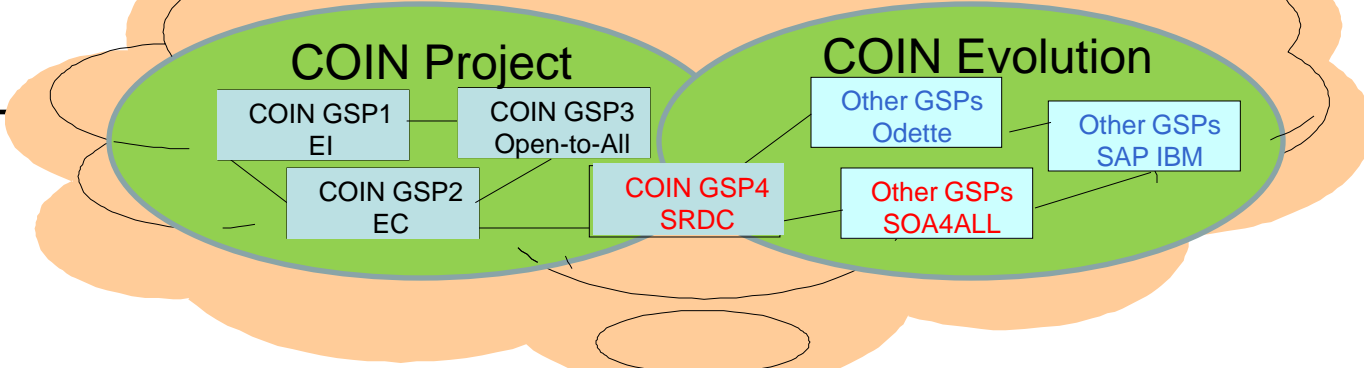WIRELESSINFO

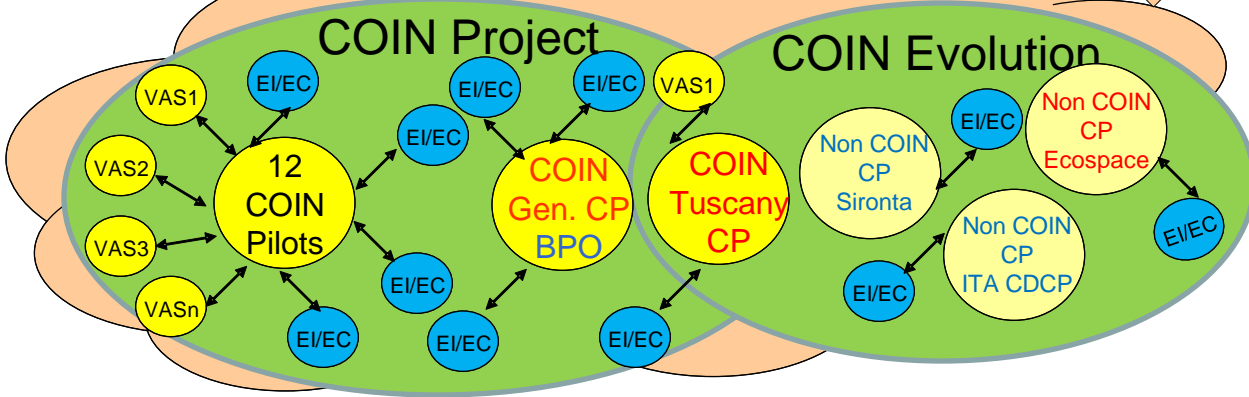Jožef Stefan Institute, Ljubljana, Slovenia

favit
Stream & Share!

LODER
Lojistik Derneği

University of Cyprus

TXT e-solutions

ESoCNET

Produced by the Cartographic Research Lab
University of Alabama

COIN SP7 Technical relevance

- **In the Lower cloud**
  - ➢ Additional test cases for COIN architecture, CP and services
  - ➢ New business scenarios, new sectors, new application domains
  - ➢ New countries, new cultures, new languages
  - ➢ Different maturity levels, different technology awareness-adoption
  - ➢ Requirements for adaptation of existing EI/EC services and for new EI /EC service developments

- **In the Upper cloud**
  - ➢ Services Development & Adaptation (e.g. language, character set)
  - ➢ Registration of the new services in the GSP federation
  - ➢ At disposal of the original 6 COIN pilots and for additional networked enterprises

COIN SP7 Use Cases

Pilot/ Topic	Sector Domain	COIN Platforms	COIN Services	New Services
UPB, RM	Civil Construction	Yes	WP4.2-4-5 WP5.3	C-PD C-HI MS Project
UCY, CY	Marine Shipping	Yes	WP4.1-5 WP5.2	UBL i/op DA-DESK
FAVIT, BG	Media & Content	Own CMS FAVIT	WP4.5 WP5.2	Cyrillic, Ont FAVIT-CP
Loder, TK	Transport & Logistics	Yes	WP4.4 WP5.1-2	UBL Turkish axapta lams
KTU, LT	Discrete Manufact.	Yes	WP4.1-3 WP5.2	UBL i/op centas rivile
Wireless info, CZ	Agriculture & Food	Own DSS Pre-Farm	WP4.2-5 WP5.1	Ontology Geospatial

Enterprise COllaboration & INteroperability COIN (SP7)

TURKISH LOGISTICS ASSOCIATION

Big Potential:
Logistics Sector in Turkey

❑ Total Logistics Sector Business Volume in Turkey is € 70 Billion and Total Logistics & Transportation Companies Business Value is € 40 Billion.

