

**PRESENTATION**  
**of G.M. Konkashova, Deputy Chief**  
**Department of Automation and Customs Statistics**

**ADB Sponsored Workshop**  
**on April 17,2004**

**“CAIS: Status and Development Opportunities“**

Abstracts:

1. Status of the Customs Automated Information System (CAIS).
2. Efforts made in 2003 to develop the CAIS.
3. Development Opportunities.
4. Conclusion.

Dear Colleagues!

**1. Status of the Customs Automated Information System (CAIS)**

The Customs Automated Information System (CAIS) is one of the major management tools and it has been created within the framework of the Republic of Kazakhstan general concept on customs development.

The role and importance of the Republic of Kazakhstan Customs Automated Information System as that of the application software and also the requirements to its architecture were specified in the stated concept and the requirement specifications for the system.

**(Slide # 1)**

In general the CAIS is designed to address the following issues:

- automation of processes related to customs control;
- information backup in decision-making;
- centralized collection of data on external trade operations;
- collection and preliminary data processing for putting together statistics on external trade;
- improvement of efficiency on communicating information to the government and other concerned authorities of the Republic of Kazakhstan based on introducing advanced information technologies;
- support of information interaction among the CIS customs agencies, including the EuroAsian Economic Council member-countries.

The CAIS is a comprehensive and interrelated program and technical complex and it covers both the corporate Republican Data Transmission Network (DTN) and Automated Information System.

**(Slide # 2)**

Right now the CAIS consists of the following components: corporate data transmission system covering 88 satellite stations, 40 radiomodems, more than 100 routers, 3 optic communication lines, 112 UNIX-servers, Informix database management systems, a park of personal computers owned by the customs authorities (over 2000 units).

The network for data sharing between customs subdivisions (99 subdivisions are connected) based on ground-based satellite stations, radiobridges and full-scale local area networks is in sustainable operation.

Certain part of the assignment on automation of processes, like customs clearance, collection of electronic copies and entry of customs documents into the central database, has been accomplished under the first phase of the CAIS project.

**(Slide # 3)**

The main functional subsystems of the network integrated program product Work Station (WS) "Universal" is in operation. The Customs Control Agency in a centralized manner develops and processes databases of customs documents, including cargo entries (CE), customs value declarations (CVD), documents on delivery control (DDC), customs receipt vouchers (CRV). Specifically the function relating to registration of customs data collection was identified at the initial stage as the priority function in justifying the CAIS development project.

**(Slide # 4)**

Information technologies have found their practical application and became an integral part of the customs clearance process. About 1500 cargo entries are received every day of which 90% - on a daily basis and 10% (from the non-automated entry points) on a weekly basis.

**2. Efforts made in 2003 to develop the CAIS**

The below described work was carried out in 2003 to upgrade and develop the CAIS:

For the purposes of setting up additional points of automated customs clearance there were provided radiomodems and installed in customs subdivisions of the Atyrau, West-Kazakhstan, Zhambyl and Pavlodar regions.

Hardware, completing sets and spares were procured and distributed to the territorial authorities for technological equipment operating under the CAIS project.

Studio of corporate television was put to use and 11 lectures delivered by the staff of the central office were assembled as well as 2 Board meetings of the RK Customs Control Agency (CCA) were translated.

The RK CCA Web-site was operationalized. Headings like “Regulatory and Reference Information” , “Rate of Exchange”, “CCA Setup”, “Legislation”, “Press Service”, “Questions and Answers”, “CCA Communications”, “For Participant of External Economic Activities (EEA)” are being maintained.

There were developed and approved both the overall technical specification for creating the second line of the CAIS and particular specifications for application software (AS) of the CAIS components under which specifications the programmers carried out the work on developing and putting into operation the new AS.

**(Slide # 5)**

Program products like “Customs Receipt Voucher”, “Accounting Adjustments of Customs Value”, Work Station “Customs Inspector” were developed and brought into operation last year. Software “External Trade Statistics” was introduced in the Agency’s central office to automate the daily intelligence gathering in the DCCC-35 and also to monitor databases containing electronic copies of cargo entries (EC CE).

