

# ➤ SAP Implementations



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# ► About Smart Technologies Group



**The Smart Technologies Group** has had more than ten years' experience in implementing full-scale infrastructure projects, from the creation of corporate information systems to specialised branch solutions.

The main directions of Company activity are the implementation of technological solutions and management consulting. The systems introduced by **the Smart Technologies Group** optimise industrial activity, reduce expenses and provide accurate and reliable data for decision-making.

**The Smart Technologies Group** is a certificated partner of SAP AG, and offers clients complete solutions introduced on a “turn-key” basis, from working out the concept to training and support for the operational system.

Long-term cooperation with such large enterprises as the Moscow Metropolitan, Mosgortrans and MOEK are a testament to **the Smart Technologies Group** as a highly professional and reliable partner.

## MAIN PRINCIPLES OF WORK

The Smart Technologies Group is guided by following principles:

- A complete approach to solving customers' problems
- Allocating the right team of professional employees to implement projects of any scale and complexity level
- Solve the concrete business problems of the customer, according to the customer's requirement and in close cooperation with its experts during the realisation of the project
- Use the best Russian and international experience of SAP solutions

## OUR ADVANTAGES

- System implementation on time and on budget, meeting the terms of the contract and taking into account all the requirements and priorities of the Customer
- Research into the solution, calculating the results from introducing the system
- Proven techniques and operational experience in large, including municipal, enterprises
- Solution for Transport Companies (STC) – a specialized, proprietary solution based on a SAP platform for enterprises having large motor vehicle pools or connected with transport activity
- Successful implementation of payroll systems, based on SAP. for large enterprises (including piece work)
- Training the customer's personnel so that they can use and further develop independently the information system
- Responsibility for the project's end result
- Support of the customer's operating systems
- A highly skilled team of SAP experts (more than 200 people)

Our experience, project management methodology and team of qualified experts guarantees a high level of service.

# ➤ Services and Solutions



## MANAGEMENT CONSULTING SERVICES

- Optimization of the business processes in the customer's enterprise
- Analysis of administrative problems (business consulting)
- Determination of an IT strategy for the customer
- Conceptual design of IT systems
- Project Management

## IT SERVICES

- Complete introduction of a corporate information system (ERP) based on SAP software
- Creation of strategic management systems for the enterprise
- Creation of uniform corporate systems for IT standards and help information
- Control systems for cooperative relationships with suppliers, including creation of an electronic trading platform
- Optimising IT infrastructures; specification and delivery of the necessary hardware and software for the introduction of corporate information systems, and its development
- Support for the implemented systems

## SPECIALIZED SOLUTIONS OF THE COMPANY

Some of the techniques and solutions built on SAP platforms by the experts from **the Smart Technologies Group** represent unique value for the Russian marketplace. Among them are:

**SOLUTION for Transport Companies (STC) built on a SAP platform** — a universal solution for enterprises having large motor vehicle pools or connected with transport activity, which includes:

- Automation of the basic business processes of a transport agency (planning and accounting for the performance of transport, producing and processing primary documentation - rosters, route sheets)
- Creating uniform centralised standard directories and uniform primary documentation
- Supervising fuel expenses
- Creating operational and analytical reports for any time period
- Integrating the standard modules of System SAP/R3 with external systems

**Automating personnel records and payroll with "Salaries and Personnel"**, a solution based on the HR module of SAP provides the following benefits:

- Automating personnel records and payroll in isolated divisions while preserving benefits
- Automatic accounting of working hours, including the production of summarised working hours
- Automatic calculation of overtime hours in any registration period in the summarised account of working hours
- Payroll calculation taking into more than 800 kinds of payment which for the most part are automatically calculated on basis of data in timesheets, piece work rosters, route sheets, driver logs, etc.
- Various systems of a payment: time, temporary employee, indirect piece work, piece work, by agreement
- Payroll calculated by categories of employees, including internal part-time workers, probationers and other categories, and those working incomplete hours

