## **Standard Summary Project Fiche for the Transition Facility**

1. Basic Information

CRIS Number: 2004/016-925/02-04

1.1 Title: Development of the Lithuanian Customs Data Warehouse

1.2 Sector:

1.3 Location: Lithuania

### 2. Objectives

## 2.1 Overall Objective

This 0.885 MEUR value project is addressed to the improvement of the Lithuanian Customs cooperation with other Governmental Institutions based on the high quality of Customs Data and increase effectiveness of Lithuanian Customs Administration.

### 2.2 Project purpose

The purpose of this institution building project is to ensure analytical possibilities, access to necessary Customs data and secure exchange of it by implementing Customs Data Warehouse.

The main tasks of the project is to improve Customs data quality, variety, fullness and enlarge it's accessibility for legal and secure exchange with internal and external users by implementing Data Warehouse.

#### 2.3 Justification

Lithuania is generally meeting the commitments and requirements arising from accession negotiations in Customs Union chapter and is on track in its preparations for membership in the Customs Union field.

The monitoring Report (Chapter 25) indicates that "Attention must be paid to the interconnection of the national systems with the EC customs information technology systems and the implementation of infrastructure investments at border posts; the reduction of staff turn-over in order to stabilise IT services; the inter-agency co-operation; the enforcement of existing provisions on fraud, intellectual property rights and anti-corruption; and to the necessary steps to prepare for the application of measures and provisions that will be introduced only at the time of accession".

Regular Report says although Lithuania's customs improved administrative capacity through intensive training of staff and the purchase of new computers, further efforts are needed in administrative and enforcement capacity as well as in training on IT systems for staff. An increase in IT staff should require to meet the demands of the interconnectivity projects foreseen over the next two years.

The National Programme for the Adoption of the **Acquis** (NPAA) 2002-2003 identifies the following medium term priorities for Customs computerisation in the Internal Market sector:

3.25-S6 Strengthen Customs Information Systems Centre:

develop information infrastructure;

develop a common computer and communications network;

develop Customs Information System (CIS);

### 3. Description

### 3.1 Background and justification

Lithuanian Customs have to fulfil the requirements raised by the European Commission in the Customs Union field. One of the main tasks is to implement a modern integrated Customs Information System (CIS), based on the newest technologies, which would interoperate reliably with the EU customs IT systems.

This is an administrative capacity strengthening project, and technical assistance is required to improve IT personnel qualification seeking to ensure interoperability of Lithuanian Customs information systems with EU IT systems.

As all decisions that have to be made are based on the disposable information and data, the pressure is on to provide faster, higher quality information to everincreasing numbers of users, analysts and decision makers. Everyone wants the ability to reach information they can trust, when they need it, for effective decision-making. The Lithuanian Customs Administration has customs Data Warehouse, which is built on the SAS technology and is being currently used. This current Data Warehouse is not longer meeting the enhanced requirements of users and therefore needs further development. Lithuanian Customs Administration also is taking part in the Danish-Lithuanian technical assistance project "Inter-community Data Warehouse" ("Lithuanian III") which shall be used by these governmental institutions: State Tax Inspectorate, Social Insurance Fund, Statistics Department, Financial Crime Investigation Service, Ministry of Finance, Economical Analysis Department under the Lithuanian Government and Customs. The Customs Administration is required to gather and present customs data according to the common standards of this project. For this purpose there is an action foreseen in the 2004 Implementation plan of the Business Strategy of the Lithuanian Customs.

Comprehensive, accurate, consolidated high quality information and data and their analysis would help to administrate taxes more efficiently; to apply preventive measures in order to minimise fraud cases; to increase the quality of the examinations and to strengthen their control process; to simplify trade by flexible reaction to changing terms of the world market after Lithuania's accession into the EU; to secure the EU internal market against fraud and irregularities of the law; to provide the EU with the statistical information (including trade statistics); to formulate the strategy of the customs duties and trade on the basis of the economic forecast of the indicators.