❑ According to the Gross Domestic Product values in 2009, transport, storage and communication sub-sectors constitute 13% of total GDP value

Scenario

Sector: Chemical/Paint

Subject: "Collaborative Transportation of paints from paint manufacturer to its customers"

Case SME: Dinçer Lojistik

Selected Clients: Polisan and Kayalar

Objective: Increasing the customer services to the highest level by decreasing the logistics costs

Factors Effecting The Objective: vehicle occupancy, route optimization, delivery time, resource optimization, transportation damage rate, defective shipping rate

Business Specification:

-Dinçer Lojistik provides the transportation of paints for 225.000 Ton/Year where the total paint industry production value in Turkey is 800,000 Ton/Year.

Total Logistics Sector Business Volume in Turkey is € 70 Billion andTotal Logistics & Transportation Companies Business Value is € 40 Billion

- The total number of course is 28.695 per year where Dinçer Lojistik revenue is € 12.820.513 per year and total distance is 12.510.000 km/year

Collaborative Transportation of paints from paint manufacturer to its customers

DINÇER LOJISTIK is an SME, member of LODER.

Dinçer Lojistik

- Domestic a...
- Domestic a...
- Complete a...
- Fleet Transp...
- Storage serv...
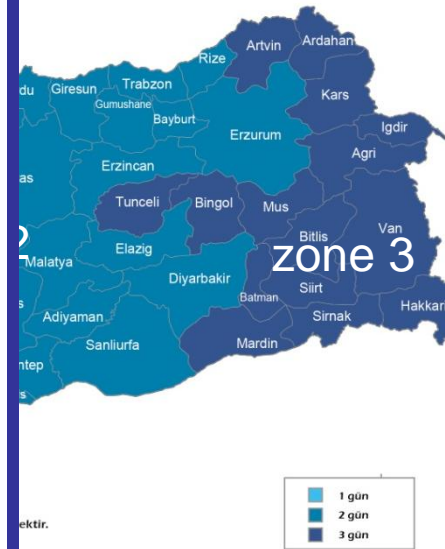- Round trans...

Services
Transportation and Logistics
Project Management
Storage and Distribution Services
Inventory Management
Domestic Distribution Service
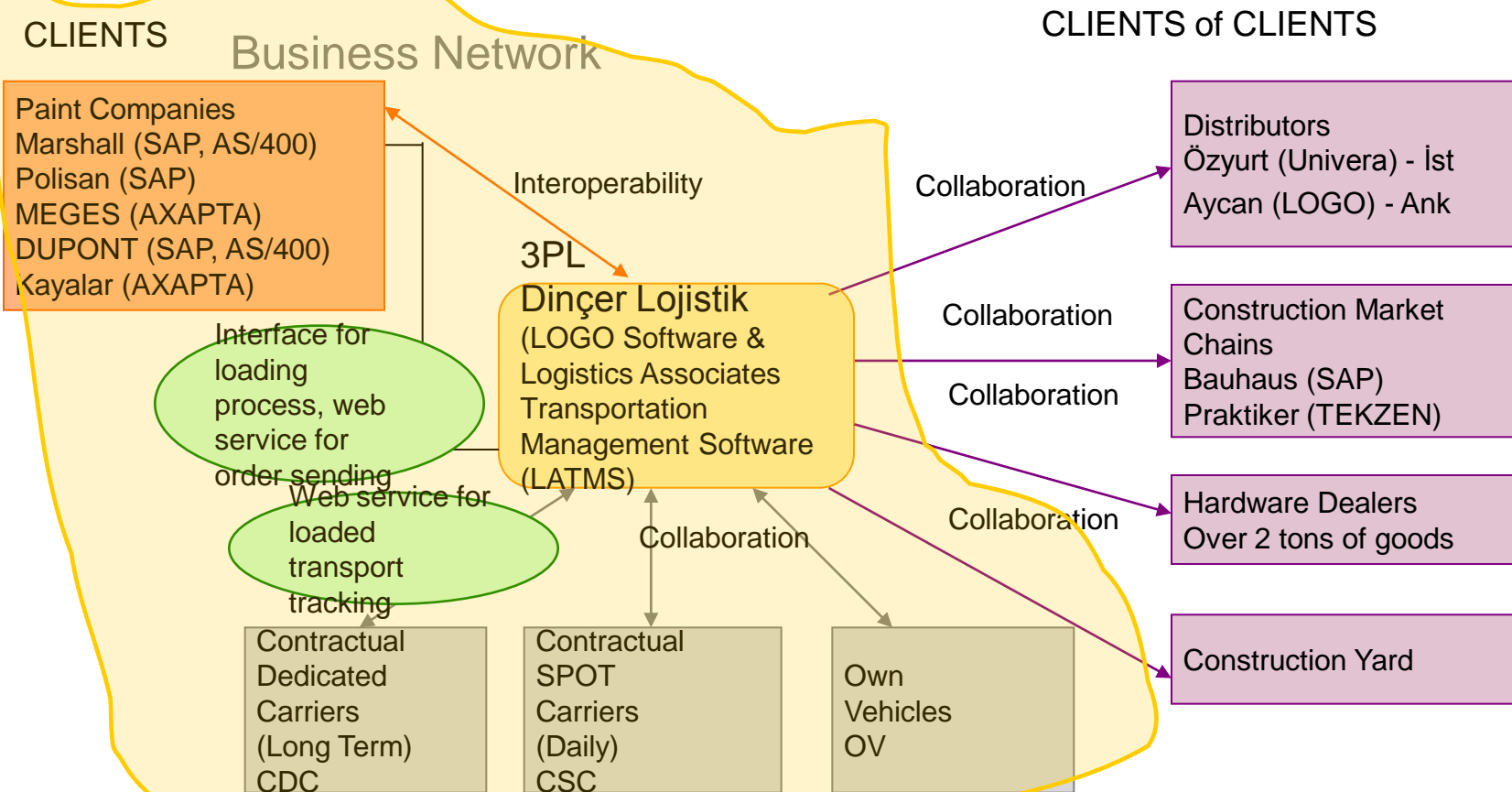Added Value Services

zone 3

Mainly in the Ch...