- Automatic calculation of taxes (for each physical person in the case of internal part-time workers)
- Integration with SAP components PM, CO, FI
- Integration with non-SAP components and branch solutions, taking into account the actual hours worked by train drivers and drivers of other motor transport
- Auxiliary reporting for personnel services, management accounting and accounts payable

The solution to automate the accounting of equipment maintenance, servicing and repair (PM – plant maintenance) provides:

- Registration and reporting on the technical condition of equipment
- Repair planning
- Planning material, labour and financial resources for repair work
- Calculation of the actual expense of repair work
- Production of summary and analytical reporting
- Integration with “Salaries and Personnel” to calculate the wages of workers in the repair divisions

PM system provides all the key functionality required and is easily integrated with the customer’s automated control system.

Industry Solution Utilities (IS-U) is a SAP-based solution for power provides:

- Record energy consumption and the supervision of payments from industrial enterprises and private persons
- Predict energy consumption and balance the municipal power supply system
- Sale of electrical and thermal energy

The Electronic Trading Platform is solution based on the SAP SRM module for the management of cooperative relationships with suppliers.

This solution automates all the purchasing processes, uniting choice of suppliers with the organisation and carrying out of tenders for the purchase of goods and services.

The benefits of the SAP SRM solution are:

- Effective choice of suppliers
- Competitions and auctions conducted within the Internet environment
- Employees can independently create purchase orders
- Use of shared folders for the exchange of documents
- Easy-to-use index based on a web-browser
- Predetermined analytical reports on the Purchasing Department
- Automated generation of purchase orders with a reduction in paper use and errors

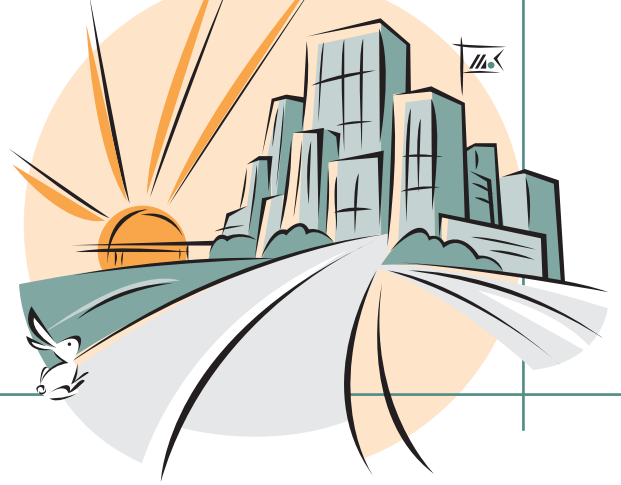


## ➤ SAP expertise



FI	–	Book keeping and reporting
FI-AA	–	Asset accounting
FI-SL	–	Tax accounting and the reporting
CO	–	Planning and accounting of actual expenses
MM	–	Management of purchases
SD	–	Sales management
PM	–	Accounting and analysis of actual expenses for maintenance, service and repair of equipment
PS	–	Project Management
HR	–	Personnel management and payroll
SRM	–	Management of cooperative relationships with suppliers (electronic auctions)
RE	–	Real estate management
STC	–	proprietary solution based on SAP for the enterprises having large motorvehicle pools or connected with transport activity (Solution for Transport Companies)
IS-U	–	Branch solution for power systems “Sales management for electrical and thermal energy”
SEM	–	Strategic business operations
BW	–	Data warehouse

# ➤ Key Projects



## CREATION OF A CORPORATE INFORMATION SYSTEM FOR THE MOSCOW INCORPORATED ENERGY COMPANY (MOEK)

**The MOEK** was created in 2004 by the Moscow Government. The MOEK's activity extends to all segments of the capital's power market: generation, distribution and sale of thermal energy, and the generation of electrical energy.

Providing stable and high quality heat supplies to more than two thirds of the territory of the capital, the MOEK is one of the largest and most strategically important enterprises not only in Moscow, but also in Russia.