Business objectives of the Lithuanian Customs Data Warehouse system are established by identification of business drivers: customs statistics, infringements, fraud, taxes, goods, trade statistics, supplementary check-ups, documents, procedures, requirements. Data volumes to be stored into the Data Warehouse are evaluated and equals to 750 gigabytes of different types of data; the estimated annual growth is no less than 100 gigabytes.

Improvement of the Lithuanian Customs Data quality, security and exchange by implementing a Customs Data Warehouse would help to extend and improve Lithuanian Customs' cooperation with other Governmental Institutions.

#### 3.2 Linked activities

The main projects funded by the Phare programmes are:

Funding of 1.4 MEUR has been received from the 1996 Phare National Programme for the introduction of the automated declaration processing system ASYCUDA. The funds were allocated to the Pilot phase of the project. In order to ensure continuous process of implementation of the Customs modernization programme, the 1998 funds are being utilized in the project's Roll Out phase.

1998 Phare allocation of 0.996 MEUR has been allocated to the project within which training in Oracle and SAS software was provided as one of the results among others

1999 Phare allocation of 1.5 MEUR has been used to design, develop and construct a computerised version of the Customs Master Tariff Register (CMTR), which will be used to process amendment data from source information and subsequently update all other systems, including ASYCUDA, using tariff information as reference data.

2000 Phare allocation of 2.03 MEUR has beeng used for the project "Strengthening Customs' Procedures and Operations in the Lithuanian Customs Department and the Regional Customs Administrations". Training for customs officials in using SAS technology were provided.

2001 Phare allocation of 0.15 MEUR has been used for the preparation of the functional specifications of the following systems on the basis of undertaken analysis in the relevant area:

- Tariff Quotas and Surveillance (TQS);
- European Binding Tariff Information (EBTI);
- Specimen Management System (SMS);
- Information System for Processing Procedures (ISPP);
- European Customs Inventory of Chemical Substances (ECICS);
- Binding Origin Information (BOI);
- Tariff Suspensions;
- National Transit Control System incorporating the New Computerised Transit System (NCTS);
- Anti-Fraud Information System/Customs Information System (AFIS/CIS).

2002 Phare 4.75 MEUR funds have been dedicated for the implementation of the following EU systems:

- Planning, overall project and contract management, quality assurance for all projects and legal technical assistance for each functional area;
- New Computerised Transit System (NCTS);
- Integrated Tariff Management System (ITMS) excluding Lithuanian Tariff System (LITAR) including Tax calculation, Electronic Binding Tariff Information (EBTI), European Customs Inventory of Chemical Substances (ECICS), Tariff Quotas and Surveillance (TQS);
- National case management/intelligence systems, Anti-Fraud Information System (AFIS)/ Customs Information System (CIS).

2003 Phare programme funds of the 2.3 MEUR is allocated for the implementation of trader based risk assessment and control system. The creation of the Integrated Customs Information Systems is being carried out for several years and the most active actions were taken during the past three years (2001, 2002, 2003). A number of training events have been provided for IT personnel to be able to proceed with activities needed for the IT projects and systems maintenance. This was funded from the Lithuanian state budget.

A contract between the Customs Department and Hewlett-Packard Ltd (HP) was concluded in September 2001 in order to create an Integrated Customs Information System (funds used for the contract activities were allocated exceptionally from Lithuanian's state budget):

1. Integrated Data and Voice Network Design – implemented.

- 2. Transit Control System (NCTS based on the MCC software package) system is operational and implementation of this system in the customs posts is taking place.
- 3. Customs Declaration Processing System (based on the ASYCUDA++ software package).
- 4. Taxes Accounting and Control System under the development.
- 5. Enterprise IT Architecture:
- Integration Services Integration Services Analysis and Dataflow specification are prepared.
- Security Security Policy, Risk assessment, High-level design and Detailed design are prepared.
- Integrated CIS environment Blueprint Overview and Repository
   Enterprise IT Architecture are prepared. Repository of the Lithuanian Customs is under the development.
- IT Service Management Design of Incident & Problem Management Process is prepared. The IT Service Desk is operational.

