CENTRAL BİLGE AND TIR APPLICATIONS IN TURKEY

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SUMMARY DECLARATION

Discharge of Summary Declaration

Access to Tariff
Taxes, Duties, Documents, Messages

ProSel

Payment of taxes

CPT

Risk Analysis

SUMMARY DECLARATION
* SUMMARY DECLARATION
* WAREHOUSE MANAGEMENT

ProSel

Risk Analysis

Risk Analysis
TIR SYSTEM

SUMMARY DECLARATION

For Import
Summary Declaration is generated from TIR Vole2 data

For Export
Summary Declaration data is used when TIR Vole1 data entry

TIR CARNET

Transition document control

INTELLIGENCE AND BORDERGATES VEHICLE PURSUIT

Intelligence control for vehicles, drivers and transportation firms

Risk Analysis

Ministry of Transport
TIR-Current Situation (Distributed Architectures)

HEADQUARTER

TOOB
IRU

Custom Offices

Custom Offices
Current Situation - Disadvantages:

- Difficulty with collecting data at Headquarters because of distributed system
- Delay in transferring data to IRU
- Delay in releasing guarantee
Why Centralized Architecture?
Distributed ...

- Management problem
- Security problem
- Problem to reach information from distributed data
Main objectives behind the “centralisation” decision are to:

- Simplify the system management
- Lower the maintenance costs
- More efficient utilization of system and human resources
- Increase the quality of service with centralized control
- Improve the IT infrastructure
- Preparation for EU IT interconnectivity rules for integration with EU Institutions
Centralized

Web Browser or Smart Client Application

Backup

Application Deployment

Application Upgrade

Reporting

Branch 1

Application Server

Database Server

Branch 2

Branch 3
Centralized Architecture

Seems to be advantageous;

• Centralized server is down, everybody is down
• Increase in number of users (internal and external)
• Increase in quantity of data results in difficulty in management and performance
• What about disaster? What is the definition of the disaster?
Database Management System Strategy

- Database Migration
- Database Clustering
- Partitioning
- Database Security
- Database Backup and Recovery
- Database Disaster Recovery

Database Centralization Strategy

- Data Consolidation
- Data Verification and Validation
- Database Design Changes
- Data Modeling
Scaleable

Server 1

Database

Oracle 11g

Server 2

Oracle 11g

RAC
Oracle Partitioning

Declaration Form Table

Jan08  Feb08  Mar06  Apr08  Dec08
Disaster Recovery

Primary Site

Transaction Send (Real Time)
No Delay

Standby Site

Application Center

Disaster Center

Real Time Reporting
Defined Standards

- User Interface Standards
- Database Standards
- System Architecture Standards
Software Architecture Strategy

- SOA Approach
- Functional Architecture
- Layered Architecture
Functional Architecture

User Interface Tier
- External Users (Traders, etc.)
- TCA Headquarters Clients
- Customs Sites
- Other Organizations

Application Tier
- TCA Common Libraries
- TCA Application Portal Interface
- Summary Declaration
- Detailed Declaration
- Reference Data
- Tariff
- Binding Tariff
- Access Rights & Privileges
- Risk Analysis

Database Tier
- Oracle Data Warehouse Server
- Storage Area Network
- BILGE Operational DB
- Test Database
- Oracle Central Database Server (Real Application Cluster)
- Other Databases
Layered Architecture

- Presentation
- Presentation Logic
- Application (Business) Logic
- Data Access Logic
- Integration Logic
- Data and Resource Management
Framework

- Microsoft Visual Studio 2008
- C# Language
- WCF 3.5 - Windows Communication Foundation
- Smart Client - Click Once Application
- Web Application
- Local Cache Mechanism
- Compression
OTHER SOFTWARE INTEGRATED INTO CENTRALIZED BİLGE

CONTAINER CONTROL

GÜVAS

BINDING TARIFF

USERS CONTROL

TIR CARNET

VEHİCLE TRACKING

RISK ANALYSIS

GÜMSİS
Deployment

- November 2009 two small range Custom Office started as pilot
- February 2010 a middle range and a small range Custom Offices is started
- March - April 2010 three small range Custom Office will be implement
- End of 2010 all Custom Offices will be implemented
After the deployment of central applications
We have planned to

• On-line integration with IRU
• Query on validity of carnet
• On-line TIR Volet 2 data transfer after inspection
e-TIR Integration:

• Turkish Customs is ready for e-TIR system because of central TIR application is started to operate

• Ready for e-TIR messaging system because of current declaration system is using XML web services with e-signature

• Able to integrate when e-TIR system is realized
DEVELOPMENT OF NEW COMPUTERIZED TRANSIT SYSTEM (NCTS) AND INTEGRATION TO BİLGE
### Project Objectives

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<td><strong>General</strong></td>
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<td>Proper protection of the future external borders of the EU through a modernized Turkish Customs Administration (TCA) to ensure that it is in a position to fulfill the tasks and obligations of an EU Member States Customs Administration.</td>
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<td><strong>Specific</strong></td>
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<td>EU compatible Customs IT systems (NCTS applications) installed and fully operational at the end of the project and in line with the EU requirements in terms of interconnectivity and interoperability.</td>
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Main Achievements

- **Project Iteration I**
  - Vision documents
  - Analysis and design documents
  - Software Prototype fully functional *07 Jul 2009*

- **Project Iteration II**
  - Analysis and design documents
  - Software Beta version installed and tested *11 Nov 2009*

- **Project Iteration III**
  - Analysis and design documents
  - Software version 1.0 installed and under tests *8 Jan 2010*
  - Integration of the software with BİLGE user authorization management module is performed.
  - Integration of the software with the Ministry of Transport is performed.
    - *Integration with BİLGE under tests*
    - *User Manuals for version 1.0 under development*
    - *Workshop together with twining team for NCTS users*
  - Project is in schedule (time, costs, resources, deliverables) **82%**
  - Activities for first 4 Quarters accomplished.
THANK YOU