- 29 enterprises and sites
- 8,127 central thermal points (CTP)
- About 8,000 km of thermal inputs and distribution networks
- 4 thermal power stations

### PROJECT GOALS

- Creation of a uniform information management tool for the enterprise
- Maintain transparent processes for enterprise activity to implement administrative decisions
- Provide operational control and monitoring of all economic processes

### IMPLEMENTED FUNCTIONALITY

- Maintenance service and repair (PM)
- Materials Management (MM)
- Financial management (book keeping and reporting, budgeting, tax accounting, general ledger, asset accounting - FI)
- Planning and accounting of actual expenses (CO)
- Calculation of payments for consumed electrical and thermal energy (IS-U)
- Management of cooperative relationships with suppliers (SRM)
- Strategic business operations (SEM)
- Data warehouse (BW)

### IMPLEMENTATION RESULTS IN THE MOEK

The introduction of the Corporate Information System completely automated the industrial, financially and economic activities of branches. In addition, there was:

- A considerable reduction in the time taken to prepare reports and to analyse data
- An increased efficiency in the flow of documents

- The ability to track equipment and its condition
- A lowering of warehouses stocks and maintenance expenses
- A reduction in the probability of errors

#### EXPERTS HAVE CALCULATED THAT IN THE MEDIUM TERM THE RESULTS WILL BE:

- A singular improvement in the total activity of the enterprise - profit, turnover, return on capital
- A decrease in bad debts
- Reduction of emergencies
- Improved customer satisfaction

“This project was implemented in the context of an increase in management efficiency of the business of the company achieved through the ongoing introduction of uniform administrative standards and principles, based on modern software products.

Consumers of our services can already see for themselves the role of new technologies, and with the introduction of SAP they will receive more transparent tariffing mechanisms and detailed accounts.”

**Alexander Anatolevich Lebedev, the IT Director of MOEK**



#### INTRODUCTION OF AN AUTOMATED CONTROL SYSTEM FOR FINANCIAL AND ECONOMIC ACTIVITY IN THE MOSCOW METROPOLITAN

**THE MOSCOW METROPOLITAN** is the foundation of public transport in Moscow which leads the world in terms of passenger volumes and concentration.

Almost ten thousand trains a day pass over 292 kilometres of track distributed among 12 lines. Depots store more than 4,500 passenger cars in more than 500 structures.

#### THE MOSCOW METROPOLITAN HAS:

- 15 electrodepots
- 176 stations
- 35,000 employees

The high frequency and reliability of services on the Moscow Metropolitan is due to the application of modern technologies and new techniques, and with the use of the advanced international experience of the largest transport companies in the world.

#### PROJECT GOALS

- Reduction of expenses
- Savings in repair expenses
- Control of purchases
- Reliable indicators of financial and economic activities
- Provision of operational information
- Control the deviation between planned and actual performance
- Operational administration

## IMPLEMENTED FUNCTIONALITY

The following SAP solutions were introduced within the framework of the Management Information System introduced into the Moscow Metropolitan:

- Financial management (book keeping and reporting, tax accounting, general ledger, asset accounting - FI)
- Planning and accounting of actual expenses (CO)
- Asset management (MM)
- Maintenance and repair (PM)
- Personnel and payroll (HR)

## IMPLEMENTATION RESULTS IN THE MOSCOW METROPOLITAN

The introduction of the Management Information System in the Moscow Metropolitan resulted in the following:

- Creation of uniform algorithms for accounting and the calculation of expenses
- Creation of a uniform centralised directory for kinds of payments, qualifiers inventory holdings and the definition of uniform algorithms for the calculation of wages and taxes
- Control of procurement prices on inventory holdings for the Metropolitan enterprises
- Operational tracking of warehouse stocks in divisions with the ability to transfer inventory holdings between divisions
- Automatic error control during data input
- Standardized procedures to price named materials and to choose suppliers
- Operational preparation of accounting and help documentation, and the analysis of primary documents
- Planning maintenance works and repairs depending on the actual condition of rolling stock
- Gathering and statistical analysis of repairs and service data
- Producing information on the actual state of personnel, whether the industrial and administrative divisions of the Metropolitan are up to strength, and the presence of vacancies in departments
- Compliance to all requirements of the labour and tax laws

“We not only have received a transparent financial system, but also have forced employees to work in a new fashion. The information pyramid is destroyed: any manager knows that top management can check any concrete operation at any level, and hold managers responsible for errors”.