Dinçer Lojistik is located in İstanbul and provides logistics services in all over Turkey (3 zones: 1=1 day, 2=2 days, 3=3 days distribution zones)

Collaborative Transportation of paints from paint manufacturer to its customers
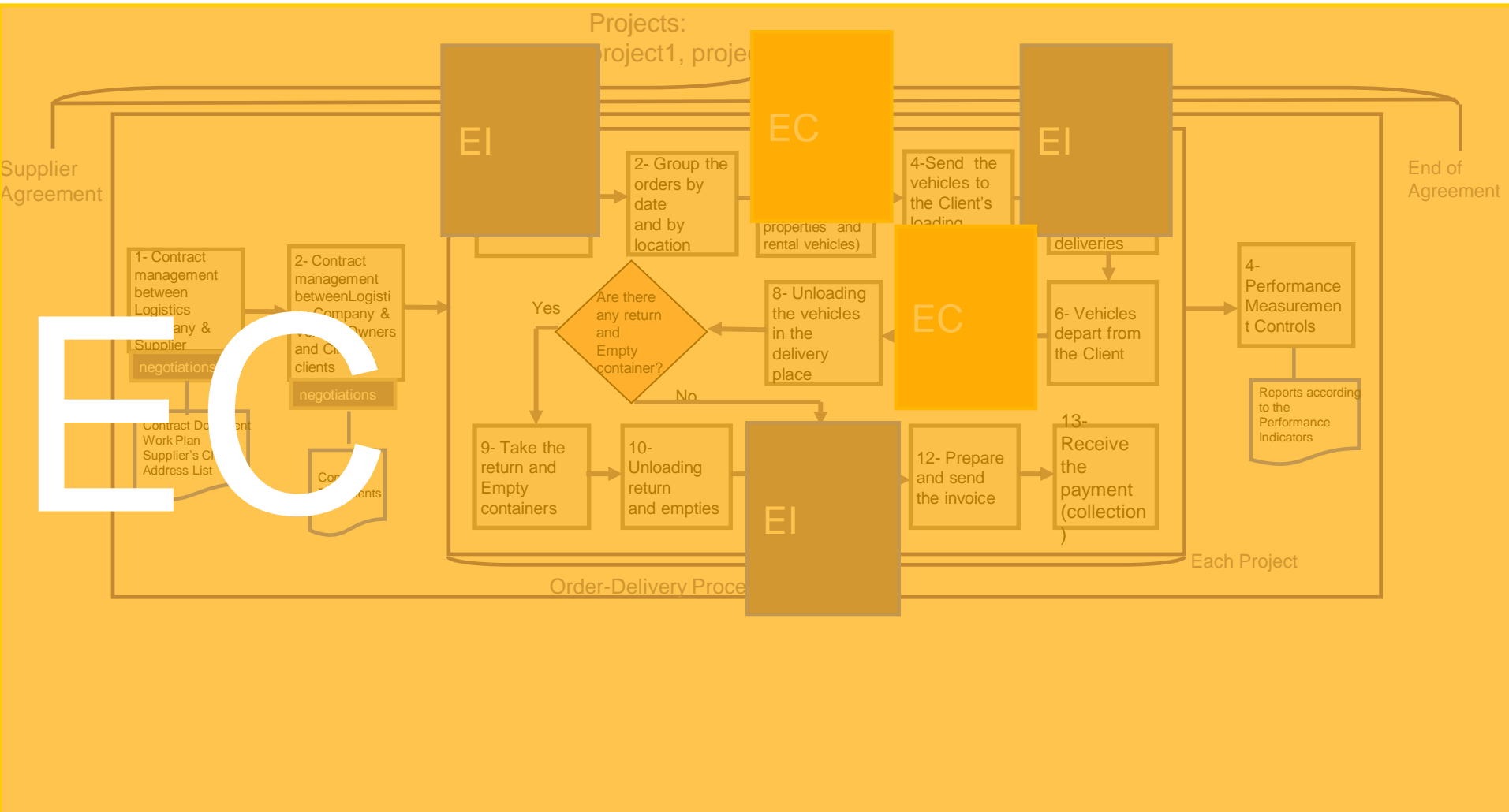
Dinçer Lojistik transports paints of the paint producers (Polisan and Kayalar) to the paint producers' clients: distributors, construction market chains, hardware dealers and construction yards by making agreements with carriers and plans the transportation service in collaboration with the clients of the client.

CLIENTS

Business Network

CLIENTS of CLIENTS

Paint Companies
Marshall (SAP, AS/400)
Polisan (SAP)
MEGES (AXAPTA)
DUPONT (SAP, AS/400)
Kayalar (AXAPTA)

Interoperability

3PL
Dinçer Lojistik
(LOGO Software & Logistics Associates Transportation Management Software (LATMS)

Interface for loading process, web service for order sending

Web service for loaded transport tracking

Collaboration

Collaboration

Collaboration

Collaboration

Collaboration

Collaboration

Distributors
Özyurt (Univera) - İst
Aycan (LOGO) - Ank

Construction Market Chains
Bauhaus (SAP)
Praktiker (TEKZEN)

Hardware Dealers
Over 2 tons of goods

Construction Yard

Contractual Dedicated Carriers (Long Term) CDC

Contractual SPOT Carriers (Daily) CSC

Own Vehicles OV

Domestic transport, packaged goods (IBS) and a process without storage

Projects:
project1, proje...

