



CUSTOMS COMPUTER-AIDED INFORMATION SYSTEM (CCIS): BACKGROUND, STATUS, PERSPECTIVES *

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INTRODUCTION

Since Kazakhstan gained sovereignty the President of our Republic N. A. Nazarbaev and the Government pay special attention to establishment of customs service, which is one of the main sources to replenish the republican budget.

Concurrently with establishment of the customs service we realized the necessity to computerize it. Information took one of the key places by 1996, when the general concept on customs service development was created. Despite the budget deficit an international tender for establishment of the CCIS was held in 1996. An agreement was signed for design and introduction of the CCIS with a group of companies-winners of the tender.

It should be noted at once, that the results of the tender fully confirmed the conclusion that computerization needs to be conducted separately, maximally using the experience of international community and intellectual potential of the republic, rather than redesigning and introduction of expensive western systems, which would be more costly and take longer time.

As on today CCIS takes meriting place among the information systems of ministries and departments of our republic.

Since 2001 the customs service has introduced and is using software covering all technological processes of customs clearance. For the purpose of a single information space of customs service since 1998 a powerful telecommunication network has been created and is developing based on the use of satellite, optical and radio communication means; this network unifies the Agency, customs departments, customs and all main customs posts. A unique experience has been accumulated in creation and practical exploitation of information systems, data base has been formed containing all major data on customs clearance during the second half of 1997 to present.

This database is unique and is needed only to customs agencies, but is actively used in the operational regime by government departments: National Security Committee, tax services and finance police etc. Besides, statistical data is regularly submitted to the Government of RK, Statistical Agency of RK, Ministry of Finance (*provided access to the database to receive on-line requests*), Ministry of Agriculture, Ministry of Justice, Ministry of Industry and Trade etc. We also plan to consider perspectives of expanding information exchange with other departments: Treasury Committee, Ministry of Internal Affairs, Ministry of Transport and Communication and others.

To compare: tax agencies, more advanced in information of their structures, were able to establish and use a single information base only in 2002.

BACKGROUND

Before telling the story of CCIS, a little history on why the Customs Computer-aided Information System was established.

CCIS - one of the main elements of customs administration is established under the general establishment, operation and development concept of the Republic of Kazakhstan.

The following measures are implemented under the CCIS:

1. submission of operational and reliable information to all levels of customs agencies to ensure maximal collection of customs payments to the republican budget;
2. regular forming and submission of customs statistics data on external trade to the Statistics Agency of RK. During 2003 it is necessary to solve the issue of submitting the external trade statistical data by customs agencies to the RK;

3. submission of reliable information for decision taking to the state government bodies;
4. establishment of information exchange with the customs services of the CIS – participants of single economic space and other states;
5. simplification and reduction of terms of customs clearance for citizens and legal entities of the Republic of Tajikistan by reducing the period of customs processing of shipment flows;
6. increase of efficiency, responsiveness and reliability of the information collected and used;
7. increase efficiency of control over implementation of the customs legislation of RK;
- 8.

Designing and introduction of the CCIS started in 1997 and continued until commissioning of the first line in July 2001.

During this period the following measures have been provided:

- establishment of database of customs declaration for the period 1997-2002, which allows to form external trade statistics (without which participation of the Kazakhstan in the World Customs Organization will not be possible), and special customs statistics for the state government bodies;
- control on delivery of goods through internal transit and on international convention of road transits;
- correct and full accrual of customs payments to the budget;
- effective information support in drug-trafficking and weapon-trafficking control;
- effective customs-bank foreign exchange control;
- a set of typical goods' customs clearance technologies;
- information support of customs agencies at all levels;
- telecommunication system, uniting all customs structures in one information space.

MAIN PART

Introduction and exploitation of the operating information system required investment of significant budget funds in its design, introduction and exploitation.

The set-technical platform of the CCIS comprises satellite stations, radio modems, computer and peripheral devices, servers, routers, local calculation networks.

The set-technical platform CCIS, reflecting the structure of ACC ATK, now represents multitude objects geographically distributed all over the republic, which provide about 1700 workplaces. All ACC servers work under the unique operational system UNIX, which fully complies with the requirements to an open system. Customs documents database function under the DBSM Informix.

There is a data exchange network based on the land satellite stations and radio bridges. At the customs objects (departments, customs, and posts) local computation networks, network integrated program products' subsystems have been introduced. Database of customs documents helping to conduct customs statistics, external trade operations' analysis, as well as submit necessary data to state government bodies, are formed and processed in a centralized way.

At present there are trained experts in the customs service such as technical staff (including network and database administrators, software programmers), as well as personnel using the software. It should be noted that issues of providing training have to be addressed constantly and kept under control.

Necessity to modernize the CCIS and introduce the second line is explained by the following reasons:

- constant changes in the customs legislation, as well as adoption of a new Customs Code;
- expanding information exchange with other state agencies in the republic and customs services of the countries-members of Eurasian EC;
- on February 23 presidents of Kazakhstan, Russia, Ukraine and Belarus have come to a principal agreement on forming of a single economic area. As a consequence, customs legislation and customs technologies were amended and a decision was taken on modernization of CCIS;
- emergence of new revolutionary information technologies;
- physical and moral depreciation of the CCIS set-technical platform. It is enough to say that the major part of computers and servers were commissioned in 1997-1998 and became overage morally obsolete.

But standard modernization and introduction of new software will not be sufficient at this stage of development. It is necessary to modernize and replace technical devices of the lower level of subsystems used by customs posts, as well as of the higher level systems, first of all analysis and statistics.

Some steps have already been taken in this direction:

- a tender on establishment of the second CCIS line was held in the end of 2002, a second CCIS line concept was drafted, terms of reference was prepared and work is being conducted on creation of a new software based on modern information technologies.
- in 2002 first steps were made towards introduction of unique analysis and statistics system in Kazakhstan, though many ministries have also started working on this issue.

FINDINGS

Under the first line of the CCIS project a set of tasks on computerization of transfer of information flows was implemented.

At the same time we note, that for efficiency and sustainable operation of the CCIS constant maintenance and development of the software and technical equipment parts of the system is required to ensure its actuality and compliance with modern requirements.

In 2003 the Customs Control Agency of the Republic of Kazakhstan continues modernization of the Customs Computerized Information System related to the amendments in the customs legislation in connection with the adoption of the new Customs Code of the Republic of Kazakhstan, need for exchange of information on consideration of changing normative requirements with other state bodies in the republic and other countries-members of the Eurasian, introduction of changes in the logics of technological processes, application of progressive technologies for renewal of obsolete technical solutions, as well as implementation of structural database optimization.

Currently, in accordance with the agreement for 2003 program implementation of the 23 components of the CCIS under the second system line is being fulfilled. In the result of modernization a new information system will be built based on modern technical solutions with web-technologies designed for computerization of many technological processes of customs control.

Taking into account physical and moral depreciation of the main system components in 2003-2004 and the above reasons, modernization of the information system is being conducted, which will allow the customs service to come up to expectations of the Government on increase of budget revenues at the expense of customs collections and effective customs control and solve other tasks allotted by the Government.