

# Information Technologies of the State Financial Control

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## Abstract<sup>1</sup>

In the article results of the researches spent within the limits of research effort «The investigation and working out of intellectual technologies of support in decision-making and management on the basis of knowledge engineering» are stated at performance of basic researches under the thematic plan of research effort of Federal agency on Education.

## 1. Introduction

Applying programs of social and economic development and modernization the of system of the government provide the actions directed on the improvement of professional skill of government personnel and a level of technical equipment of public service; maintenance of an information openness and transparency of procedures of development and making of the state decisions, realizations of the rights of the citizens to access to the information about the activity of federal bodies of the government; formation of a modern telecommunication infrastructure on the territory of the country; maintenance of growth of volumes of financing of the state programs and the projects providing the usage of information technologies in activity of federal bodies of the government; distribution of experience of successful use of information technologies in activity of federal bodies of the government.

An example of usage of information technologies in the government is the information-telecommunication system (ITCS) of Account Chamber of the Russian Federation - departmental information system, intended for automation of all stages of the control over carrying out of the federal budget, expert-analytical activity and the kinds of activity which was ensuring the functioning

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Proceedings of the 8<sup>th</sup> International Workshop on  
Computer Science and Information Technologies  
CSIT'2006  
Karlsruhe, Germany, 2006

Account Chamber. In given article some questions of information of the state financial control are considered.

## 2. The Review of Approaches of Development ITCS

The main objective of development of ITCS is construction and commissioning of the finished, complete system providing information-technological support of the whole financial control process and expert-analytical activity of Account Chamber, the organization of information interaction with all participants of budgetary process and controlling bodies of the Russian Federation. Development ITCS can be under construction on the basis of one of three approaches.

**The traditional approach.** Introduction of new components ITCS begins only after detailed study of the subject domain and creation of all complex of the project documentation to the system. The basic characteristics of the given approach are: "a paralysis of the analysis" in conditions of time trouble, essential initial financial and time expenses, the big interval of time for achievement of an ultimate goal.

**The segment approach.** Promotes the increasing of works on separate segments within the limits of structured architecture of ITCS. This approach mainly concentrates on the functionalities of ITCS. The main characteristics of such approach: realization of projects in separate functional segments within the limits of the general architecture, consecutive automation of functions Account Chamber, scheduled development of infrastructure ITCS.

**Maintenance "status quo".** The development of components of ITCS - as a reaction to problems which appear as a result of increasing of volume of the processable and used information, or during attempts to give the adequate answer to quickly changing environment. At the given approach the projects which at present deal with "narrow" places of existing ITCS are realized.

## 3. Methodological and Architectural Principles of Development ITCS

The structure and composition of information and the software are based on the basis of model of a subject

domain - federal budgetary process and processes of its control. Components of ITCS are making stage by stage a system functioning on common organizational and technical principles.

The development of ITCS corresponds to the developed concept of the United State Information resources (USIR), electronic administrative rules (EAR) and to recommendations on construction of architecture of information systems of the state bodies, presented in materials of project "Electronic government" FCP "Electronic Russia".

The construction of the system is based on consistent hardware-software components.

The architecture of ITCS should provide the unified technology of introduction of new components of the system. By development of separate components of the system it is necessary to apply the unified planning and organizational decisions.

ITCS of Account Chamber should meet the requirements of safety and protection of the federal information against not authorized access. Means of cryptographic protection, including the electronic digital signature, should be certificated. During the development of ITCS the politics of information safety based on criterion «the expediency - efficiency - cost of realization» should be realized. Reliability of functioning of ITCS should be reached due to use of the checked up hardware-software decisions and maintenance of a necessary level of reservation of components.

#### 4. Architecture of ITCS

The architecture of information system is a group of supervising principles (rules, patterns, interfaces and standards), used at its construction. The main principle of architecture of ITCS of the second turn should become the system approach and the multilevel scheme where top levels make the functions sold by system as a whole, and bottom - mechanisms and an infrastructure by means of which they are realized.

Such representation allows to allocate the main components of ITCS and to define, in what directions there should be its development. Advantages of development of architecture are that the decisions accepted at this level can be duplicated in the form of requirements at realization of the future projects that will allow to raise efficiency and speed of development of new decisions.