One of the tasks dedicated to HP was to analyse the current situation, functional and technical needs and to produce Assessment Report on Data Warehouse. This task was successfully carried out.

### 3.3 Results

The developed Data Warehouse has to be able to perform the following tasks: a) automatically extract the data from the external data sources (transactional databases, registers, lists and other electronically handled files) according to the programmed schedule; b) fulfil data cleaning and transformation procedures before updating and load of data to the data warehouse; c) manage the user access to data authorisation rights, provide possibility to ensure data security at minimal data element level; d) rapidly modify data structures; e) have a set of sophisticated data analysis tools to support statistical analysis as well as ability to produce ad-hock queries and what-if analysis; f) support On-line Analytical Processing.

#### Deliverables:

- Review and analysis of existing data sources and structures performed;
- Functional and Technical Specifications for the Lithuanian Customs Data Warehouse (DW) are prepared;
- Data collected and gathered from various sources and different data formats, successful migration of this data to the Customs Data Warehouse developed;
- Design, development, implementation and testing of the Customs Data Warehouse system;
- Training for system administrators and users (min 20 persons 2 administrators, 3 programmers and 15 end users);
  - Data marts developed;
- Technical specifications for the hardware necessary to implement the Data Warehouse system prepared.
- Data Warehouse software licences, portal and other software needed for the Data Warehouse implementation are procured.
  - User manuals are prepared and delivered.
  - System administrators manuals are prepared and delivered.

#### 3.4 Activities

Within the global price service contract these activities shall be taken:

- Preparation of the Functional and Technical Specifications for the Lithuanian Customs Data Warehouse:
- Development of the technical and software means necessary for data gathering, extraction, transformation and migration (loading) to the Customs Data Warehouse:
  - Development of the Data quality and post entry control system;
  - Development of users authorisation and auditing system;
  - Implementation and testing of the Data Warehouse;
- Training for system administrators and users (min 20 persons 2 administrators, 3 programmers and 15 users);
  - Preparation and delivery of user manuals;
  - Preparation and delivery of the system administrators manuals;
- Development of the Data selectivity system necessary for the data submission for the external systems and external users;
  - Developing of Data marts;
- Preparation of technical specifications for the hardware necessary to implement the system;
- Preparation of legal acts necessary for the Customs data submission to the external users and Customs Data Warehouse system's legislation;
- Translation of legal acts, manuals and other documentation produced during the developing of Customs Data Warehouse System;

Procurement of the Data Warehouse software licences, portal and other software needed for the Data Warehouse implementation.

#### 3.5 Lessons learned:

- One of the most critical areas during the development of the Data Warehouse is data quality and that is why the main attention should be given to this issue.
- Defining of the all necessary and relevant data and information sources is a complex and a very important task of the development of any Data Warehouse.
- Interconnections/interfaces with the systems that are under development and legacy (already developed and systems that are still being used) systems shall be ensured
- Security issues for the exchange of the data/information with the external users shall be considered very carefully.

#### 4. Institutional Framework

The Project will be implemented within the Customs Department under the Ministry of Finance of the Republic of Lithuania, A. Jakšto str.1/25, LT-2600 Vilnius, Lithuania.

The organisational structure of the department is as follows: the Director General, four Deputy Directors General, the main divisions: Law and Enforcement; Customs Law Harmonisation; Analysis of Statistics; Strategic Planning and Development; Control and Surveillance; Tariff; Tax Administration; Customs Business Management; Economic Entities Control; Internal Audit; Personnel and Training. The overall Lithuanian Customs organisation includes the Customs Department as headquarters, 5 Regional Customs administrations, and 73 Customs posts, Customs Criminal Service; Customs Information Systems Centre, Customs

Training Centre and Customs Laboratory. The Customs Information Systems Centre will be responsible for this project.