**Gaev Dmitry Vladimirovich, Chief of the Moscow Metropolitan**



## CREATION OF A UNIFORM, AUTOMATED CONTROL SYSTEM FOR THE FINANCIAL AND ECONOMIC ACTIVITIES OF THE MOSGORTRANS

**The MOSGORTRANS** is the main operator of land passenger transport in Moscow and is the world's largest enterprise for such transport. The rolling stock of the Mosgortrans carries more than 47 % of the total number of ground transport journeys in the city and daily transports more than 6 million passengers.

## THE MOSGORTRANS HAS:

- 53 branches
- 687 routes
- 37,000 employees

## PROJECT GOALS

The main objectives for the introduction of a management information system based on SAP R/3 into Mosgortrans was to control the cost price of journeys, including the prices for fuel, spare parts and the wages of drivers and conductors.

It was necessary:

- To make the cost price of journeys clear
- To be able to qualitatively and quantitatively compare the economic and financial indicators from different vehicle parks
- To be able to identify deviations and to understand their cause.

## IMPLEMENTED FUNCTIONALITY

- Financial management (book keeping and reporting, tax accounting, general ledger, asset accounting - FI)
- Account for the movement and work of vehicles (STC)
- Personnel and payroll (HR)
- Maintenance and repair (PM)
- Asset-management (MM)
- Real estate management of (RE)

## IMPLEMENTATION RESULTS IN MOSGORTRANS

As a result of the introduction of SAP solutions to Mosgortrans all industrial activity of the enterprise has been automated.

The company management noted the following results:

- Creation of a uniform information field:
  - uniform centralised standard directories
  - uniform primary documentation
  - uniform algorithm for the calculation of wages according to the kinds of payment approved by the management of Mosgortrans and the legislation of the Russian Federation
  - uniform directory of debtors and creditors
  - uniform algorithm for the calculation of expenses and planning, taking into account specific features of branches according to the registration policies of Mosgortrans
  - uniform format for reporting by branches to the management of Mosgortrans;
  - uniform algorithms for the control and formats of accounts реального времени
- Real time work control in all branches and divisions
- Reduction of fuel expenses ~ 15 % by controlling the standards for fuel consumption after each modification
- Increase in the mean-time-between maintenance works due to timely carrying out of scheduled preventive maintenance
- Timely transfer of branch reports to Mosgortrans management allowing the ability to create operational reports for any time period
- Accurate differentiation of the rights and powers of users
- Creating a uniform register of real estate with their unique characteristics
- Information and technical support from the solution supplier.

«Without SAP 80 % of the time was spent processing information and only 20 % of the time on its analysis, and half of that was in the search for inevitable errors. After the introduction of SAP 20% of the time is spent on inputting information and 80% on its analysis».

**The Deputy General Director of «Mosgortrans» M.E.Trusenkova**



# ➤ Benefits from the introduction of SAP

## QUALITATIVE BENEFITS

## QUANTITATIVE BENEFITS

Reduction of labour expenses for drawing up rosters

25 % - 40 %

Reduction of fuel expense for the transport divisions of the enterprise

10 % - 30 %

Reduction of maintenance, service and repairs expenses

15 % - 20 %

Decrease in purchase expenses due to the control of procurement prices

5 % - 20 %

Decrease in level of un-used stocks in warehouses

10 % - 30 %

Decrease in input errors due to a decrease in reliance on manual skills (for all divisions of the enterprise)