EI

EC

EC

EI

Supplier Agreement

End of Agreement

1- Contract management between Logistics Company & Supplier negotiations

2- Contract management betweenLogistics Company & Vehicle Owners and Client clients negotiations

2- Group the orders by date and by location

properties and rental vehicles)

4-Send the vehicles to the Client's loading

deliveries

4- Performance Measurement Controls

Contract Document Work Plan Supplier's Client Address List

Con...ents

Yes

Are there any return and Empty container?

8- Unloading the vehicles in the delivery place

6- Vehicles depart from the Client

Reports according to the Performance Indicators

No

9- Take the return and Empty containers

10- Unloading return and empties

EI

12- Prepare and send the invoice

13- Receive the payment (collection)

Each Project

Order-Delivery Proce...

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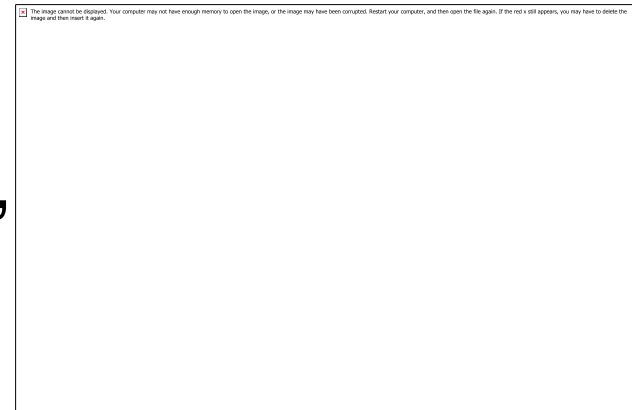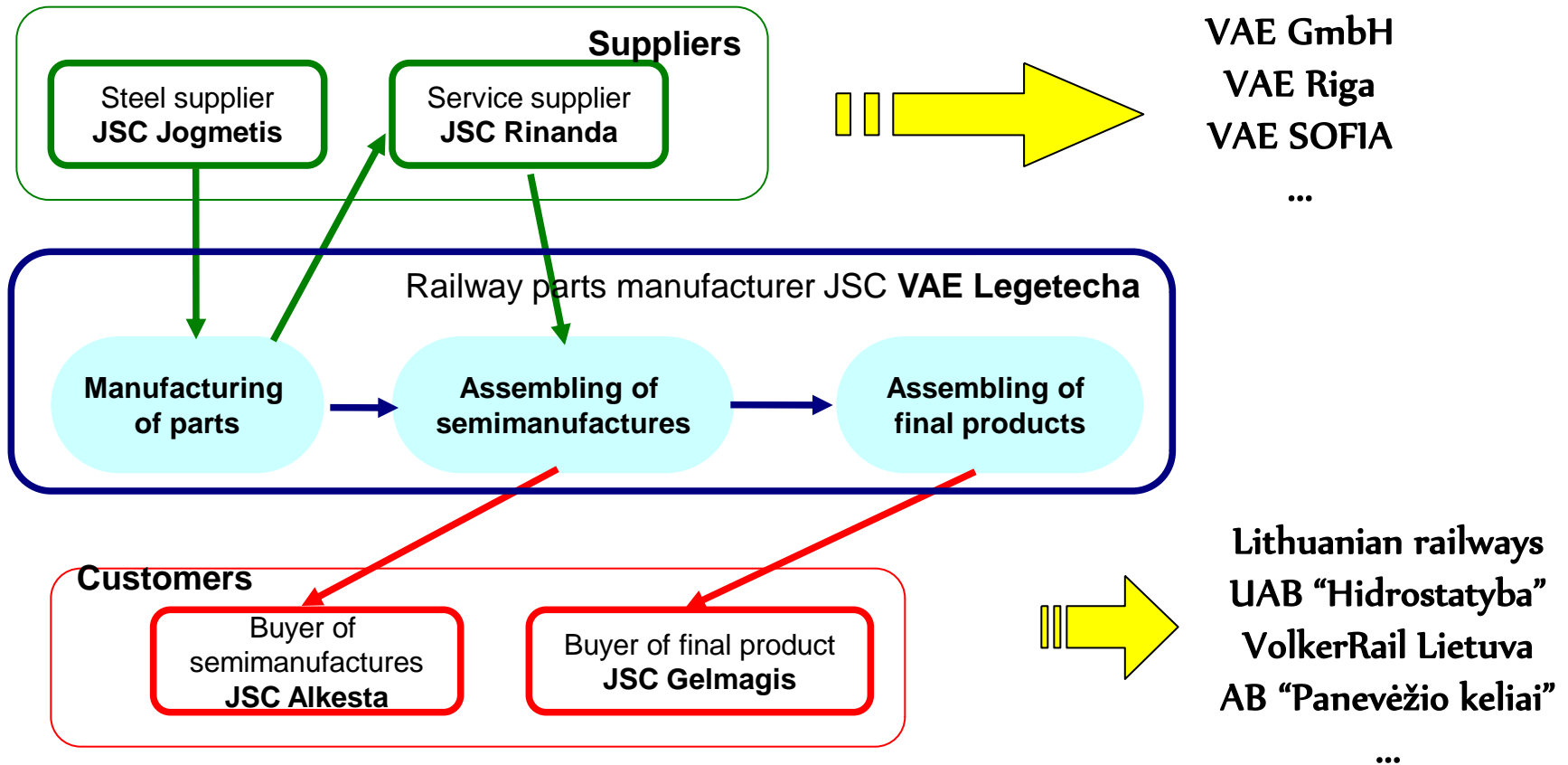

