# INFORMATION SYSTEM OF THE LOCAL TAX ADMINISTRATION - IS LTA

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**Investor** – The project IS LTA is the part of the sector plan of the National Investment Plan (NIP) for the Local Tax Administration development. The proponent and coordinator – National Information Technology and Internet Agency, Ministry of Science and Technological Development, Ministry of Finance –Tax Administration, Ministry of Telecommunications and Information Society..
**Year of the project's completion:** 2007 – 2009.

## THE PROJECT'S DESCRIPTION

IS LTA provides a support for implementation of fiscal decentralization. It presents one of the basic elements for public finance management and it is one of the key information systems within integrated systems of the authorities. IS LTA provides data of one of the key parts of the revenue side which is in the system of consolidated accounts of the Treasury of the Republic of Serbia. Therefore, it sets the analytical basis for policy creation and management in the field of public finance. It provides the certain amount of data about fiscal capacity of physical and legal persons for the central tax administration. Bearing in mind that the system is very complex and that municipality decisions are specific, the aim was to create the unique database, to standardize and unify monitoring of local revenues.

## THE PROJECT'S AIM

The aim of this project is implementation of the strategy of the Information society accepted by the Government of the Republic of Serbia, long-term planning of the public governance directed to citizens with high-quality services and with reduced costs.

The implementation of IS LTA enables the increase of total fiscal revenue in the Republic of Serbia as well as standardization, continuity and minimization of costs, application of complete, transparent and auditable legality, reaching unambiguity of relevant data about population and property, precise and fast decision-making by local municiplaities concerning economic development, availability of data for all authorities.

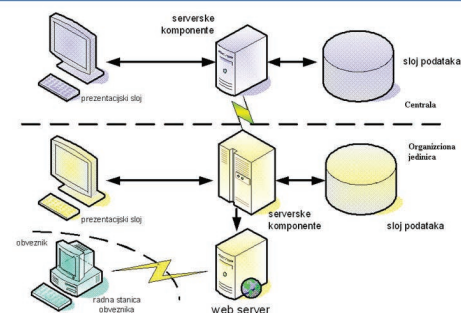Gudielines in development of IS Local revenues caused:
• Engagement of great number of participants in
   realization of IS LTA
• Concept "two levels":
  - uniform solution for the distributed system:
    databases and applications which are the same for
    all organizational units of Local government
  - the level of the "Head Office" with the formed basis
    of aggregated data and application for reporting
    and analyzing (infrastructure improvement is the
    prerequisite for progressive networking of computer
    systems and for integration of distributed databases
    in regional operational centers).
• Use of the most innovative information technologies
   in project development
• Management and constant monitoring of the project

## BASIC FUNCTIONS

**Basic functions of IS LTA:**
1. Determining basic revenues of the units of the local self-government by introducing the tax solution for all revenue resources of a local self-government's unit – property tax of physical and legal persons, land tax, local municipal tax, fees for use of the construction land of physical and legal persons, voluntary tax on cadastral income of farmers, on self-employment income, on value of property for which land tax is paid, compensation for environmental protection.
2. Tax control (in an office and field) of the original income of local self-government's units
3. Regular and enforced collection of the original income of self-government's units
4. Work in two fiscal years
5. Control of data from the previous fiscal years
6. System protection, data exchange with relevant authorities, analysis of system performances, admission of tax applications via Internet, monitoring and performance of the system, printing documents in the Serbian Latin or Cyrillic letter

### System Architecture



Logic and functionality of the system have been implemented by using the three-tiered architecture.
The installation of the system is simple and fast, changes of system components are made on the application server, there are no inconsistent versions, reduced resources of clients, complete flexibility in the system administration is reached, network expansion and connection with other systems is made.

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## METHODOLOGY AND STANDARDS

Management and realization of projects IS LTA have been performed by using the most innovative tool which supports object-orineted techniques in project management and they enable realization of projects in different stages.

Applied methodologies: Rational Unified Process (RUP), Object-oriented system development, Developemnt led by use cases, Developement oriented towards architecture, Iterative-incremental development

Applied standards: JUS/ISO/IEC 12207-1997, ISO/IEC 17799-2005, IEEE 1471-2000 DIS 25961)

**Appliedi sw platforms:**
• Enterprise Architect
• Oracle JDeveloper+JHeadStart, ORACLE Business Intelligence, Sybase Power Designer
• CVS - Tool for software configuration management
• Red Hat Enterprise Linux 4 AS, Windows All – operational system
• Oracle 10G – system for database management
• Oracle Application server, Tomcat – application server

The system's protection is  software protection and it provides data protection during the entering of data as well as during the data transfer, approach to procedures, keeping and recovery of data, backup and recovery of the system.



REALIZATION OF THE GRAPHICAL INTERFACE - WEB system in OU

## SYSTEM OF DATA EXCHANGE, SECURITY AND PROTECTION

Data exchange is made in both directions. Data purpose defines the exchange direction.

The meachanism of data exchange is reliable (all data is exchanged and only changes of data from the last synchronization).Synchronization with the central base is made periodically, automatically or after making the connection. The database in"Head Office" presents aggregated data of all OU organized through the structure which is  identical to the structure of data in OU.

Definition of database security is organized through the concept of privileges and roles, auditing system, maintenance of  data integrity and monitoring of the system's operation.

RESULTS
IS LTA has been realized and put into operation as the part of the Government by fully applying Web technologies

**Documentation of the project :**
–Project of the IS of local revenue
–Project of the  implementation of the explotiation work (testing plan, training plan, installation plan)
–User documentation (installation instructions, use and maintenance)
–Project of performed works (supply and installation of technological licenses - databases, operational systems, application and Web servers, development environment)
–Program documentation (source code)