For supporting the AS CAIS WS “Universal” and with the objective of enhancing data accuracy additional software was introduced in the regional subdivisions for format and logical test of both scratch and archived databases containing of EC CE.

Given the technical complexity and the big scope of the CAIS project works on developing the AS CAIS-2 will be continued in 2004 through 2005.

Preparation of data for implementation of Protocols on information exchange is carried out according to the schedule:

- Protocol of information exchange on transit goods from third countries via the territories of the Republic of Kazakhstan and Russian Federation;
- Protocol on facilitation of information exchange on relocation of goods in mutual trading between the RK and RF;
- Protocol of information exchange on transit goods transported by trucks via the territories of the Republic of Kazakhstan and the Republic of Uzbekistan.

In close cooperation with the subdivisions of the central office the Department is developing a new regulatory framework on completing and using electronic forms of customs documentation.

In conjunction with the CJSC “NIT” preliminary work has been done to introduced to the Customs Control Agency the Uniform System of Electronic Document Circulation (USEDK).

One of the important functions of the CAIS is providing the CCA and other concerned ministries and agencies with information support on external economic operations.

**(Slide # 6)**

Under the decision taken by the Council of the CIS Heads and passed in 1998 the aggregate data on export and import at the level of 4,6 signs of the CC EEA is being shared among the CIS customs.

**(Slide ## 7,8,9)**

In order to implement the RK Customs Code and in accordance with the Statute on the RK CCA since the beginning of 2004 the RK Customs Control Agency has been independently maintaining statistics on the RK external trade. Functions related to putting together external trade statistics have been delegated from the Republic of Kazakhstan Agency on Statistics (RKAS) to the Republic of Kazakhstan Customs Control Agency, since then a number of working meetings were held and information on databases, accumulated by the RKAS and some methodological information was transferred. The RK Government Resolution "On Issues Concerning Maintenance of Statistics on External Trade by the Customs Control Agency" became effective on February 3, 2004 and resulting from that the CCA takes care of publications on statistics of the RK external trade.

The Department of Automation and Customs Statistics is involved in supporting and developing the CAIS. At present the Department of Automation and Customs Statistics (DACCS) performs the below provided duties:

1. administrative functions of a subdivision under the central office and it is also in charge of coordinating automation issues relevant to customs authorities including provision of methodological coverage;
2. functions of the sectoral computer center in which capacity it:
  - supports and develops the system and technical platform and application software for CAIS (covering 189 customs divisions, 112 servers, over 2000 units of hardware and telecommunication equipment);
  - administers data transmission network and customs information database;
  - supports information interaction between the government authorities and the customs of other states.

The Department independently carries out such key functions as management of the CAIS components, like:

- administering UNIX-servers of the customs authorities;
- administering Informix DMS on servers of the customs authorities;
- administering corporate network of data communication;
- administering mail system and catalogue services.

Given that the Customs Control Agency puts together data on the RK external trade on its own the Department of Automation and Customs Statistics has been entrusted a big scope of additional work. Now it has to develop and publish

statistics on the RK external trade resulting from its functions of putting together statistics on external trade which requires permanent execution and support provided by the furnishing services.

### **3. Development opportunities**

The CAIS as any other complex information system of state importance is continuously being upgraded and developed. Below provided are the most important objectives assumed under the CAIS development plan for 2004:

1. Modernization of the CAIS system and technical platform (STP).
2. Modernization of the CAIS application software and introduction of new information technologies.

#### **(Slide # 10)**

Within the framework of the STP modernization it is planned:

- to switch the departments and customs in a phased manner from satellite channels over to ground-based fast channels that will allow to ensure on-line operation due speeding up data transmission;
- for the purposes of enhancing reliability and failure resistance to duplicate the main components of the system management center;
- to introduce licensed system and antiviral software;
- to replace antiquated equipment like Sun-servers, in the first place, Ultra-1, Ultra-5.