The results of this project will be implemented in the Customs Information Systems Centre and applied for the overall Integrated Customs Information System (ICIS).

The project will be controlled by the Project Steering Committee chaired by Mr. Rimutis Klevečka, Director of the Customs Department.

Project Steering Committee meetings will be held according to an agreement between the Lithuanian Customs Administration and the Contractor, not less than once per quarter. The agenda for the meeting shall be prepared and agreed upon by both parties at least one week before each meeting. Representatives of the EU Delegation, NAC and CPMA will take part in the meetings as observers.

### Contact persons details:

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For project's content part: Tautvydas Banelis Deputy Director of the Customs Information Systems Centre (tel. +370 5 236 23 60, fax: +370 5 236 23 36 e-mail: t.banelis@cust.lt).

# 5. Detailed Budget (MEUR)

	Transition Facility	Support			
	Investment Support	Institution Building	Total TF(=I+IB)	National Cofinancing*	TOTAL
Service Contract		0.649	0.649	0.236	0.885
Total		0.649	0.649	0.236	0.885

<sup>\*</sup> *In cases of co-financing only* 

The co-financing funds shall be provided from the Lithuanian state budget. These funds are already foreseen for the years 2004 and 2005 in the 2004-2006 Investment project of the Customs Information System Development.

### **6.** Implementation Arrangements

### **6.1** Implementing Agency

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### **6.2** Non-standard aspects

The project will be implemented according EDIS rules.

#### 6.3 Contracts

It is foreseen to have one service contract for the development of the Lithuanian Customs Data warehouse. The maximum budget for this contract is 0.885 MEUR.

## 7. Implementation Schedule

Component	Start of Tendering	Start of Project Activity	<b>Project Completion</b>
Service contract	2004 IV Q	2005 III Q	2006 III Q

The period of the implementation of this contract is 15 months.

### 8. Sustainability

Analysis of Statistics division of the Customs Department will be the owner of the system.

Personnel from this division and staff from Statistics and data processing Division and Data Warehouse Division of the Customs Information Systems Centre shall be the key specialists during the implementation of this project together with the assistance of the personnel from other divisions of the Customs Information Systems Centre. Data Warehouse and Statistics and Data Processing Divisions in the Customs Information Systems Centre will continue to be responsible for the maintenance of Data Warehouse.

Funds for co-financing of the project are planned in the Customs Department 2004–2005 year budget. Maintenance costs will be covered from Customs Department running costs budget, which is annually planned for the maintenance of the Integrated Customs information System.

## 9. Conditionality and sequencing

The phases of the Data Warehouse development:

- Analysis of the end users information needs.
- Analysis of the data sources. Definition of the data structures. Data processing (restructuring and de-normalization if needed). Data loading.
- Data processing (structuring and normalization if needed). Development of the users authorisation and auditing system. Users training.
- Ensuring interconnection with On-line Transaction Processing system (OLTP) and ability to support On-line Analytical Processing.
  - Development of the Data marts.

# **LIST OF ANNEXES TO PROJECT FICHE**

- 1. Logical framework matrix in standard format
- 2. Detailed implementation chart
- 3. Contracting and disbursement schedule