#### 5. Automated Functions of Account Chamber of the Russian Federation

Functions and organizational structure of Account Chamber allow to allocate in structure of ITCS some typical automated workplaces (automated workplace) of users: the head, the inspector/analyst (mobile and stationary), "graphic station" and input of documents and a print, employees of departments and managements of device Account Chamber (figure 1).

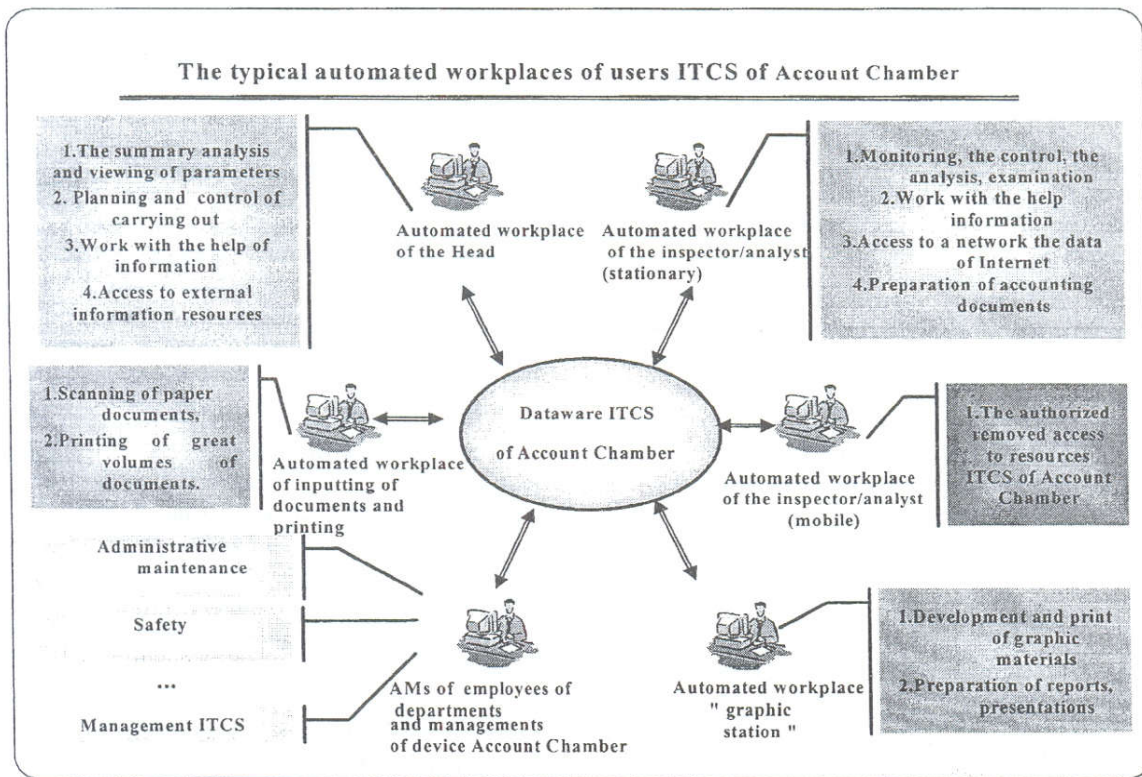


Figure 1. The Typical Automated Workplaces of Users ITCS of Account Chamber

## 6. Conclusion

Some approaches and principles of development of ITCS of the Russian Federation. And the architecture and automated functions of Account Chamber of the Russian Federation are considered.

The developed ITCS will allow to provide the increase of efficiency and quality of accepted decisions on the basis of use of a common database in all directions of activity of Account Chamber and creation of the situational center; reduction of time of the solution of functional problems due to enlargement of the list of the automated functions and uses of modern information technologies; enlargement of the nomenclature and improvement of quality of the primary information presented in an electronic kind, due to integration of ITCS of Account Chamber with external information systems; increase of completeness and consistency of a supply with information due to use of uniform storehouse of data and introductions of the general subsystem of referenced

maintenance; reduction of volume of paper documents due to realization of external and internal electronic document circulation; increase of reliability and improvement of quality support of ITCS due to unification and introductions of means of automated management by computing resources and their inventories.

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