COIN SP7
Lithuanian Business Use Case

JSC "VAE Legetecha"

* VAE Legetecha was founded in 1995 as turnout producer

* VAE Legetecha supplies "Lithuanian railways" with fully assembled turnouts, switch blades, frogs, insulated rail joints and all enterprises of VAE Group with baseplates

* Today Enterprise is exporting its products to more than 10 countries: Latvia, Estonia, Austria, Spain, Italy, USA, Australia, Holland

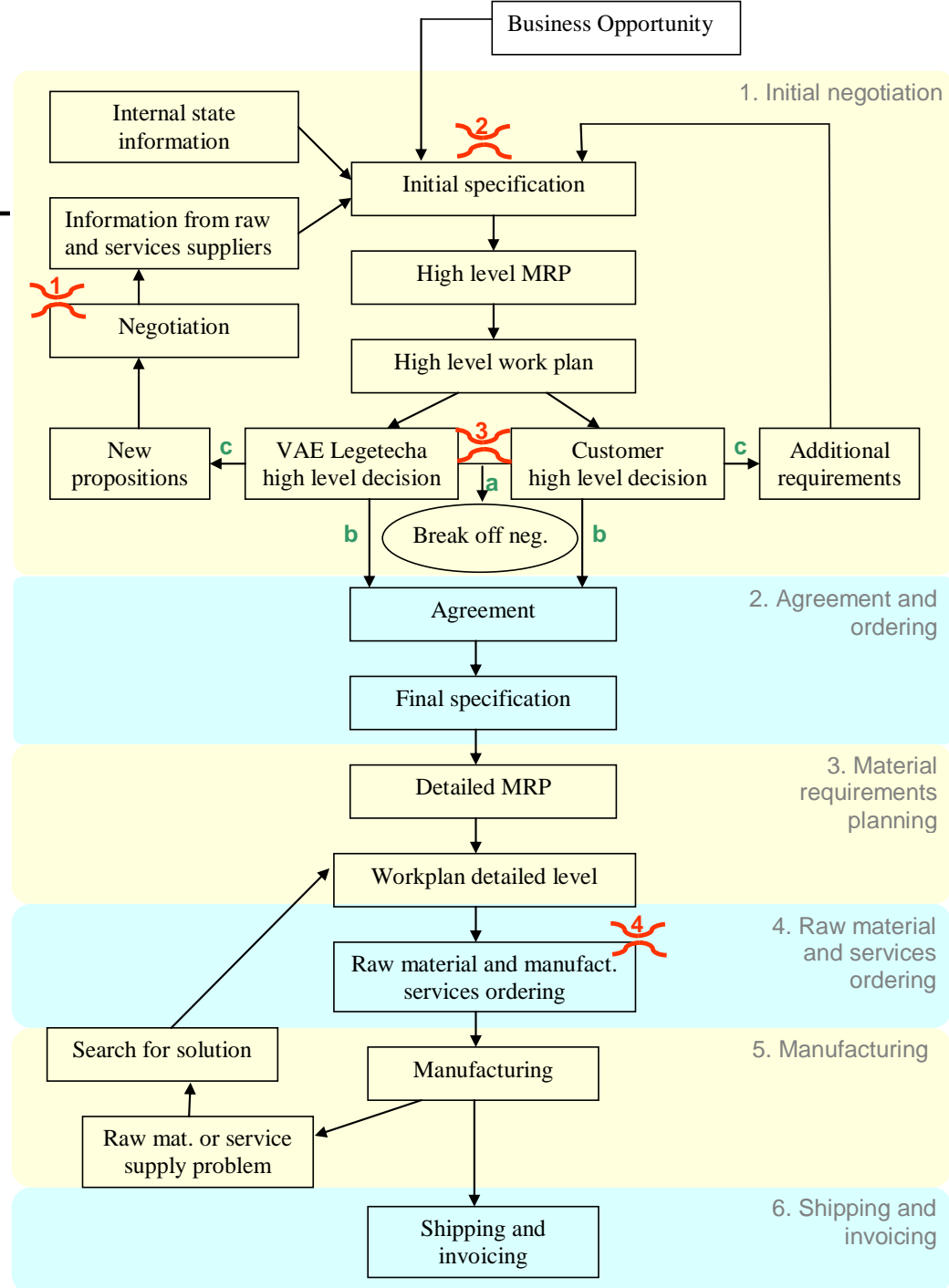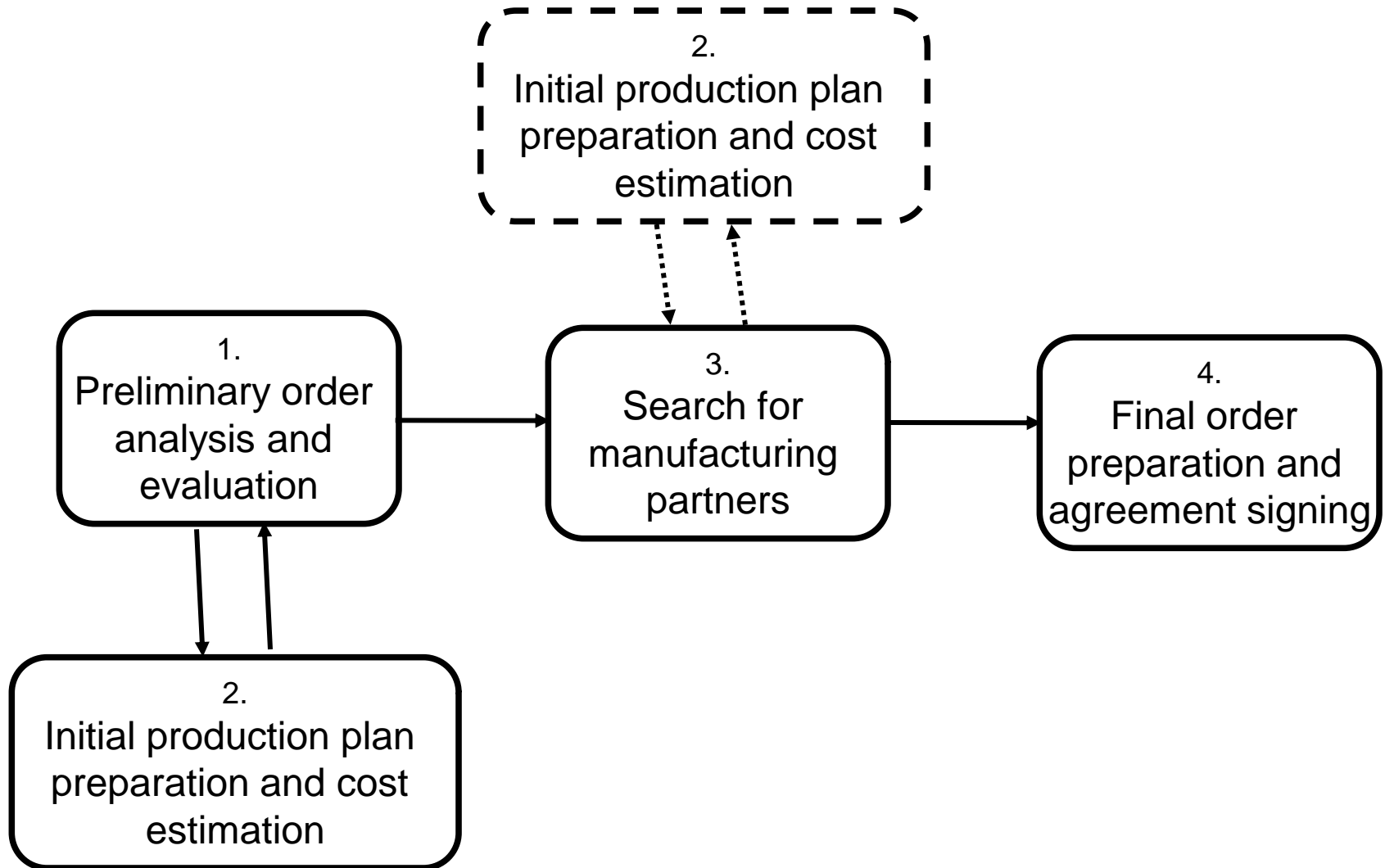# Example of relations with Legetecha's suppliers and customers