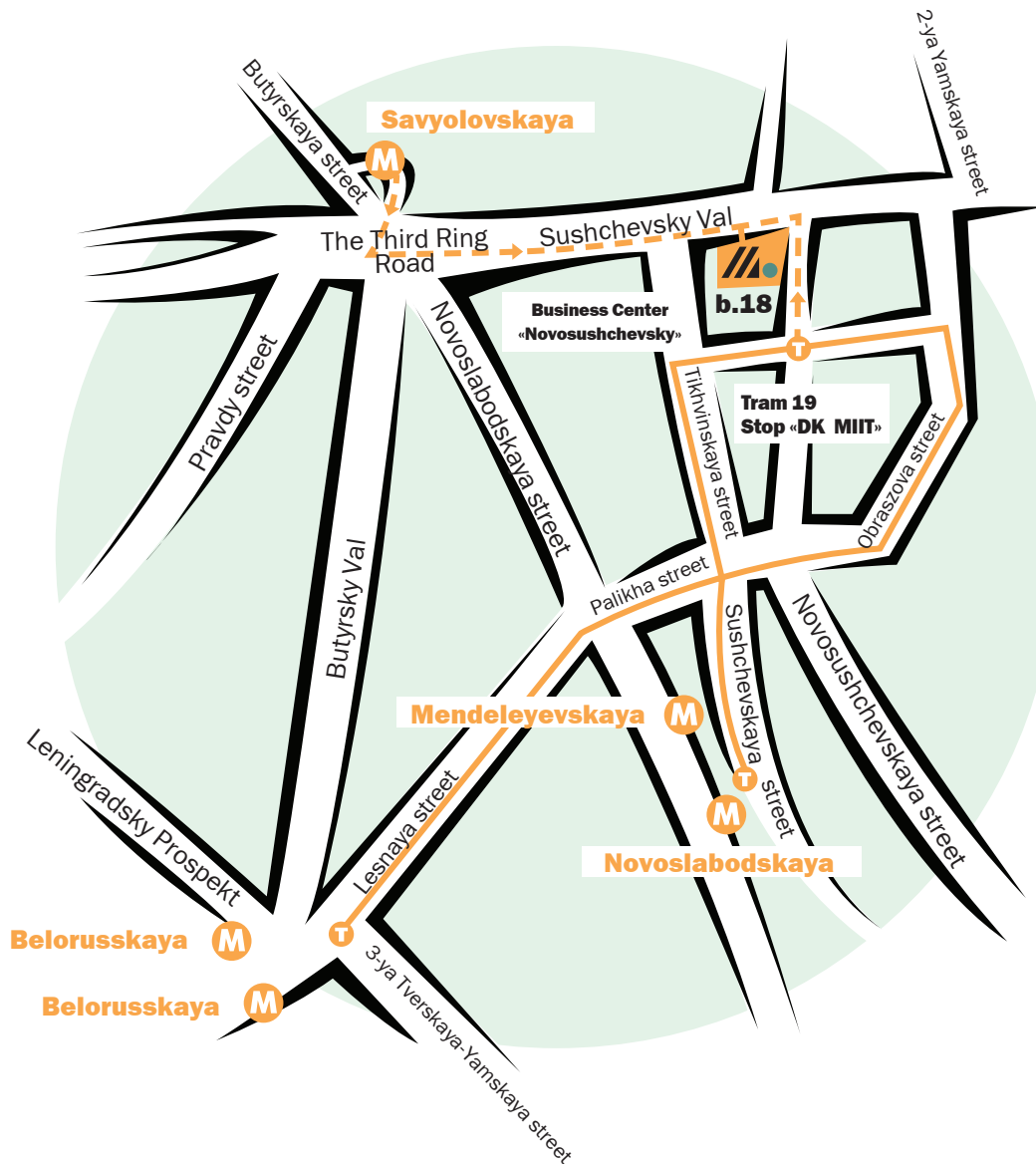
40 % - 60 %

Reduction of costs as a result of obtaining accurate electrical consumption figures and controlling payments from industrial enterprises and private persons

5 % - 10 %



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