Modernization of the AS for CAIS will be performed in compliance with the approved requirement specification. The most important areas are considered to cover the following:

- development of information system “Electronic Customs”, that includes “Web-Broker” and a fragment of a single information space with the participants of the customs clearance process, like carriers, brokers, bonded storage;
- implementation of the project on statistics, analysis and provision of access to the users of data on external trade statistics through Internet;
- integration of CAIS with the ASGDC- CTC ???.

The “Electronic Customs” project has been under consideration for many years and it consists of three stages:

1. development of a single information space for the customs and the relevant infrastructure around the customs (like carriers, brokers, bonded storage);
2. provision of Web-service for the participants of EEA;
3. electronic declaration of goods.

Within the nearest two years the first two important stages will be implemented.

**(Slide # 11)**

The system of electronic customs allows to gradually create electronic forms of documents that can be handed over to the next stage of processing documents given that the information will be inherited from the previous stage. The system is easily customized to any used schema of technological processes.

**Advantages resulting from setting up electronic customs are as follows:**

- provision of opportunities to the EEA participants for carrying out their businesses across the entire country irrespective of their location along with reducing barriers to entering the sector of economy, especially for the representatives of small- and medium-size businesses;
- reduction of expenses and time for customs clearance: provision of opportunities to the EEA participants to efficiently interact with the customs;
- switch over to paperless technology and use electronic digital signature.

Software placed on the Web-site will allow to complete, check and send electronic copies of CE-ies to the server of the regional center for customs clearance. Verification on the Web-site makes it unnecessary to carry out entry inspection at the stage of registration with the customs authority and decreases the overall time required for customs formalities.

I would like to specifically note that software Web-Broker will be used by the participants of EEA at no cost and that will substantively support small businesses as the participants of EEA.

Now, I would like to say a few words about creating an integrated system for external trade statistics. Last year an application was developed for the central office that puts together statistic base from archived CE base and routine reports.

It is proposed to develop the CAIS subsystem "Customs Statistics" by creating a new integrated system that would incorporate such systems as:

- system of supporting decision-making (SSDM) - "Analysis";
- system of access to customs statistics;
- system for preparation of customs statistics on external trade and putting it together for publication.

**(Slide # 12)**

**Expected results:**

- reducing time required for addressing analytical problems and ensuring flexibility for carrying out analysis;
- improving quality in addressing analytical problems;
- making accurate intelligence data available for the management that will allow to enhance the quality of the taken decisions;

- providing the Internet/Intranet subscribers with an access to information massifs containing customs statistics on external trade through using the CCA Web-site;
- enhancing efficiency and quality of putting together quarterly bulletins and annual collections on customs statistics of the RK external trade;
- eliminating routine and labor-intensive operations in data preparation and control.

## **Application of the Automated System of Goods Delivery Control (ASGDC)**

### **(Slide # 13)**

The specific feature of the ASGDC is that it is integrated with the hardware components of customs control, like equipment and devices for tracking down vehicles, radiation control, automated identification of numbers on the license plates of trucks, their weight and size that allows to increase information accuracy and reduce to the maximum extent involvement of the human factor.

#### **This system allows the Agency to:**

- monitor on-line relocation of transit goods and vehicles including through use of the CAIS data;
- reduce time for customs inspection and increase the flow capacity of entry points;
- intensify control and take care of banning items barred from entry to the territory of Kazakhstan and also of vehicles exceeding standard size and axis load.

In 2004 the system will be installed in the customs of “Horgos” and “Kordai”, the “Gany Muratbaev” control and entry point and it will ensure efficient control of transit goods.

## **4. Conclusion**

### **(Slide # 14)**

The current operation and development of the CAIS allowed the Agency to automate the processes of customs clearance, to timely collect payments, get complete and accurate customs information and also to ensure quality data and, therefore, make a step to a new level in handling data that, in turn, allowed the Agency to get a responsive status of the body which is now authorized to put together statistics on external trade of the Republic of Kazakhstan.

Introduction of the above provided CAIS components will ensure a new level for the customs overall work performance and to further improve its quality.