Bottle necks

1. VAE Legetecha's actions to find suitable suppliers
2. VAE Legetecha's and potential customer working groups' actions to prepare initial manufacturing specification and high level work plan
3. VAE Legetecha's and potential customer's consideration to make business agreement
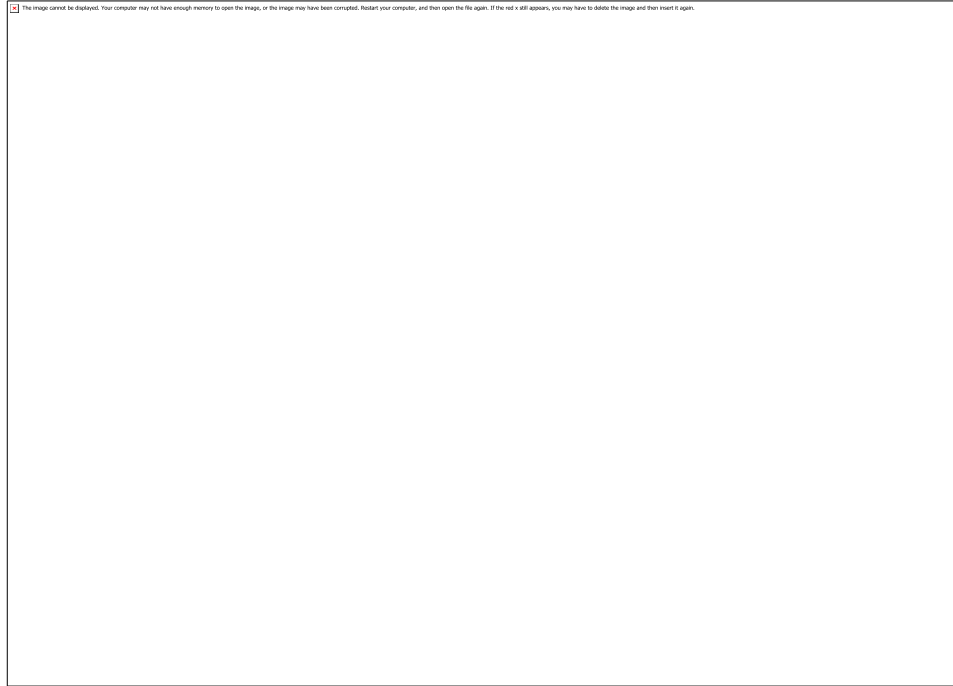4. VAE Legetecha's actions to negotiate with suppliers