# Annex 1

LOGFRAME PLANNING MATRIX FOR			
Project: Development of the Lithuanian Customs Data Warehouse		Total budget: 0.885 MEUR	Transition Facility budget: 0.649 MEUR
Overall objective	Objectively verifiable indicators	Sources of Verification	
Improvement of the Lithuanian Customs cooperation with other Governmental Institutions based on the high quality of Customs Data	<ul> <li>Simplified and secure electronic exchange of Customs Data with Governmental agencies and public sector</li> <li>Second level legislation;</li> <li>Instructions and procedures for Customs officers;</li> <li>Improved data quality (data filters; independence of data; operations, procedures of interconnections and compensation; data interpretation rules; data security means)</li> </ul>		
Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
To ensure analytical possibilities, access to necessary Customs data and secure exchange of it by implementing Customs Data Warehouse	Lithuanian Customs Data Warehouse is operational (end of 2006)	<ul> <li>Project documentation</li> <li>Steering Committee</li> <li>Reports</li> <li>Training Certificates</li> </ul>	Dedicated personnel available
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
<ul> <li>Review and analysis of existing data sources and structures performed</li> <li>Functional and Technical Specifications for the Lithuanian Customs Data Warehouse (DW) are prepared</li> <li>Data collected and gathered from various sources and different data formats, successful migration of this data to the Customs Data Warehouse developed;</li> <li>Data marts developed</li> <li>Design, development, implementation and testing of the Customs Data Warehouse system</li> <li>Training for system administrators and users (min 20 persons - 2 administrators, 3 programmers and 15 end users)</li> </ul>	<ul> <li>Lithuanian Customs Data</li> <li>Warehouse is developed</li> <li>Training Certificates</li> <li>Software licences and portal for Customs Data Warehouse are procured</li> </ul>	<ul> <li>Project documentation</li> <li>Steering Committee</li> <li>Reports</li> <li>Training Certificates</li> </ul>	Dedicated personnel available

LOGFRAME PLANNING MATRIX FOR			
Project: Development of the Lithuanian Customs Data Warehouse			
• Technical specifications for the hardware necessary to implement the Data			
Warehouse system prepared			
• Data Warehouse software licences, portal and other software needed for the			
Customs Data Warehouse implementation are procured			
User manuals are prepared and delivered			
System administrator manuals are prepared and delivered			
Activities	Means	Sources of Verification	Assumptions
• Preparation of the Functional and Technical Specifications for the Lithuanian	<ul> <li>Service contract</li> </ul>	• Steering Committee	<ul> <li>Dedicated</li> </ul>
Customs Data Warehouse		Reports	personnel available
• Development of the technical and software means necessary for data gathering,		Transition Facility	
extraction, transformation and migration (loading) to the Customs Data Warehouse		projects monitoring reports	
Development of the Data quality and post entry control system			
Development of users authorisation and auditing system			
Development of Data marts			
Implementation and testing of the Data Warehouse			
• Training for system administrators and users (min 20 persons – 2 administrators, 3			
programmers and 15 users)			
Preparation and delivery of the users manuals			
Preparation and delivery of the system administrators manuals			
• Development of the Data selectivity system necessary for the data submission to the			
external systems and external users			
• Preparation of legal acts necessary for the Customs data submission to external users and Customs Data Warehouse system's legislation			
Translation of the legal acts, manuals and other documentation produced during the			
development of Customs Data Warehouse system			
• Procurement of the Data Warehouse software licences, portal and other software			
needed for the Data Warehouse implementation			
• Preparation of technical specifications for the hardware necessary to implement the			
system			
			Preconditions
			National co-
			financing available

### Annex 2

# **Detailed Implementation Chart for the Project**

Year 2003					2004						2005									2006																					
Month	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3 4	1 5	6	7	8	9	10	11	12
Service Contract																																									



Annex 3 CUMULATIVE CONTRACTING AND DISBURSEMENT SCHEDULE (Transition Facility Contribution only – 0.649 €Million)

						Date								
		2004			20	05		2006						
	30/06	30/09	31/12	31/03	30/06	30/09	31/12	31/03	30/06	30/09	31/12			
Contracting														
Service Contract						0.649								
<b>Total contracting (cumulative)</b>						0.649								
Disbursement														
Service Contract						0.195	0.308	0.421	0.535	0.649				
Total disbursement (cumulative)						0.195	0.308	0.421	0.535	0.649				