Business use case overview

```
                    ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
                          2.
                    │  Initial production plan │
                       preparation and cost
                    │     estimation       │
                    └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```

| 1. Preliminary order analysis and evaluation | → | 3. Search for manufacturing partners | → | 4. Final order preparation and agreement signing |

2.
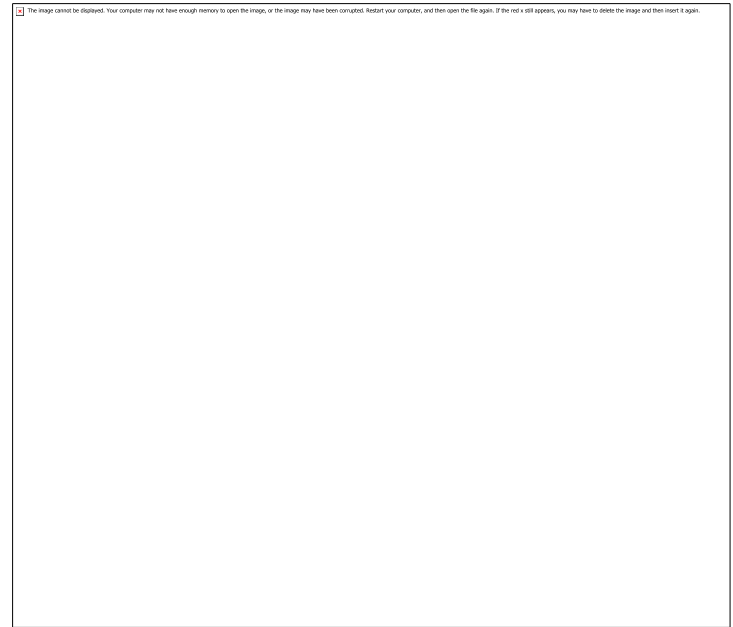Initial production plan preparation and cost estimation
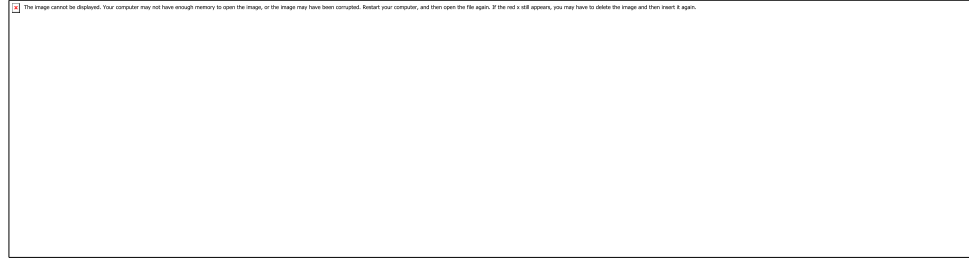
ERP system "IMI2005"

- Specialized cost accounting and planning system

- Client server architecture

- Hosted on local server

- Borland Interbase DBMS

- Full version available, realistic data available for testing

- JDBC, BDE, or ODBC interface

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ERP system "Centas"

- Commercial ERP system

- GUI + DB

- Hosted on local server

- Database: Paradox DB tables

- Demo version available, realistic data for testing

- BDE or ODBC interface

ERP system "Rivilė"

- Commercial ERP system

- GUI + DB

- Hosted on local server

- Database: standard FoxPro DBF files

- Demo version available, realistic data for testing

- Custom interface for import/export based on XML

Enterprise COllaboration & INteroperability

COIN (SP7)
University of Cyprus

Shipping sector in Cyprus

- Shipping is a hugely important sector in Cyprus and the wider region
  - The Cyprus Registry is classified as the 10th largest merchant fleet globally and the 3rd largest fleet in the European Union,
  - Contribution to the Cyprus economy is as high as 5.5% GDP (Gross Domestic Product),
  - European merchant fleet capacity was significantly increased upon Cyprus accession (++ ~20%).
- ~87% ship-owning/management companies in Cyprus are controlled by EU (including Cypriot) interests.
- ~4,500 persons are employed ashore and ~40,000 seafarers of different nationalities employed onboard vessels controlled/managed from Cyprus.
- Shipping industry hugely successful over last 20 years. Further growth expected with the continued introduction/development of modern infrastructure and ICT
  - A successful pilot of COIN services will contribute to this success

Introduction to use case scenario

- The selected use case scenario describes the process of accomplishing a shipping voyage.

- Donnelly Tanker Management (DTM) is the responsible party for the overall organization of a successful voyage and has to ensure communication between all involved parties are well maintained and correct communications channels are followed.

- The process for voyage establishment includes direct communication between DTM and the other parties and or the monitoring of the communication between the parties in order to receive the acknowledgment and to continue to the next step of the process until the voyage is completed.

- Actors:
  - DTM, United Product Tankers (UPT), charterers, brokers, load port agents, discharge port agents and United Fuel Services (UFS).
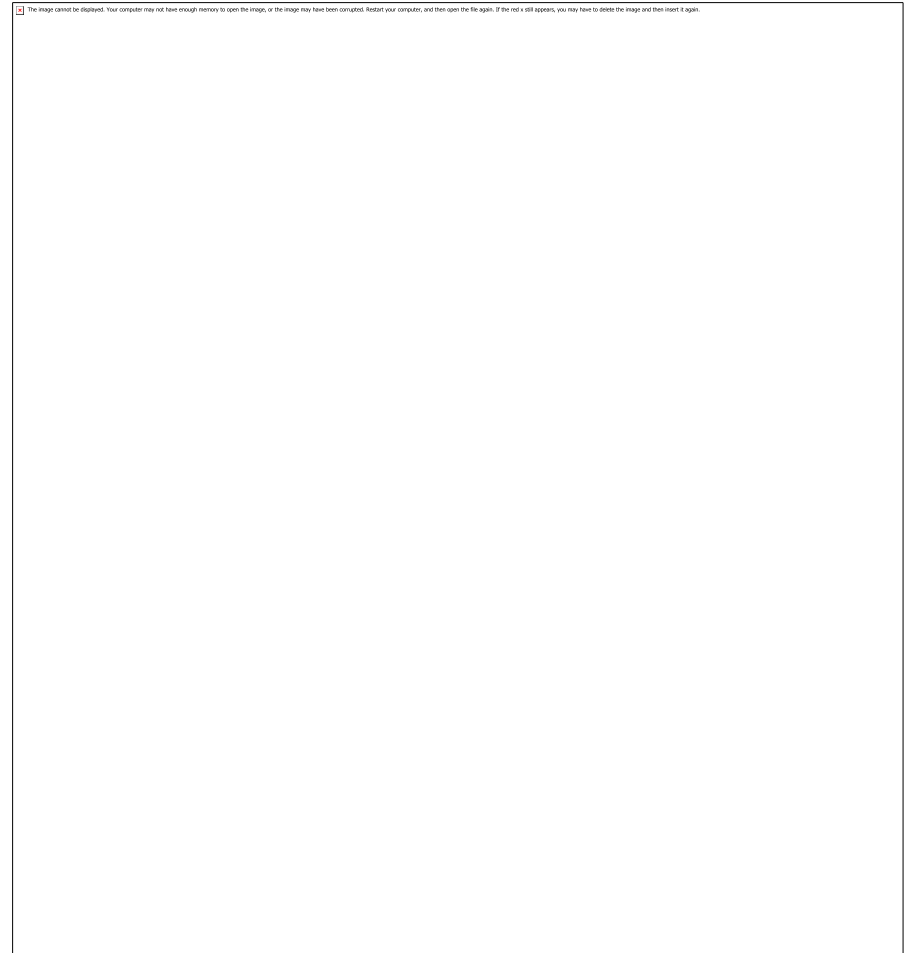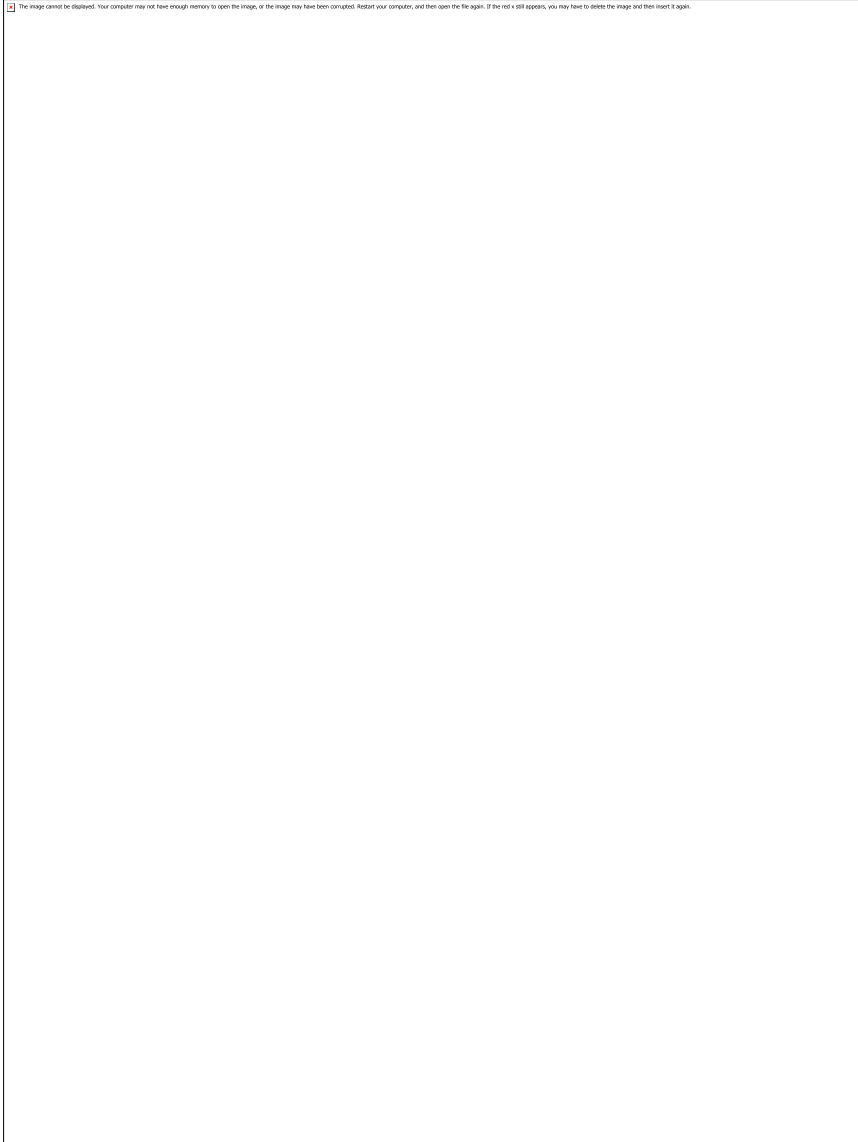
Introduction to use case scenario

Process Maker Screen Shots

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Process Maker Screen Shots

- e.g., dynaform for voyage setup step in workflow in process maker

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